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GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
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Participant Handbook

Sector
Media and Entertainment

Sub-Sector
Animation, Gaming

Occupation
Sound Editor

Reference ID: **MES/ Q 3404, Version 2.0**
NSQF level: 4

Sound Editor

This book is sponsored by Media and Entertainment
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Shri Narendra Modi
Prime Minister of India

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Certificate

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for the

SKILLING CONTENT: PARTICIPANT HANDBOOK

Complying to National Occupational Standards of
Job Role/ Qualification Pack: '**Sound Editor**' QP No. '**MES/Q 3404 NSQF Level 4**'

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The preparation of this manual would not have been possible without the Media and Entertainment Industry's support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the Industry.

This participant manual is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

About this book

This Participant Handbook is designed to enable training for the specific qualification Pack(QP). Every NOS has been covered by each unit.

After studying this book, user would be able to:

- Edit Sound
- Document and store media
- Mix Sound
- Maintain workplace health and safety

Symbols used in this manual:

Symbols Used

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1. Introduction and Orientation

Unit 1.1 - Introduction to Media and Entertainment Sector

Unit 1.2 - Key Words

Key Learning Outcomes

Upon culmination of this module, reader would be able to:

1. Importance of media and entertainment sector in our life.
2. Role and responsibility of Editor.
3. Technical terms associated animation.

UNIT 1.1: Introduction to Media and Entertainment Sector

Unit Objectives

Upon culmination of this unit, reader would be able to:

1. Importance of media and entertainment sector in our life.
2. Role and responsibility of Editor.

1.1.1 Media and Entertainment Sector in India

The Indian media and entertainment (M&E) sector is the 14th largest in the world and contributes about 1.7% to India's GDP. The sector contributes ~9.3 percent to total employment in the country and this share is expected to reach ~14 percent by 2017

It is estimated that Indian Media and Entertainment market is assured to expand at a CAGR of 13.9 % to expand from INR 1026 billion in 2014 to reach INR 1964 billion by 2019 a growth rate almost double that of the global media and entertainment industry.

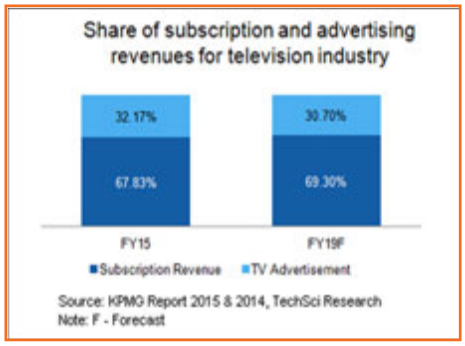

Fig.1.1.1: Advertising Revenues for TV Industry

The progress in popularity of digital media continued to upswing in 2014 with a notable growth in digital advertising of 44.5% over 2013. Advertising revenues in 2014 grew at a growth rate of 14.2 % over 2013 to reach INR 414 billion of which print (43 %) and television (37%) captured the lion's share.

India possibly has one of the largest broadcasting industries in the world approximating to a total of 800 satellite television channels, 242 FM channels and a 100+ operational community radio networks. The Indian film industry, Bollywood and its smaller counterparts, is the largest global producer of films with 400 production and corporate houses involved.

The Indian Government helped M&E industry's development by starting a variety of initiatives like digitising the cable distribution sector to catch greater institutional funding, expanding FDI limit from 74 to 100 per cent in cable and DTH satellite platforms, and granting the film industry an industry status for easy access to institutional finance.

1.1.2 Employability in Media and Entertainment Sector

The industry depends largely on advertising revenues whereas the performance of the it is dependent on the overall position of the economy. This sector employed 0.4 million people in 2013 which is expected to reach 1.3 million by 2022 which translates into 0.9 million additional employment opportunities during this period.

Under the film sub-section approximately 25 percent of the total M&E work force are employed across India.

The current total employment in the M&E sector is estimated to grow to 0.75 million by 2017 from its current estimation of ~0.46 million.

The Indian M&E sector has a high demand for skilled professionals in each of its sub-sectors is due to its expectation to grow to reach INR 1,786 billion by 2018.

The digitization activities in both Film and Television sectors as well as the launch of new channels has caused these sectors to employ the major portion of the labour force .

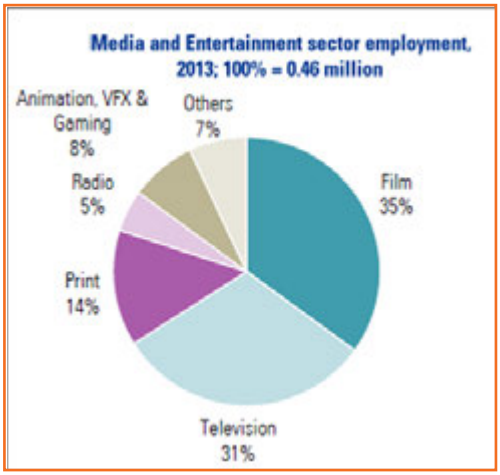

Fig.1.1.2: Media and Entertainment Employment in 2013

Sub Sector	Employment (in Millions)		
	2013	2017	2022
Television	0.14	0.28	0.64
Print	0.06	0.07	0.13
Radio	0.02	0.03	0.04
Animation, VFX and Gaming	0.02	0.03	0.04
Films	0.16	0.24	0.44
Overall Sector	0.4	0.65	1.3

Fig.1.1.3: Employement in Different Sectors of Media and Entertainment

1.1.3 Evolution of Media and Entertainment Sector

- With the Radio Club of Bombay in 1923 radio broadcasting began in India.
- One of the largest radio networks in the world, All India Radio (AIR) established in 1936.
- India first experienced Television in the form of Doordarshan (DD) on Sept 15, 1959
- The Indian economy was closed until 1990, and no private player was allowed to enter the space in the 1990s, the Indian film industry was completely fragmented
- BBC launched its national service in 1995
- In 1999, the government decided to allow fully owned Indian corporations to set up private FM stations on a licence fee basis
- In May 2000, as part of Phase I of radio broadcast licensing, the auction was conducted and 37 licenses were issued, out of which 21 are operational in 14 cities

1.1.4 Major Subsector and Segments

- The Indian M&E industry comprises several sub-sectors, such as television, radio, print media (including newspapers and magazines), films, music, and animation and visual effects (VFX).
- A significant role is played in the upliftment of the overall economy by the growth and performance of the industry which in turn is dependent on its advertising revenue.
- With the newsprints, set-top boxes and antennae; imports form a large part of the M&E industry. Moreover most of its production is consumed domestically and thus the industry isn't focused on export.

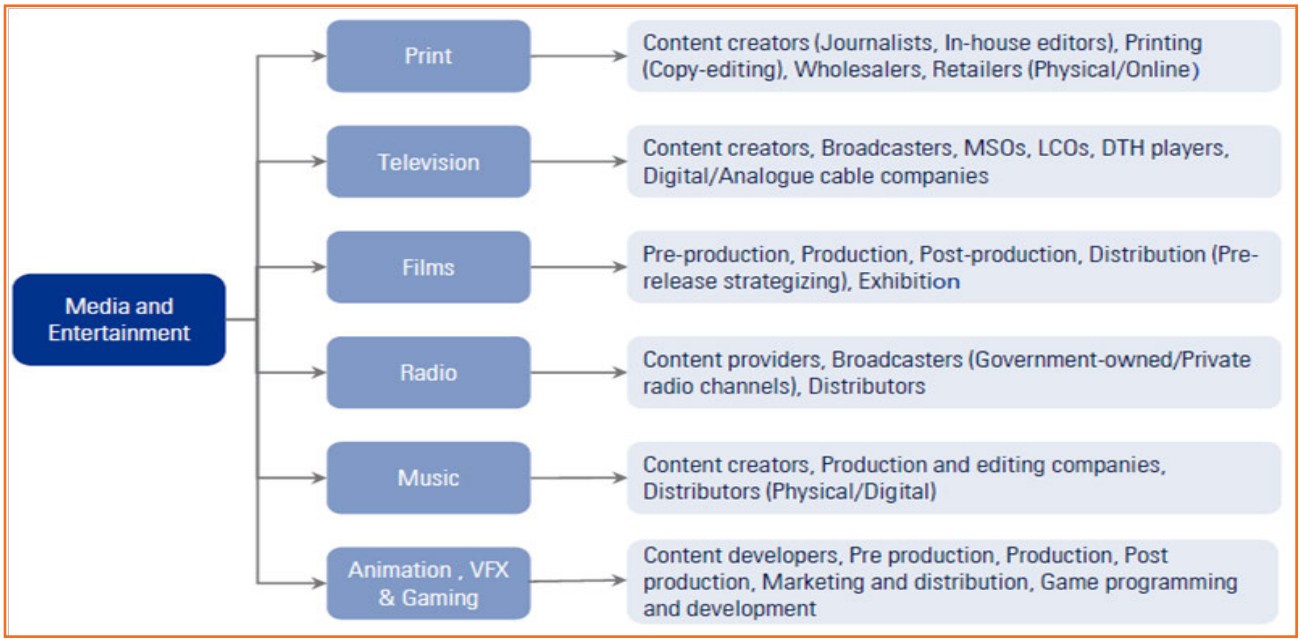

Fig.1.1.4: Media and Entertainment Sector

- The industry is specific to cultural and ethnic backgrounds, and is organized around specific hubs that specialize in output for a given population segment. For example, the Mumbai film industry (Bollywood) is a key film hub in the country. A similar hub also exists in South India.

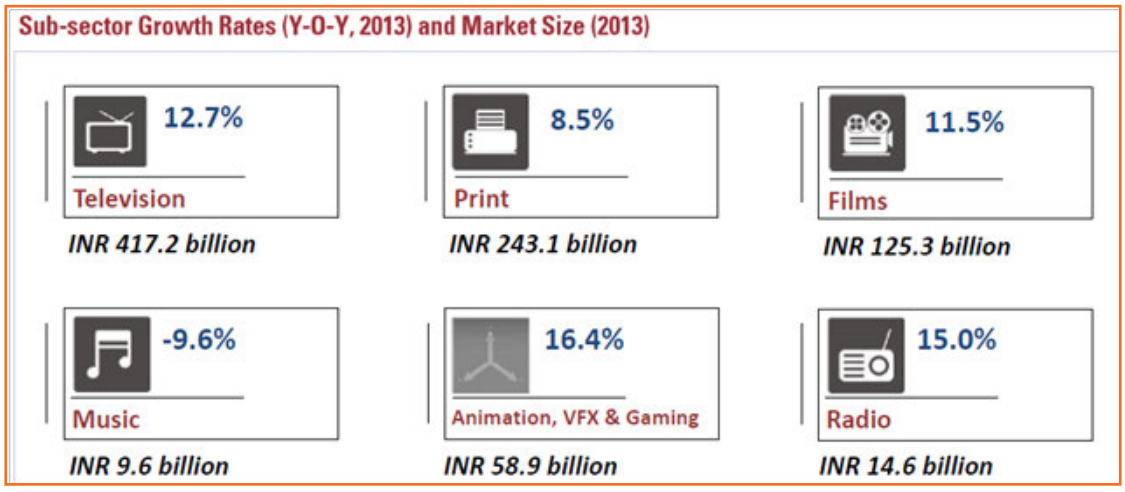

Fig.1.1.5: Media and Entertainment Sector Growth Rates in 2013

1.1.5 Role of a Sound Editor

Dialogue/ Sound/Foley Effects Editor or Supervising Sound Editor are other names for a sound editor In the M&E Industry. There is usually at least one of each; a Dialogue, Effect, Foley editor as well as a supervising Sound Editor/Designer to supervise in Film to deliver a finished result.

Brief Job Description

Preparing, organizing and editing sound sequences are part of the responsibilities of the job to ensure they live up to the quality standards and necessities of production.

Personal Attributes

To meet the set production requirements someone in this position must operate a large range of sound equipment and software be well-versed in the principles of acoustics, psychoacoustics and aural discrimination be able to select sound sources, apply various editing techniques and treatments. Depending on the production size, they may also have to delegate and/or supervise several Sound Editing Assistants or Sound Specialists.

Prerequisites

- They should have a working knowledge of computer and operating system.
- How to open, save, and close files, use the mouse, standard menus as well as commands.

Responsibilities of a Sound Editor

The key roles and responsibilities of a sound editor are:

- Edit a range of audio sequences/segments using various sound equipment/software (Avid, Adobe Audition, Magix Music Maker, Goldwave).
- Edit various sound sources including live or pre-recorded music, atmosphere tracks, dialogue, foley effects, live/pre-recorded/electronic sound effects tracks.
- Identify/align/organise unedited sound materials, and check sound equipment/editing facilities in preparation for editing.
- Cut and synchronise the sound sources, removing any extraneous background sounds in preparation for final sound mixing.
- Organise the digitisation and transfer of sound sources to appropriate equipment, ensuring that the requirements for digital storage and formatting are met.
- Identify/ obtain, log, label, securely store and back-up sound materials.
- Label media precisely and clearly, ensuring that the material and its carrier have the same labels, and making sure there is adequate detail to utilize by others involved in the production.
- Store media in suitable conditions which will optimize the life of the materials, and storing recordings harmlessly and firmly.
- Mix sound during post-production or live recordings to achieve the level, tonal quality, audio image and intelligibility required.
- Efficiently communicate with sound or other crew regarding equipment positioning and requirements.
- Follow the principles of “storytelling” and the conventions of different genres and styles of film and programme-making.

1.1.6 Career Progression of a Sound Editor

Fig.1.1.6: Career Progression Path of an Editor

UNIT 1.2: Key Words

Unit Objectives

At the end of this unit, you will be able to:

1. Familiarise with technical terms associated animation

1.2.1 General Key Words used in the Book

- **Animatic:** A series of images put together with sound and dialogue for animation on a story-board.
- **Compositing:** To combine in a single frame several layers of images/elements.
- **Composition:** Keeping in mind the background and camera placement of the character.
- **Creative Brief:** A document containing main points like the objective of the project, timelines, stakeholders, target audience, milestones, vision, budgets, etc to guide a production.
- **Key Frame:** For an animation sequence they are usually the start and end poses i.e. the key poses.
- **Modelling:** For animation using a specialised software application to create three-dimensional models
- **Rendering:** To get 2D images with 3D effects from three-dimensional models.
- **Rigging:** To aid movement of a stationary 3D model by adding of joints to make it easier to pose.
- **2D animation:** Using computerized software, creating movement in pictures in a 2D environment
- **3D animation:** The simulation appears to be more realistic and have depth like in video games like Halo and others.
- **Animation:** The illusion of motion created by the quick presentation of a series of still pictures.
- **Anticipation:** Model makes anticipation by means of preparation of action.
- **Aspect Ratio:** Width divided height of picture.
- **Background Painting:** The background of an animation, like a painting.
- **CGI (Computer Generated Imagery):** To create settings, figure or other material using digital software systems.
- **Clean-Up:** Polishing the rough artwork in 2D animation.
- **Computer Animation:** Creating animation using a computer from any 2D or 3D source.
- **Frame:** A transparent photograph on a strip of film (part of a series) used to make movies or animations.
- **Frame Rate:** In animation, speed at which frames move to show motion. Its unit are frames per second (fps).
- **Graphics Tablet:** A device that allows you to create drawings and sketches to display on a monitor.
- **Pixel:** (computer science) the smallest part of picture on a CRT screen (usually a coloured dot).
- **Raster:** A formation composed of pixels making a set of horizontal lines that is used to form a picture on a CRT.
- **Rotoscoping:** Either manually or by computer automation, when using one frame at a time, picture or video are placed in background for any scene.

- **Title Cards:** scenes where words appeared on the screen in movies where there was no sound allowing people to understand what the plot was.
- **Tween:** Animating the in betweens of keyframes
- **Vector:** It refers to animation where rather than pixels motion is controlled by vectors. Vector simulation often allows smoother motion, because images are resized using mathematical values instead of stored pixel values.
- **CEL:** A CEL is a type of plastic sheet on which characters are painted. Generally. It means sheet with the outline and colouring of the character, object, and/or special effect. The outlines can be either hand-inked or copied to the plastic. Those sketches are then coloured, either by hand-painting or a serigraphic process.

Notes

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2. Sound Editing

Unit 2.1 - Basic Terminologies used for Sound Editing

Unit 2.2 - Softwares used in Sound Editing

Unit 2.3 - Editing with Audacity

MES / N 3408

Key Learning Outcomes

Upon culmination of this module, reader would be able to :

1. Recognize the basic terminologies used for sound editing
2. Learn about the software used in sound editing
3. Learn of Audacity

UNIT 2.1: Basic Terminologies used for Sound Editing

Unit Objectives

Upon culmination of this unit, reader would be able to:

1. Know about the Sound Editor
2. Describe the role of sound editor in Industry
3. Elaborate about the Sound editing with computers
4. Digitizing sound files

2.1.1 What do Sound Editors do?

A Sound Editor makes the soundtrack by cutting and coordinating sound components, like dialogue tracks, foley, production wild tracks, library material etc. in either analog or digital form to the picture and sends them to a re-recording mixer for the last audio balance. Based on tasks & complexity, hiring a dialogue and/or foley editor maybe needed. They work closely with a rerecording mixer, the sound designer as well as the director to decide what sound effects are needed during the production and to make sure that these effects are accessible from sound effect databanks, or can be created to production needs within tight time schedules.

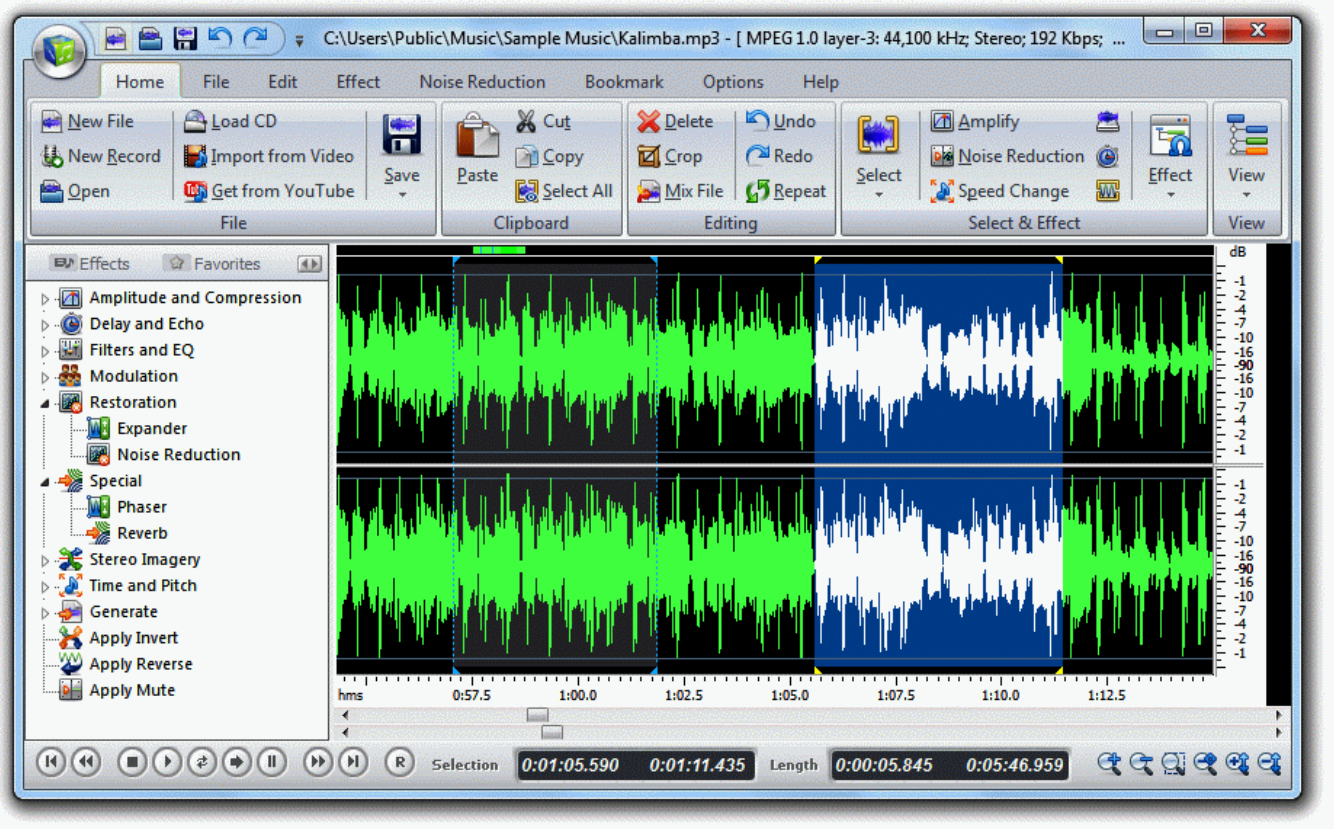


Fig.2.1.1: A Sound Editor Window

A sound editor must have good computer knowledge and have good working skills of sound recording, editing, playback and mixing equipment, also experience in the varied soundtrack delivery systems. Good listening and sense of timing are needed, as are attention to detail and excellent communication skills.

Supervising Sound Editors are accountable for all the sound after production. They are the director's coordinator for everything regarding the production soundtracks. They must have good knowledge in dialogue recording, foley, automatic dialogue replacement, music editing or sound effects. For large budget movie and television productions they generally begin work before shooting starts and appoint specialized Sound Editors to supervise individual teams for an entire area of work. For smaller productions they'll be more hands on. They are accountable for the sound budget and organizing the schedule to make sure it goes to plan.

Sound Editors have to have a working knowledge of acoustics, electronics and sound recording processes, as well as specialized knowledge of all post production sound equipment, procedure and processes, both analog and digital.

2.1.2 Role of the Sound Editor in Industry

The role of the Sound Editor in any industry which requires sound editing is very important. Let's just talk about the Sound Editor's role in Film industry. Among avid movie fans there are still very few people who appreciate role of a sound editor in a movie. The sound editors are like composers, they create the sounds.

The sound editor's job role starts once the movie has been filmed and all the dialogue has been recorded. This is known as the audio post production stage of filmmaking. Throughout postproduction, the director functions with varied editors to select the perfect shots to incorporate in the final cut of the film. This is also when all special effects are added. The sound editor's duties are to prepare all dialogue, background sounds, sound effects and music for the final mix.

The primary step is editing and cleaning up the dialogue. While shooting on film, sound is generally recorded individually utilizing a digital audio recorder. Once the director decides to incorporate a certain take or shot in the movie, the sound editor requires to locate the right audio for that take. After ensuring that it matches or syncs with the picture, the sound editor heedfully removes any irrelevant background sounds from the dialogue, like a helicopter flying overhead or a dog barking.

2.1.3 Using Sound Effects

Let's picture a scene in a movie where a man and a woman are sitting in an open Garden cafe in Delhi, India. As they talk, someone on bike passes by. You can hear birds chirping in the background and the tree leaves rustling slightly in the fall breeze. In the distance, you can hear the muffled sounds of city life: cars honking, buses rumbling and dogs barking.

Believe it or not, almost none of these sounds were recorded on location. The sole sound that was recorded live during any scene was the actor's dialogue, recorded with small microphones pinned to their attire. All of the other sounds such as the dogs, birds, leaves, car horns, and the sound of bike's engine -- are actually sound effects, added later by the sound editor to make a convincing Open Garden Cafe soundscape.

2.1.4 Mechanical Sound Editing

Before computers appear into vast use for sound editing in the 1990s, everything was done with magnetic tape. To create edits utilizing magnetic tape, you exactly had to cut the tape, remove the piece of audio that you won't want and splice the tape back together again.

The reel-to-reel tape recorder was the machine of choice for mechanical sound editing. With this component of equipment, you could record and playback audio from circular reels of magnetic audiotape. You also required many components of specialized editing equipment: a razor blade, an editing block and editing tape.

2.1.5 Sound Editing with Computers

Now-a-days almost every sound editors use computerized editing systems knows as digital audio workstations (DAW). Digital audio workstations (DAW) are multi-track systems that greatly simplify and increase the sound editing process for all types of professional audio production (film audio, studio recording, DJs, et cetera).

Digital audio workstations differ greatly in size, price and complicacy. The simply software applications are the most primary systems that can be loaded onto a standard personal computer. More professional systems such as DigiDesign's Pro Tools, requires a special sound card and are usually used in conjunction with large digital mixing boards and are compatible with hundreds of effects and virtual instrument plug-ins. The benefit of all of these systems is that an editor can function with all types of audio files- voices, Foley clips, analog and MIDI music - from the same interface.

2.1.6 Digitizing Sound Files

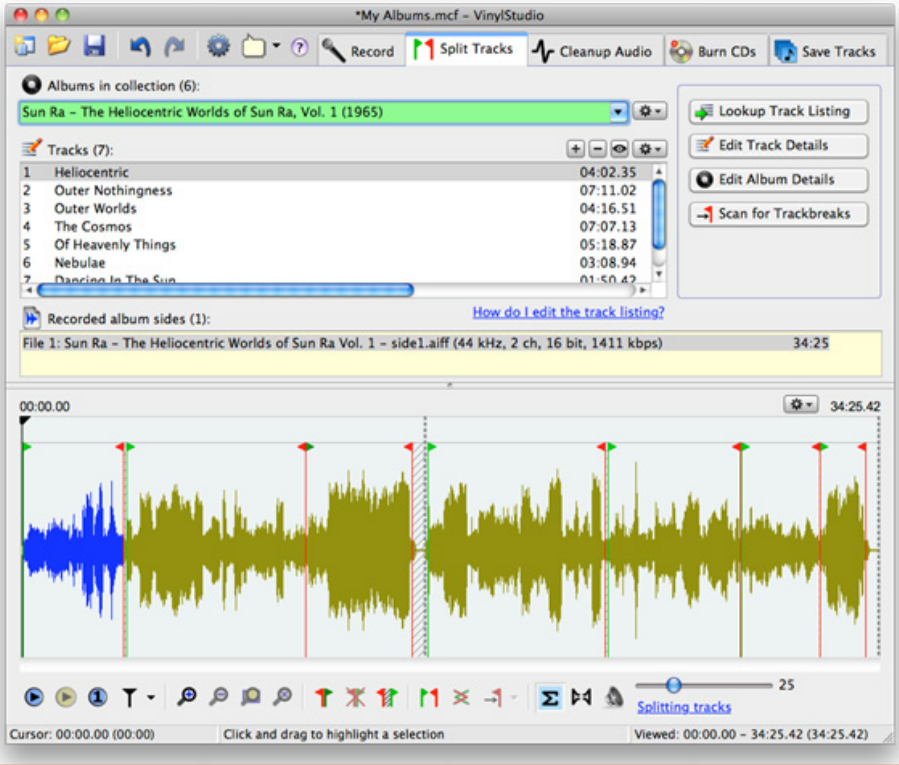


Fig.2.1.2: My Albums Windows

Sound is one of the major components of multimedia. Adding relevant sound could make web page or multimedia powerful; for instance, by linking image or text with sound makes learning easier. A multimedia designer can usually use audio files from the internet. However, when sound files are not available on the internet, a designer should make his or her own sound files. Digitizing sound is a significant part of the process of making such a sound file. Digitizing sound files, including what is sound digitizing, how to do it, and what is needed to do it, would be introduced here.

The primary step to make a sound file is to record music or sound that would be utilized by a multimedia designer. The sound could be recorded in minidisk, audio cassette, Digital Audio Tape or CD. Until these sound resources are digitized they cannot be utilized for any computer application such as multimedia. Hence, it is important especially for a beginner to know what it is and how to do it.

2.1.6.1 Digital Audio

The more samples taken the better will be the representation, and thus impacts the quality of the digital audio. Most modern multimedia devices could only process digital audio, and in the case of cell phones requiring analog audio input, they still convert it to digital before transmission.

Digital audio is a technology that is utilized to store, manipulate, record, generate and reproduce sound using audio signals that have been recorded in a digital form.

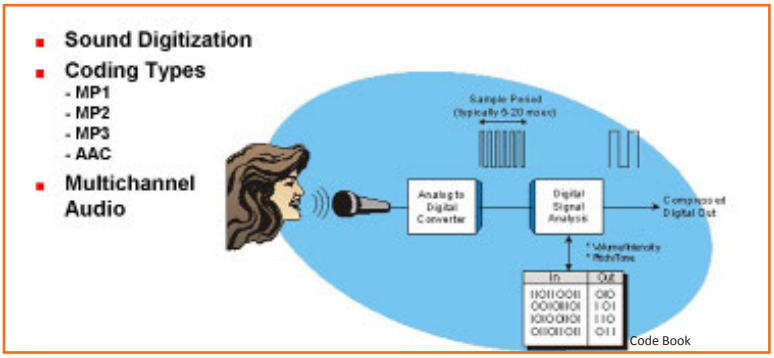


Fig.2.1.3: Process of Audio Recording

It also refers to the sequence of discreet samples that are taken from an analog audio waveform. Instead of a continuous sinusoidal wave, digital audio is composed of discreet points which represent the amplitude of the waveform approximately.

2.1.6.2 Analog Recording

Analog recording (Greek, ana is "according to" and logos "relationship") is a technique utilized for the recording of analog signals which, among many possibilities, permits analog audio and video for later playback.

Analog recording process stores signals in or on any media; it could be for example stored physically on a phonograph record as texture, or a fluctuation of a magnetic recording. This is different type from digital recording where signals are characterized as individual numbers.

Fig.2.1.4: Audio Recorder

2.1.6.3 Digital vs. Analog

Sound is produced when any object vibrates, which produces pressure waves in the air that are picked up by the ear. These pressure waves move in a pattern that is called waveform. If a record of the waves was to be made over a period of time, a curve is produced, comprising of a sequence of waveforms. These are commonly known as analog signals, that is they are uninterrupted variable signals that are comprised of waves. When the sound is required to be utilized in any computer application, we need to transform the air vibrations into an electrical signal, which is known as digital signal - a stream of 0's and 1's. The procedure of converting analog to digital signals is called digitizing.

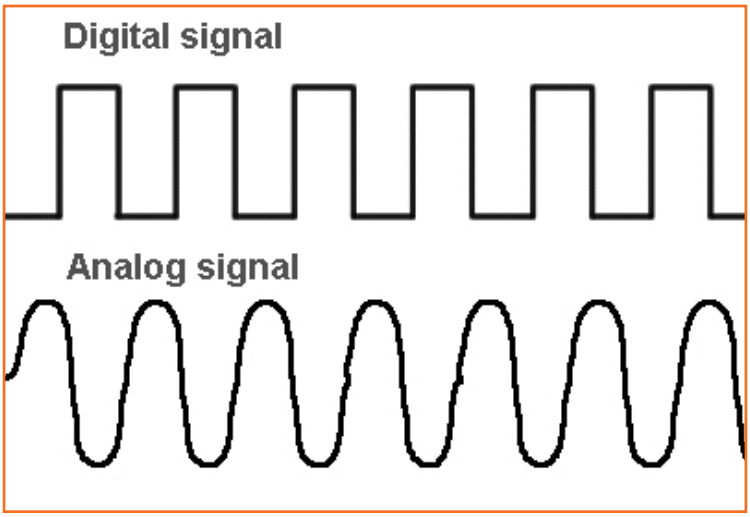


Fig.2.1.5: Digital and Analog Pulse Direction

2.1.6.4 What You Have to Consider When Digitizing Sound?

When sound is digitized, one needs to keep in mind some limitations that govern the amount of information and quality stored in any file.

- **Sampling rate:** It is rate of sampling analogue sound in one waveform & then digitizing it. Generally sampling rates of 44.1, 22.05, and 11.025 kHz are used. It simply means that in a rate of 44.1 kHz, 44,100 samples of the analog audio will be taken.
- **Bits per sample:** It describes amount of information collected by computer per sample. It essentially is a process of converting sampled sound into digital value.
- **Mono vs. stereo:** Mono is a system where all the audio signals are routed through a single channel. Stereo sound systems have two individual sound channels, and the signals created and duplicated are separated by distance. It is debated which one is the better; two sound channels give the impression that sound is coming from a set position but, mono system halves the file size. It is generally agreed that a well-designed mono system is superior to a low quality stereo system.

Note: *It is important to balance the sampling rate against bits per sample to come to an acceptable quality of sound with minimum file size.*

Sound quality comparision

Sound Quality	Sample Rate (kHz)	Bit Depth	File Size (MB)	Stereo/Mono
Compact disc quality	44.100	16	7.2	Stereo
Good Quality	44.100	16	15.1	Mono
	44.100	8	15.1	Stereo
	22.150	16	15.1	Stereo
	22.050	16	7.5	Mono
	22.050	8	7.5	Stereo
Low Quality	11.025	8	3.7	Stereo
	8.000	8	1.3	Mono

Fig.2.1.6: Sound Quality Comparision

2.1.6.5 What do You Need to Digitize Sound?

The following equipments are essential for digitizing sound:

- Audio source, such as digital audio tape (DAT), audio cassette, and compact disk (CD) etc.
- Mac or PC computer.
- Software, such as Cool Edit or Sound Edit 16. Software can help users to digitize and edit sounds.
- Mini-mini or RCA-mini audio cable. This is used for connecting audio source to the computer.
- Headphones or speakers. This helps you to hear the sounds in the process of digitizing and editing, so that you can adjust volume or other features if needed.

2.1.6.6 How to Digitize Sound?

- **STEP 1:** Connect headphones or speakers into the computer's headphones jack.
- **STEP 2:** Open up your sound editing software.
- **STEP 3:** Play the tape and listen to the sound carefully while observing the sound level so that it does not enter the red zone.
- **STEP 4:** Control the sound level with the tape recorder/DAT/CD volume controls if necessary.
- **STEP 5:** Save in an suitable format after digitizing.

UNIT 2.2: Softwares used in Sound Editing

Unit Objectives

Upon culmination of this unit, reader would be able to:

1. Identify how to edit audios
2. Describe the different types of sound editing software.

2.2.1 How to Edit Audios?

To edit audio, it is necessary to have audio editing software. It is essentially a tool that allows editing and production of audio data. It focuses on the creation and/or manipulation of digital sound files, and a sound editing programme could also be called an audio editor. There are numerous ways to classify the varied kinds of audio editing software.

Sound editing programmes can be either shareware or can be paid software. Some audio editing software that is accessible for purchase has a free trial or demo period, where trial versions may be restrictive by the length of the track that can be created/saved or by the number of days they work or by the number of sessions where it can be used. Alternatively, paid software might have the 'Save' function disabled.

Audio editing software can also be distinguished by the file types it uses. Some editing programs can handle only one type of file, for instance MP3. Others are equipped to function with a very massive range of file types, including Audio Video Interleaved, MP2 or MP3, Audio Interchange File Format, OGG, VOX, Waveform Audio File Format, or even Windows Media Audio.

Sound editing software is made to suit a range of operating systems, including Vista®, Mac® OS X, Linux, Windows® 2000, Windows® XP and Windows® 7. These may only have editing functions, or be able to perform other tasks, such as converting, reading and burning. This type of software is often a individual program, but it can have audio editing features as well as image and video editing capabilities.

2.2.2 Different Sound Editing and Mixing Tools Available in Market

Whether you need a soundtrack for your movie, or are a DJ and need to polish your work before sharing it, or a musician looking to produce music, you need a good audio editor to remove noise, edit tracks, convert files, and output the whole thing. In today's session we are going to study about the different types of Sound Editing Software. Following are some Sound Editing Software:

- Avid
- Magix Music
- Goldwave
- Audacity
- Adobe Audition
- Nero Wave Edition

2.2.2.1 Avid

Digidesign's leading software product was Pro Tools, available in three types: Pro Tools LE, Pro Tools HD & Pro Tools M-Powered.

Pro Tool HD needed the Digidesign TDM system and interface, and was geared towards licenced recording studios. Pro Tools LE was a whole package designed for amateurs and few post-production facilities. It included

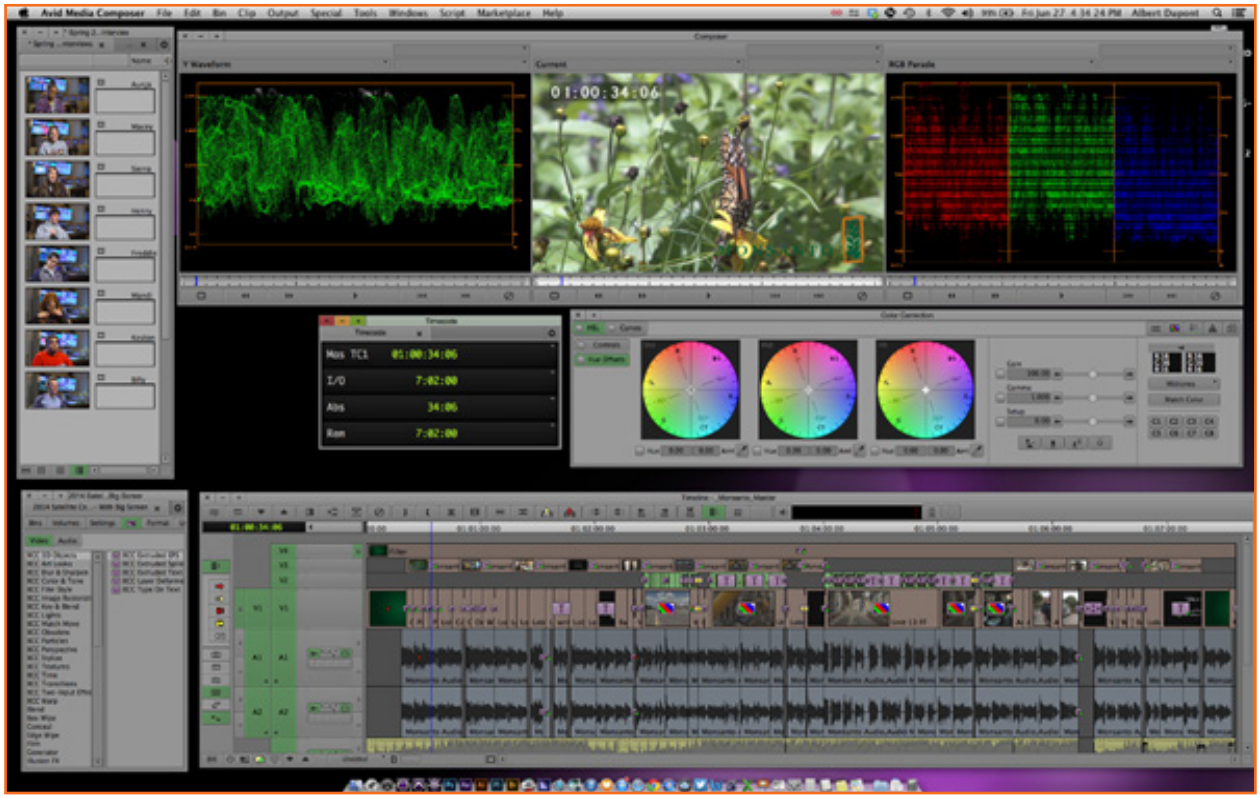


Fig.2.2.1: Avid Window

the necessary hardware & software like M Box 2. Pro Tools M-Powered was simply the same programme adapted to work on M-Audio hardware, and similar in power to an LE system.

In 2010, the varied editions of Pro Tools were largely abandoned and it are now sold by Avid as a single software programme, with the functionality dependant on the hardware used by the consumer.

Digidesign also made numerous products for the Pro Tools platform, including many software plug-ins and a vast variety of hardware add-ons for Pro Tools like MIDI interfaces, synchronizers, control surfaces, audio interfaces etc. In 2005 spring, they introduced a system called VENUE for live sound mixing.

Features of Avis Sound Editing Software are:

Avid Audio previously known as Digidesign; It began as to raise money for the founders' band by selling EPROM chips for drum machines.

Edit layers of audio more easily—just added

If you work in post-production by positioning multiple sound clips to video, you are bound to have multiple overlapping tracks but with new improvements to the programme, editing audio is easier.

- Remove overlaps only.
- Heal clips when removing one that overlaps two.

- Clean the beginning and ending of overlapping clips.
- Modify behaviours.

In addition it supports new Clip FX playback.

Adjust fades more easily—just added

Using the Smart Tool option one can now manipulate a fade in, out or cross fade, directly in the Edit menu. Merely hover your indicator over the clips' fade area till it changes to the desired fade or crossfade. Then click and drag left or right to change as desired.

Get Track Freeze, Commit, and Bounce

Earlier with virtual instrument low processor power would impact the system performance; whereas sharing sessions used to require that everyone had the same type of plug-ins. With Track Freeze, you can freeze or unfreeze the desired number of plug-ins on a track to reduce processing power. Track Commit is the same with the exception that it sets the selection permanently. With Track Bounce, you can set stems for quick and simple file delivery.

Save time with batch fades

Fading tracks is one of the essentials of sound editing, but it's monotonous and time consuming when dealing with multiple clips. Using the new fade enrichments, one can quickly complete recurring tasks and get more time to focus on the artistic points of a mix. Create and tweak pre-sets for fade outs, fade ins, batch fades and crossfades which can be recalled directly from a keyboard. One can also regulate fade settings singularly when dealing with batch fades.

Get the ultimate mixing experience

Make your mix better with the advanced options added to Pro Tools. Using VCA Masters manipulate track groups faster and easier. Work confidently using 17 advanced metering options, including VU, K-system etc. You can gauge dynamics with gain reduction metering on every channel, get highly responsive recording smoother performance and playback with the expanded Disk Cache option which no matter the size loads entire sessions into RAM.

Give yourself Space and some amazing effects

with your Pro Tools subscription get access to 17 bonus plug-ins, Avid Plug-in and Support plan or a new lasting license purchase. Using the Space convolution reverb you can make natural sounding environments to add more life to tracks.

Record with ease

It is now possible to track vocals and instrument performances faster and easier. With track input monitoring you can rehearse and record more easily and dial in cue mixes quickly by copying fader settings to sends. Solo tracks in PFL (pre-fader listen) or AFL (after-fader listen) mode for optimal recording are available.

2.2.2.2 Magix Music

The program gives the option to record sound signals from diverse sources. You can, for instance, digitize old recording media then precisely cut and edit the recordings. Importing audio track is one of important features of this. Audio files may simply be opened through a file manager or through a drag & drop into the program. Even recordings can be created with just a few clicks. You can then really begin using the audio editing software by cutting sounds, editing the audio, adjusting the volume, eliminating noise and enriching sounds with varied effects.

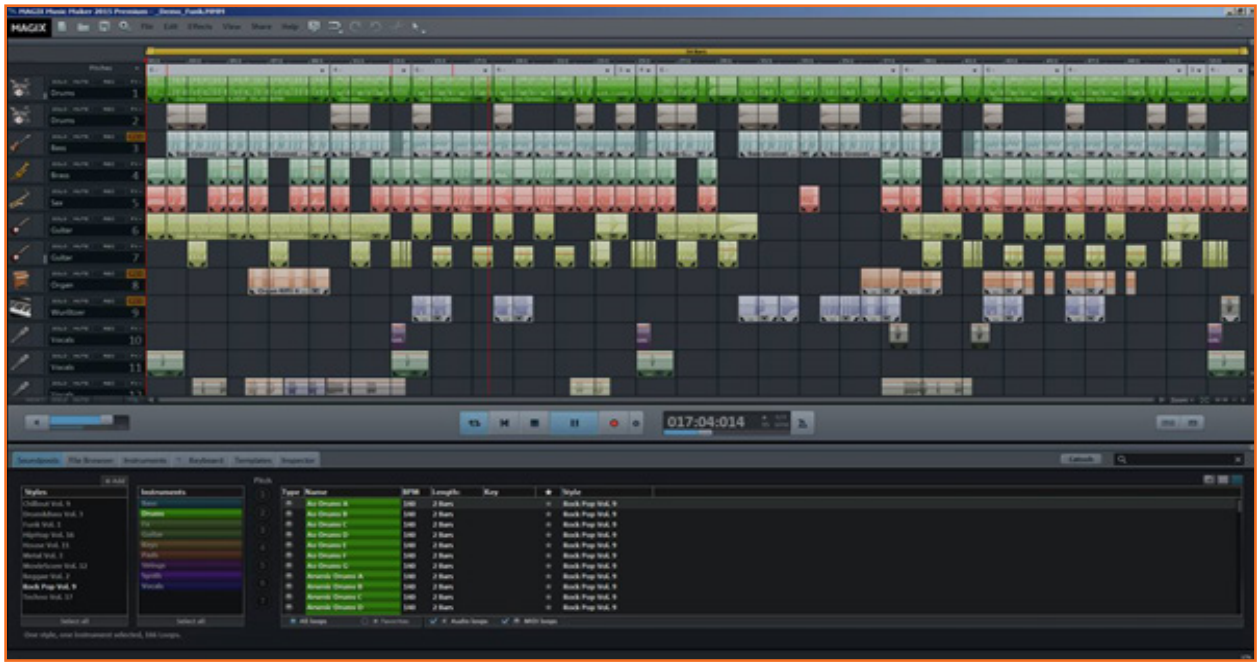


Fig.2.2.2: Magix Music

Features of Magix Sound Editing Software are:

- **Audio converter having burning option:** Supports all normal audio formats and allows burning your files to a CD or DVD or converting the files to different formats.
- **Remove crackling from LPs:** Adjust vinyl recordings you've transferred to your PC for different levels of crackling with available pre-sets.
- **Optimize the sound of speech:** To experience high-quality speech recordings you can reduce sibilants, manipulate speech intelligibility, and adjust volume.
- **Automatic re-mastering:** With Auto Mastering, by selecting a music genre you can automatically perfect the sound of your tracks. You can also compare and preview settings for different styles of music.
- **Mastering effects:** Using Audio Cleaning Lab master effects which gives professional sound and easy operation.
- **Direct support:** The info box is an integrated direct help feature which provides information and assists with editing recordings. All effects and their functions are clearly explained, so you can attain best results without spending hours in familiarizing yourself with the program making it user-friendly.
- **Multimedia Community:** At magix.info you can interact, ask questions and share your knowledge with other users and find information as well as workshops created by other users and experts on special effects, formats etc.
- **Digitize old media:** Quickly and easily transfer vinyl, cassettes, tapes and other media to your computer

- **Speech recordings:** Record acoustic commentary for presentations, podcasts etc. in studio quality.
- **Spectral display with preview feature:** Using spectral display see various frequencies in your recording in various colours, a feature that helps you to identify an issue visually, select and compare it with the original before removing it.
- **Edit audio files:** Edit audio recordings using just the mouse as most tracks need just simple edits.
- **Fade in and out:** Due to the program's user-friendly-ness transitions are easier to create between different songs or other tracks.
- **Importing track information & CDs:** CDs may be transferred to PCs while information about artist and track and even CD covers is retrieved from the Internet for entire albums and added to the file automatically.
- **Advanced effects editing:** Audio Cleaning Lab gives access to all affect details and allows personal sound editing. This means that you can edit sound precisely and not just work with pre-sets as per your specific needs.

2.2.2.3 Audacity

Audacity is, developed by a group of volunteers and distributed as a free software. Programs like this are also known as open source software, as their source code is accessible for anyone to use or study. There are numerous of other free open source programs, including LibreOffice, Firefox web browser, entire Linux-based operating systems or Apache OpenOffice office suites.

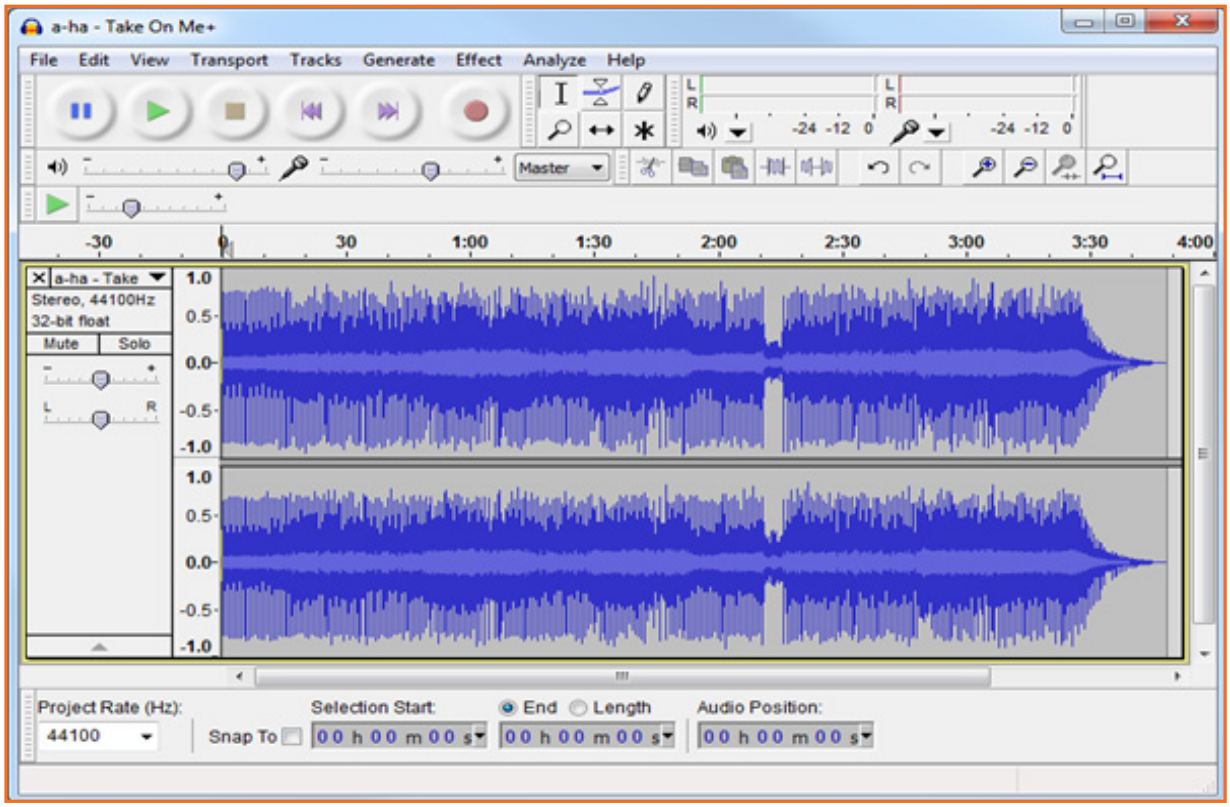


Fig.2.2.3: Audacity

Features of Audacity Sound Editing Software are:

- Live audio recording
- Record computer playback
- Convert records into digital form
- Edit different type of audio files
- Support different formats like M4A, WMA, AC3 etc.
- Copy, cut, mix or splice sounds together
- Several effects like changing the pitch or speed of a recording
- Complete list of features: http://audacity.sourceforge.net/about/features

2.2.2.4 Adobe Audition

Adobe Audition had begun as the simple sound editor known as Cool Edit Pro. It has now developed into a multi-track recording tool, which provides all the requisite tools expected from Adobe products.

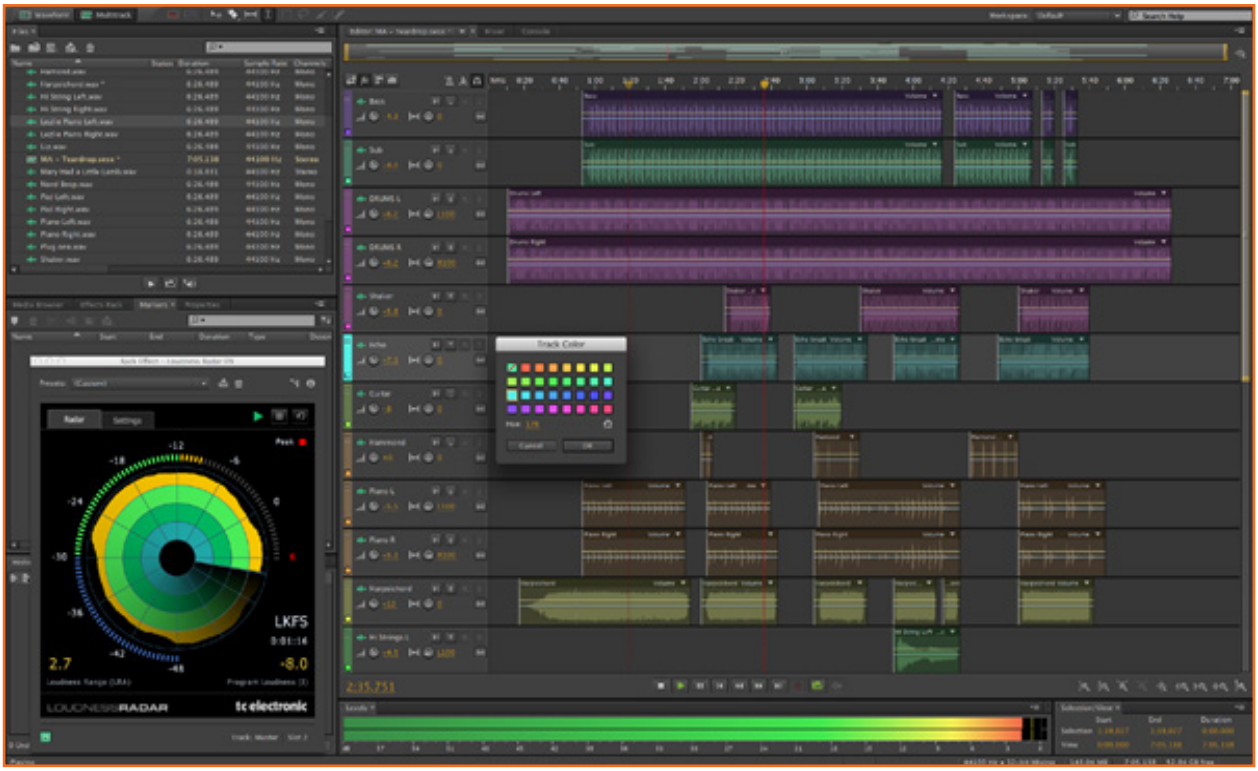


Fig.2.2.4: Adobe Audition

Key features of Adobe Audition Sound Editing Software are:

- Standard options for editing are included like cropping, pasting, cutting and mixing audio files so as to create your track.

- Adobe Audition can give a professional studio worthy outcome with numerous special effects like multitap delay, equalizers, reverb, flanger, chorus and distortion. As it is an audio editing software, it has been programmed to mix up to 128 tracks.
- It also allows for individual editing; in the latest version, the multi-track recording is enabled. Using the burning feature the software can edit audio files up to 2GB in size. It is worth noting that the program has Blu-ray burning which makes editing audio greater than earlier versions.
- Users are given the freedom to remove any sound from a music track easily using the mouse and several effects are available such as sound remover effect, pitch bender and stereo expander.

2.2.2.5 Nero Wave Editor

Nero Wave Editor is a program for recording and editing audio files. Varied filtering and sound optimization methods allow you to make individual audio files rapidly and easily. It is much better than recording from vinyl or tape in many aspects.

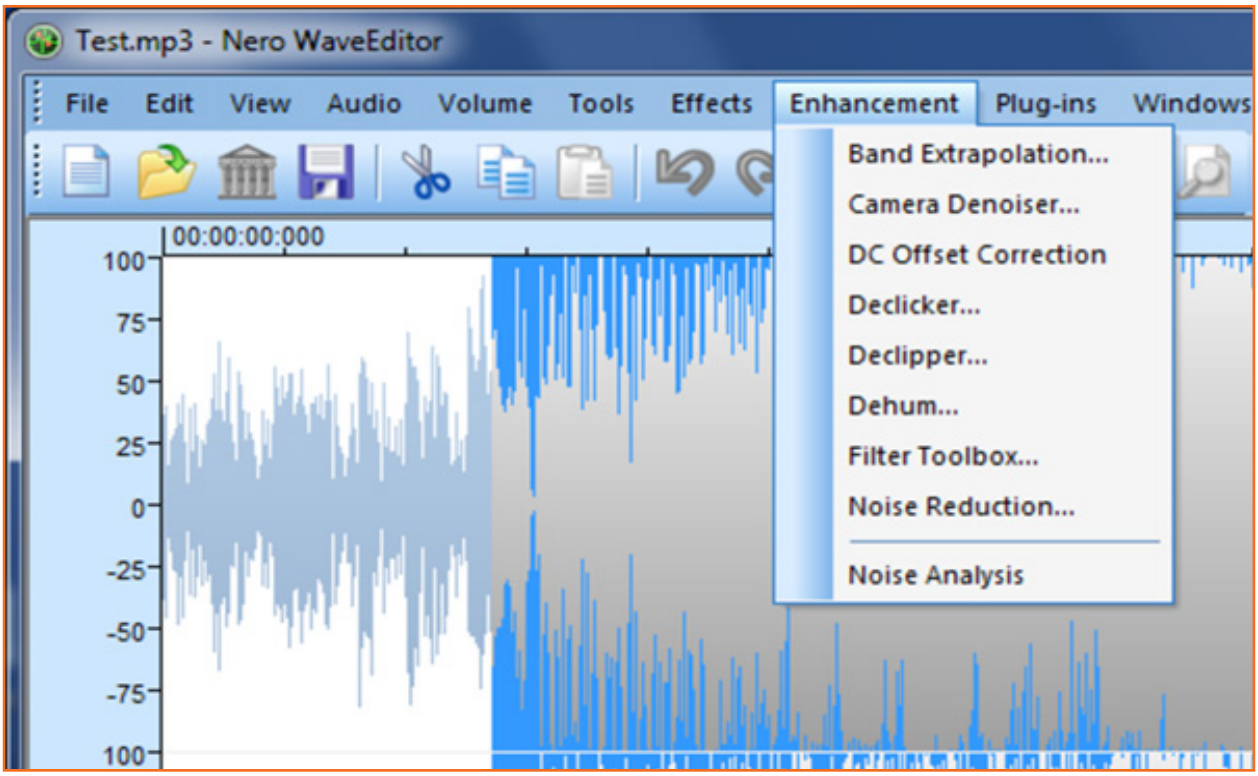


Fig.2.2.5: Nero Wave Editor

Uses of Nero Wave Editor

Nero Wave Editor is designed for processing recorded sound files for converting them to more ear pleasing form. One common example would be digitizing a vinyl record; it's rare for these types of recordings to sound good without digital fine-tuning through filtering which allows one to trim out distortion and noise, while normalisation balances the volume across the entire track.

Nero Wave Editor is similar to Audacity and the effects allow for creativity. Users can download professional VST plugins to increase the available methods

Features of Nero Wave Editor Sound Editing Software are:

- Nero Wave Editor offers a large choice of effects that can enrich audio recordings, improve the quality and provide a more professional sheen overall. These effects can be merged into presents - handy if you have multiple audio files recorded at the same time, which all needs some working.
- Real time preview option allows one to hear what an effect will sound like without waiting for the whole effect to be applied and once editing is finished, you can save your file in the original or different format.
- You can also use Nero Wave Editor to obtain the audio from analogue line-in or a digital input if your hardware didn't come with any such software, provided the computer supports it.

UNIT 2.3: Editing with Audacity

Unit Objectives

At the end of this unit, you will be able to:

1. Identify what is audacity
2. Elaborate the technical requirements for installing audacity
3. Describe the setup process of audacity

2.3.1 Introduction

You have several options where it concerns recording audio for online posting. You require software that can record audio to accomplish this. In this session we will cover recording audio using a program known as Audacity which is a simple, free program used in recording and editing audio files.

Let's say you have to record and upload an audio presentation to an online course. Here's a quick overview of what you need to do:

- Setup microphone and configure audio settings.
- Download and install Audacity and Lame.
- Record and edit audio.
- Convert audio to mp3 file format.
- Upload mp3 file to online course.

2.3.2 Technical Requirements

Hardware

Using a headset microphone will give the best results. The Centre for Teaching and Learning with Technology (CTLT) only provides technical support for USB headset microphones. Built in microphones and Analog microphones on laptops are not supported.

Software

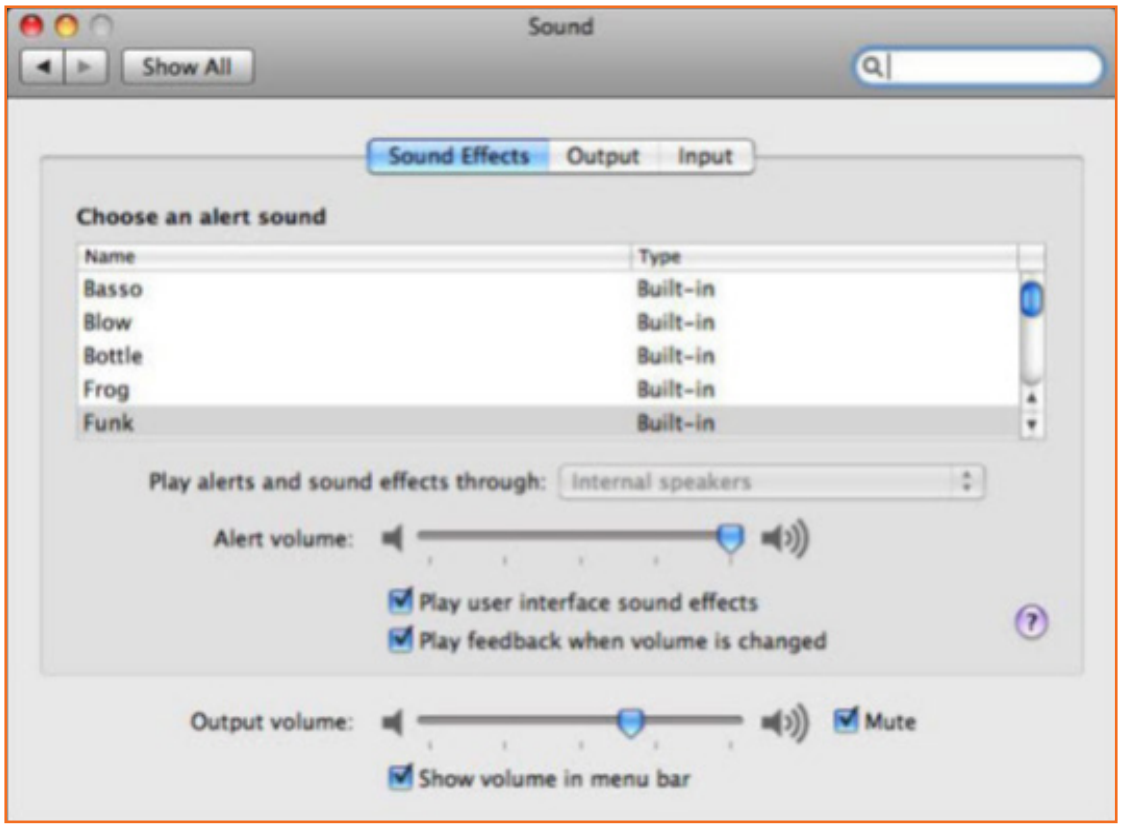
As Audacity is a free application, everything you need is not included in a single download. First download and install Audacity, then install a software known as LAME that allows Audacity make MP3 files. Instructions for downloading and installing both programs will be discussed later in this guide.

You must also ensure that your computer also meets the minimal necessities listed on the eLearning site.

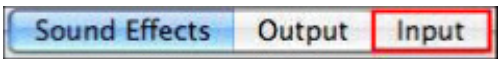
2.3.3 Setup

Configure Recording Settings for Mac

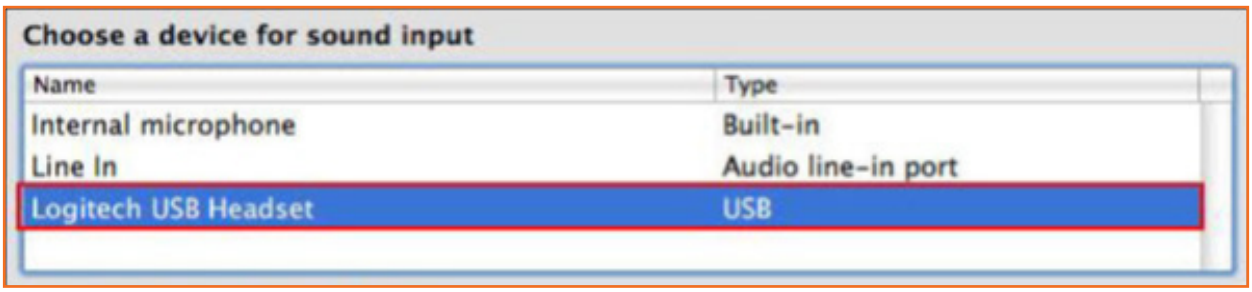
Before following the steps below, ensure that your USB headset is connected to the computer and the headset itself is not set to mute (if the option is available).



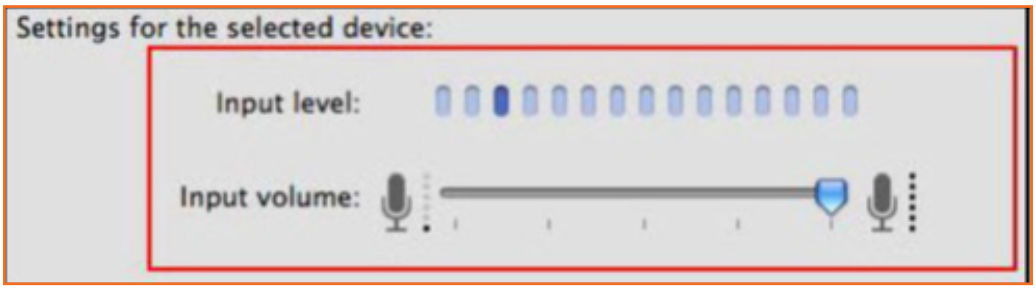
Step 1: Open System Preferences and click the Sound icon to open your sound options.



Step 2: Click the Input tab.



Step 3: Be sure to choose your USB microphone.



Step 4: Adjust the volume slider as needed, and with this window open when you speak into the microphone, the input level meter should go beyond the midway point.

Configure Recording Settings for Windows XP

Before following the steps below, ensure that your USB headset is connected to the computer and the headset itself is not set to mute (if the option is available).

- Open the Start menu and go to All Programs.
- Go to Accessories and then Entertainment.
- Select Volume Control.
- In the upper left corner of the dialog box that opens, click Options and then Properties.

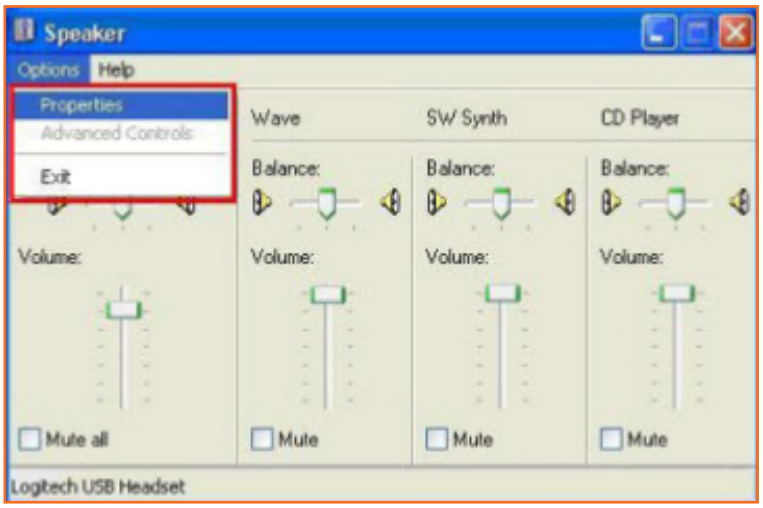


Fig.2.3.1: Volume Control

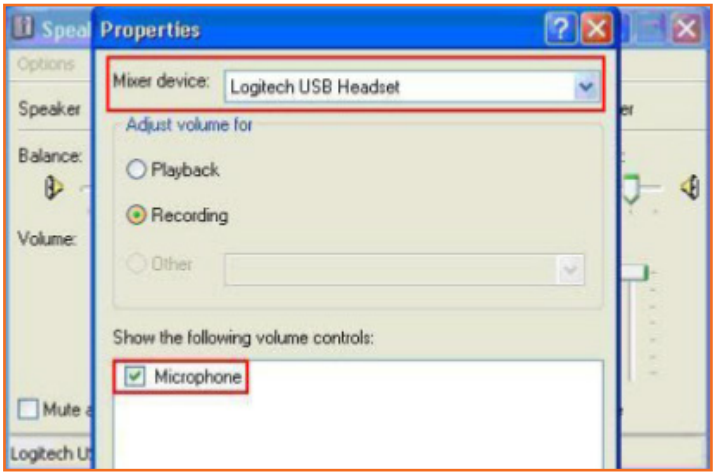


Fig.2.3.2: Recording Window

- In the Properties window, make sure the USB headset mic is selected as the mixer device. Then choose Microphone under Show the Following Volume Controls.

- Be sure to click OK at the bottom of the dialog box.
- Use the slider control on the Volume switch in the box that opens, to adjust the volume when you begin recording.

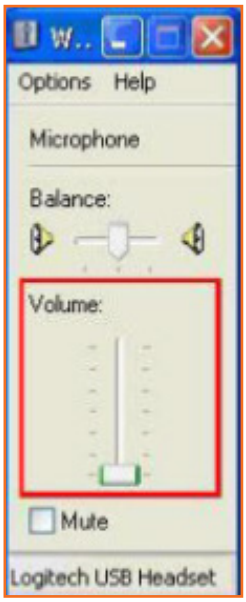


Fig.2.3.3: Master Volume Control

Configure Recording Settings for Windows Vista/7

Make sure that your USB headset is connected to your computer and that the headset itself is not set to mute (if the option is available) before following the steps below.

- **STEP 1:** Open the Start menu and select Control Panel.
- **STEP 2:** Click the Classic View link on the left side of the window and then double click Sound.

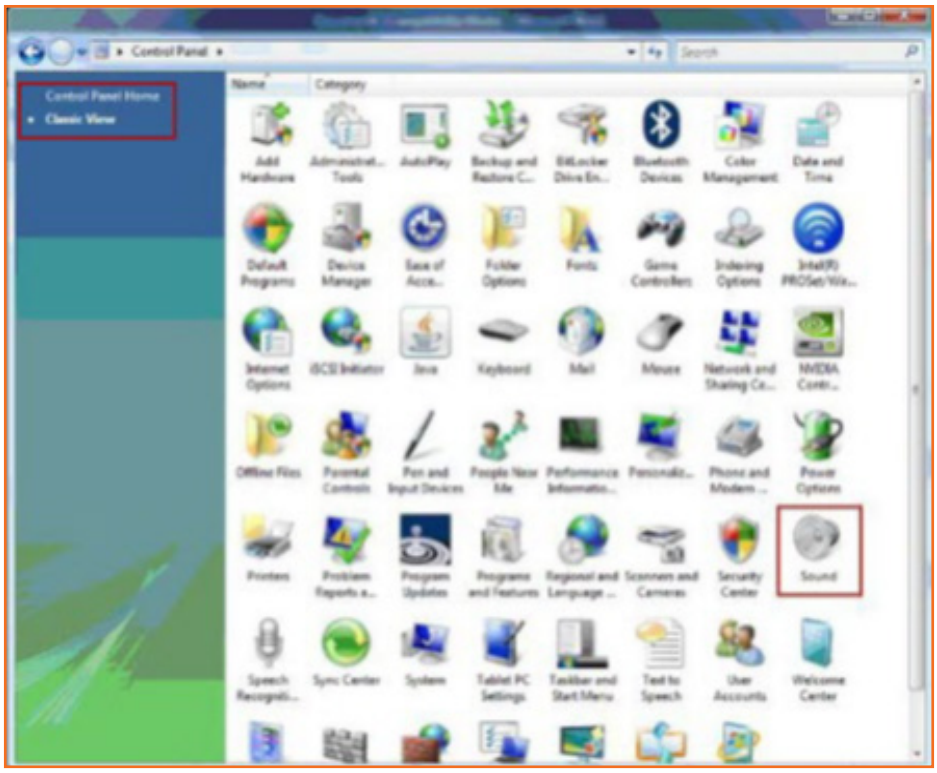


Fig.2.3.4: Recording Settings for Windows Vista/7

- **STEP 3:** Click the Recording tab.
- **STEP 4:** Make sure your headset mic is selected and says working.

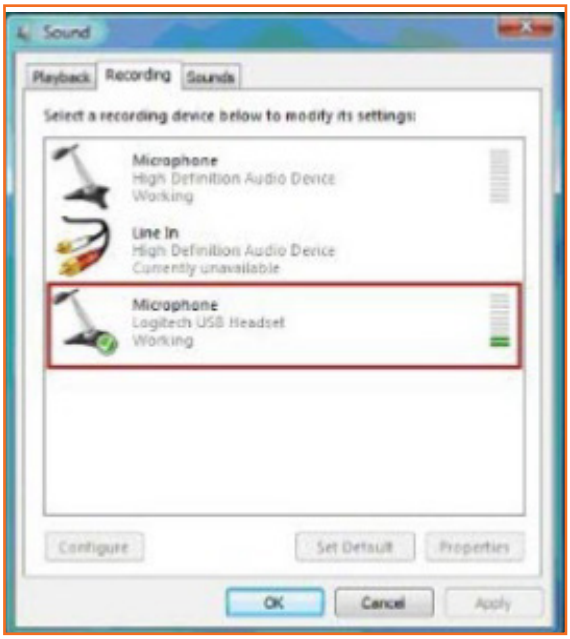


Fig.2.3.5: Recording Settings for Windows Vista/7

Fig.2.3.6: Microphone Properties

- **STEP 5:** Double-click your headset mic.
- **STEP 6:** Click the Levels tab.
- **STEP 7:** Use the microphone slider to set the volume.
- **STEP 8:** Click OK.

2.3.4 Adjust and Test Microphone

The online microphone tester is the suitable way to test whether or not your computer compatible and your microphone is working before you record. A USB connection is shown in the given picture.

Note: *The Center for Teaching and Learning with Technology only offers technical support for USB microphones.*

Fig.2.3.7: Microphone USB Cord

1. Before following the steps below, ensure that your USB headset is connected to the computer and the headset itself is not set to mute (if the option is available).
2. With the dialogue shown the mic tester will display that the USB microphone has been noticed. Click Start Test to begin the test. If you see a message saying that there isn't a microphone connected, but you are sure you do, see the configure recording settings instructions for your operating system. If you still want to test your microphone, click the Test Anyway button.

Fig.2.3.8: Microphone USB Connection Pop-up

Fig.2.3.9: Adobe Flash Player Setting

3. When prompted, click Allow to give permission to pick up sound from your microphone.

4. Speak a loudly and clearly into the microphone for 5 seconds. After 5 seconds, the tester will provide you feedback about your microphone volume. If the volume is too low or too high, you will get one of these messages

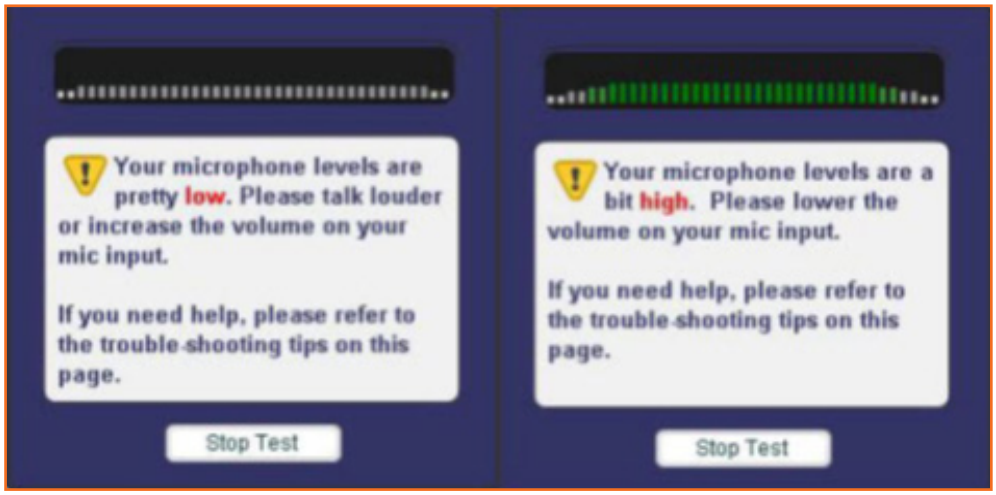


Fig.2.3.10: Microphone Testing

5. To adjust your microphone's volume, view the configure recording settings guidelines for your (OS) operating system.

6. Click the Stop Test button to end the test when you see the shown message. It means your input is satisfactory.

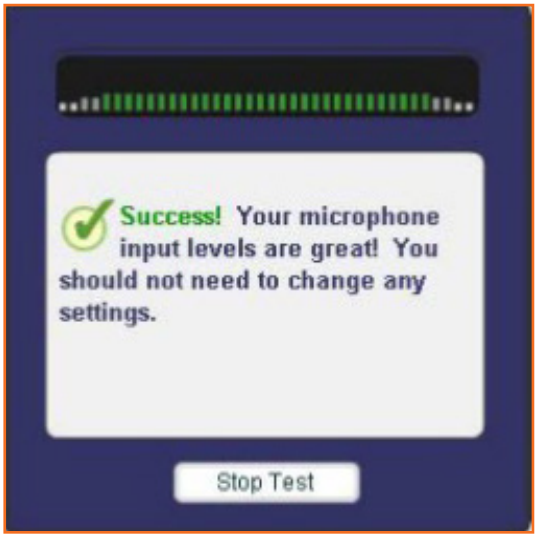


Fig.2.3.11: Microphone Input Level Indicator

2.3.5 Download and Install Audacity for Mac

This part covers instructions for downloading and installing Audacity 1.2.6 to an Intel-based Mac since that is the most prevalent Mac in use at the School. If you have a PPC- based Mac or are running Mac OS 10.6, please follow directions given on the Audacity website.

- Go to the Audacity Web site at http://audacity.sourceforge.net/.
- Click the link that corresponds to your Mac. 9
- Once the download is complete, open the Downloads folder, then open the Audacity folder.

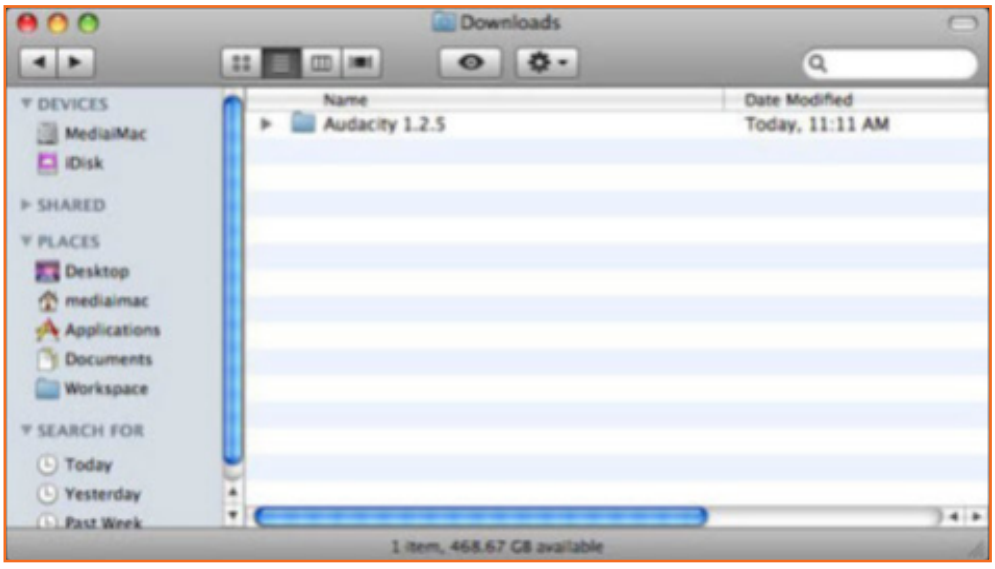


Fig.2.3.12: Downloads Window

- Drag the Audacity icon into the Applications folder, then double-click it to launch the program for the first time.

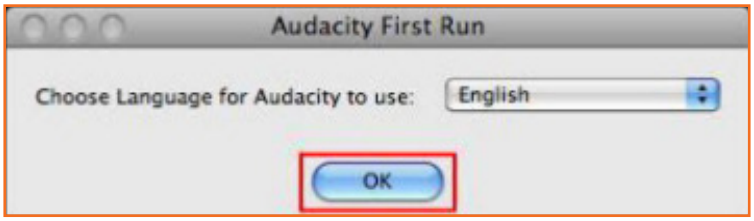


Fig.2.3.13: Audacity First Run

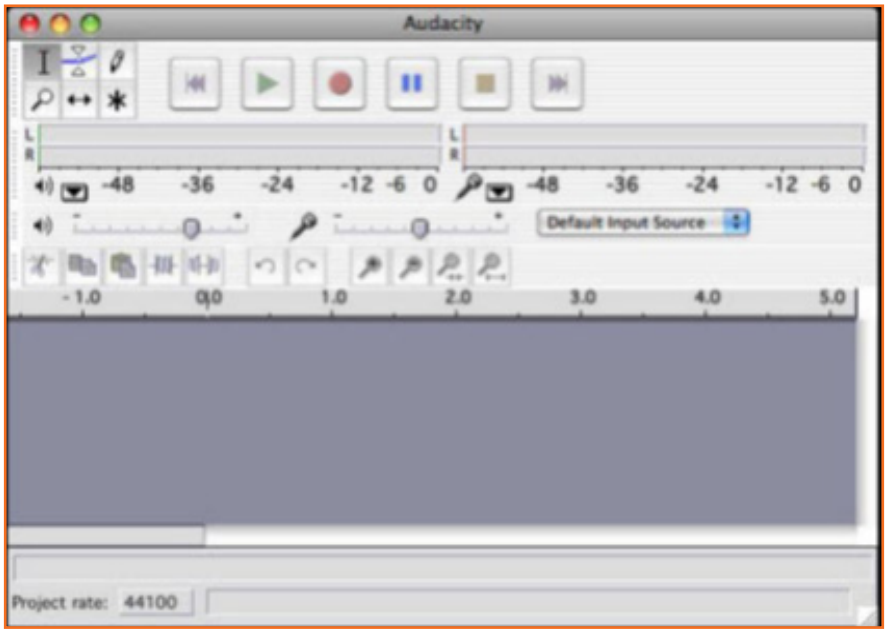


Fig.2.3.14: This is the Audacity interface. You can now begin recording

Check the audacity audio settings before recording to ensure that your recording and playback tools are selected:

1. Click Preferences from the Audacity menu.
2. Click the Audio I/O tab.
3. Select your recording and playback devices from the Playback Device and Recording Device drop down lists.
4. Click OK.

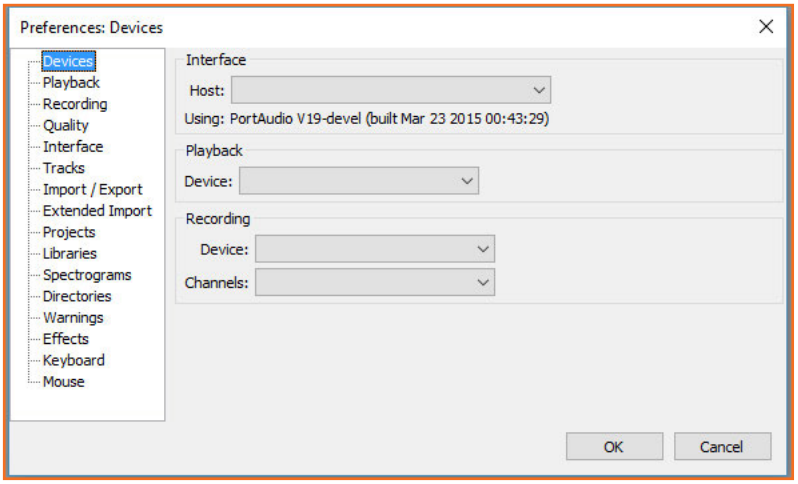


Fig.2.3.15: Preferences Dialog

2.3.6 Download and Install Audacity for Windows

This section will cover instructions for downloading Audacity to your PC using Firefox.

Note: Wording and pictures may be different if using a different browser.

1. Go to the Audacity Web site at http://audacity.sourceforge.net/.
2. Click the Download link.
3. Click the Audacity 1.2.6 installer link.

   Note: Windows 7 will need the download the 1.3.12 (Beta) version.
4. To save the file where you want select Save File in the dialog box.

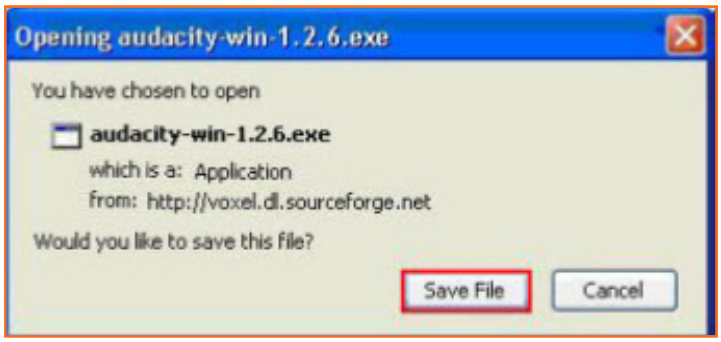


Fig.2.3.16: Downloading Audacity Setup

5. To open the executable file select OK.

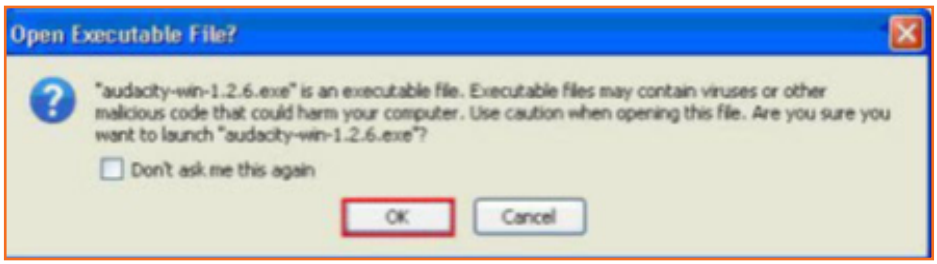


Fig.2.3.17: Run Setup

6. Run the Audacity Setup Wizard by clicking Next.

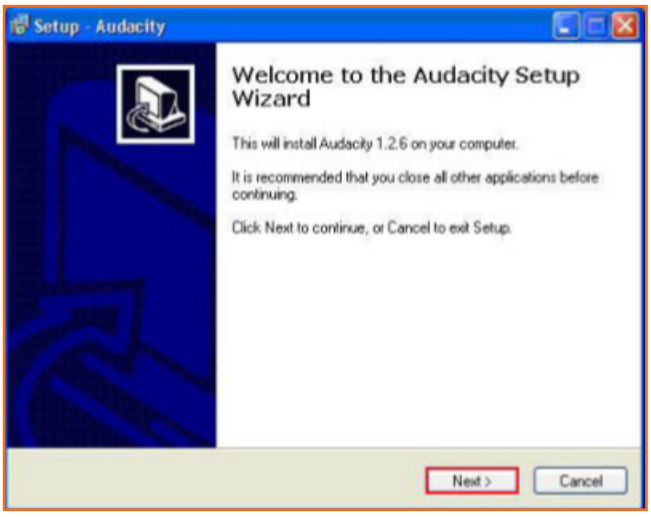


Fig.2.3.18: Setup Wizard

7. If you choose to launch Audacity, the shown interface will pop up and you can begin recording.

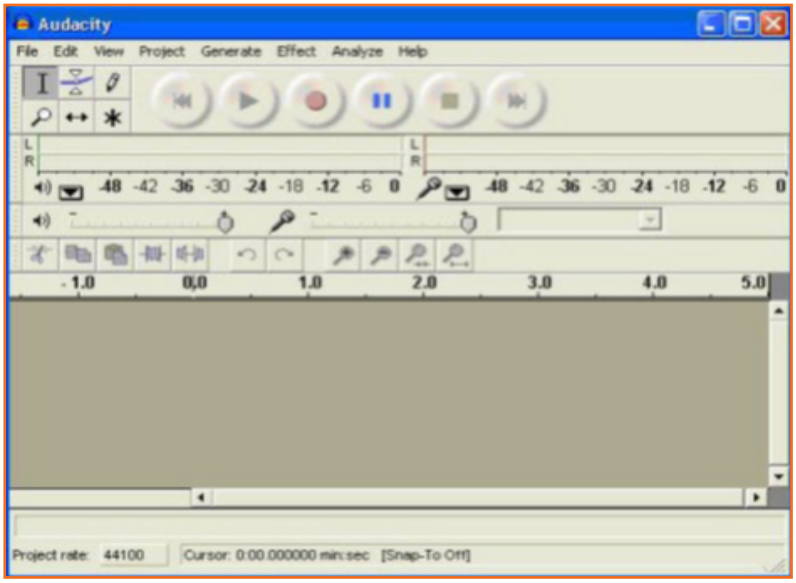


Fig.2.3.19: Audacity Window

8. This is the Audacity interface. You can now start recording
9. Before starting to record, check your software audio settings to make sure that your recording and playback tools are selected:
10. Click Preferences in the Edit menu.
11. Click the Audio I/O tab.
12. Select the desired recording and playback tools from the Playback and Recording Device drop down lists.
13. Click OK.

2.3.7 Download and Install Lame for Mac

This part covers directions to download Lame onto your Mac. To post online and export you will have to use Lame on the Audacity recordings.

1. The free Lame downloader for the Mac can be accessed from the School's servers here.

   Note: *PPC-based Mac users will need to download the LameLib-Carbon-3.91.sit file from the Audacity site and follow instructions given.*

   Once you've downloaded the Lame dmg file, double click the Lame Library v3.98.2 for Audacity.pkg file.

   Note: *if prompted, double click the Lame_Library_v3.98.2 for Audacity_on_OSX.dmg file to reveal the pkg file.*

   Once the installer wizard window opens select Continue.

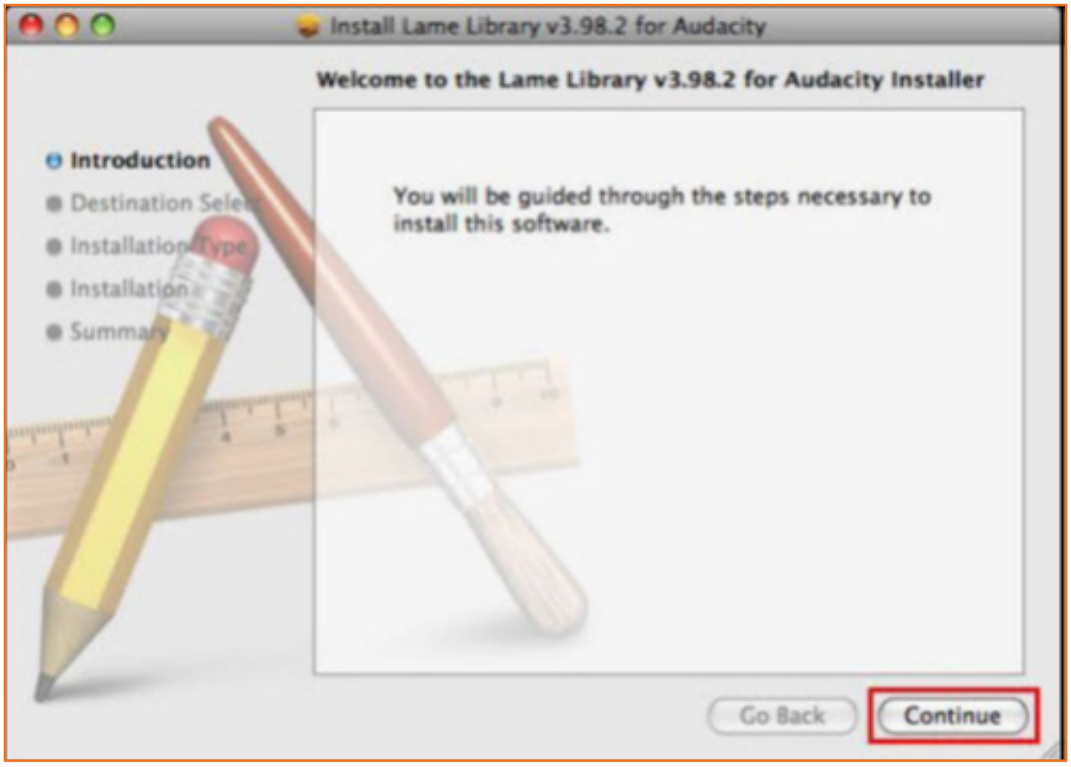


Fig.2.3.20(a): Lame Installation on MAC

2. When prompted, select the place where you wish to save the file. Select the Choose tab. The first time you export your recording, you will have to manually find the file so remember where you save it.
3. In the installer window the location will appear. Choose the volume where you wish to install the Lame software then select Continue.

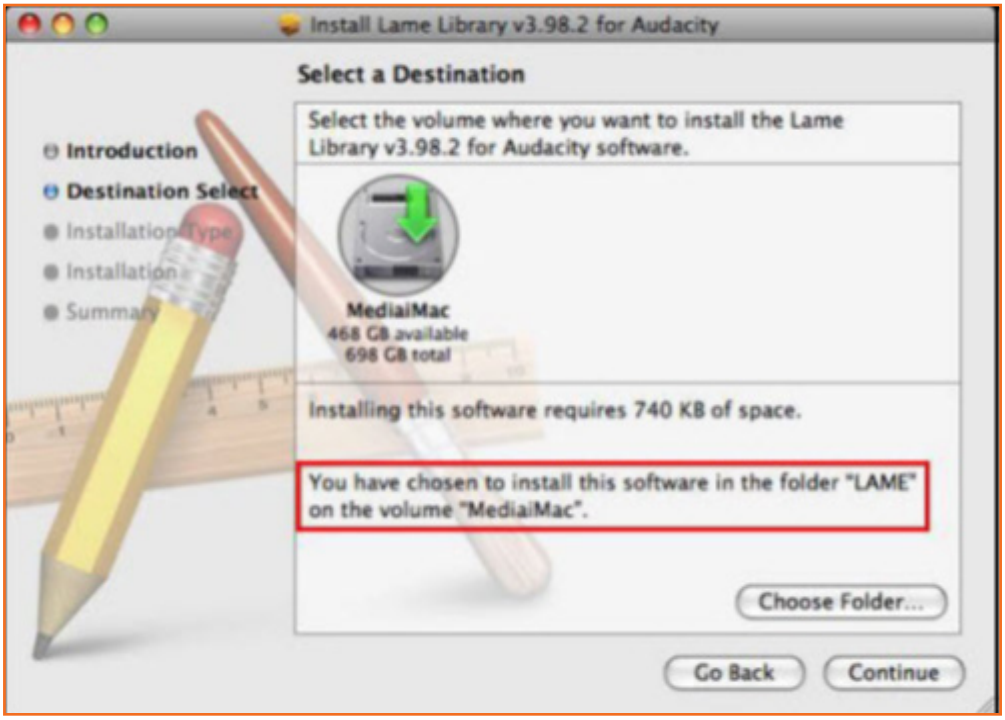


Fig.2.3.20(b): Lame Installation on MAC

4. Click Install. Enter your computer password if prompted.
5. You have installed LAME successfully! Click Close to complete the installation.

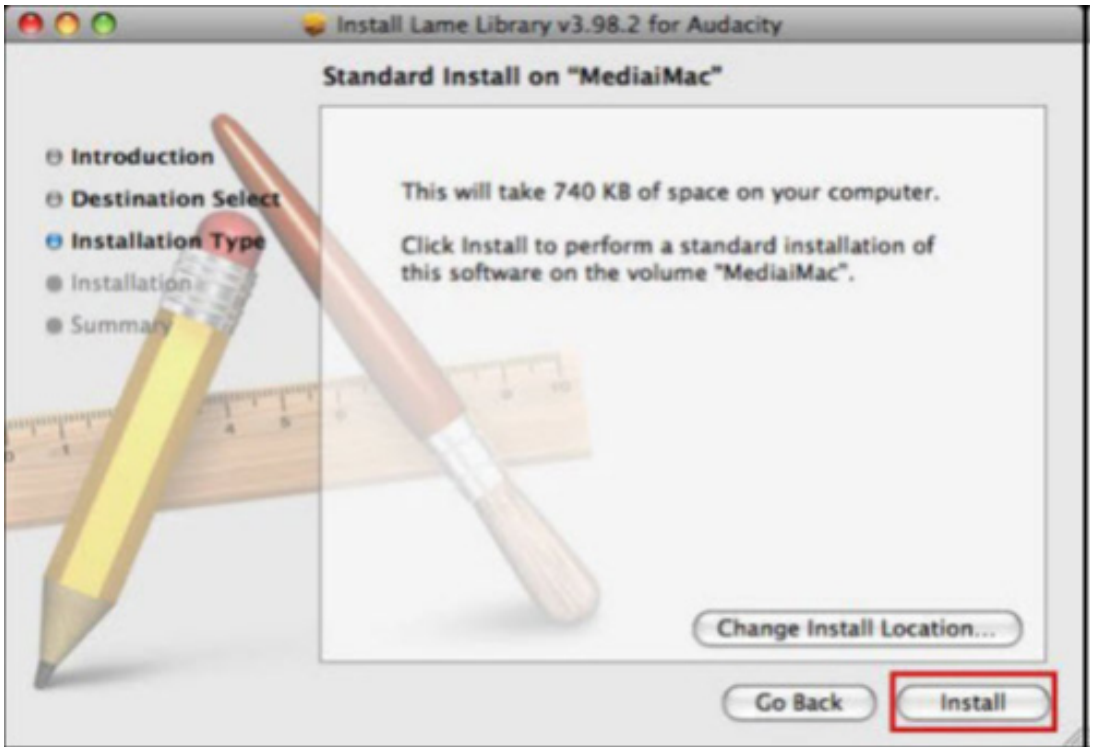


Fig.2.3.20(c): Lame Installation on MAC

2.3.8 Download and Install Lame for Windows

This part gives directions for using Firefox browser to download Lame software to your PC. To post online use Lame to export your Audacity recording.

Note: Wording and pictures may be different if using a different browser.

1. The free Lame downloader for the PC can be downloaded from the School's servers.
2. When prompted, select Save File, and then select OK.

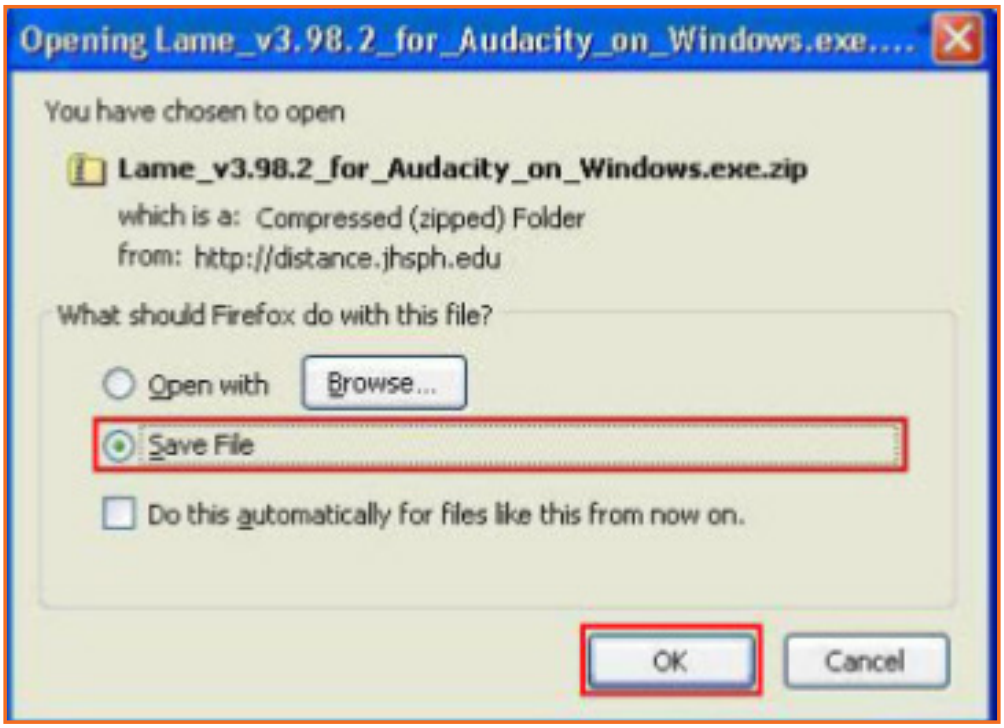


Fig.2.3.21(a): Lame Installation on Windows

3. Double-click to open the downloader file where it was saved.
4. Select where the file will be saved after it is extracted because it comes as a compressed zip file.

Fig.2.3.21(b): Lame Installation on Windows

Note: *Copy the files to your desktop if you don't see a wizard,.*

5. Find the file on your computer and click it.
6. Select the Save File option.
7. Install the program files wherever you wish, but don't forget where as you will need to find lame_enc.dll the first time you export to mp3 format.

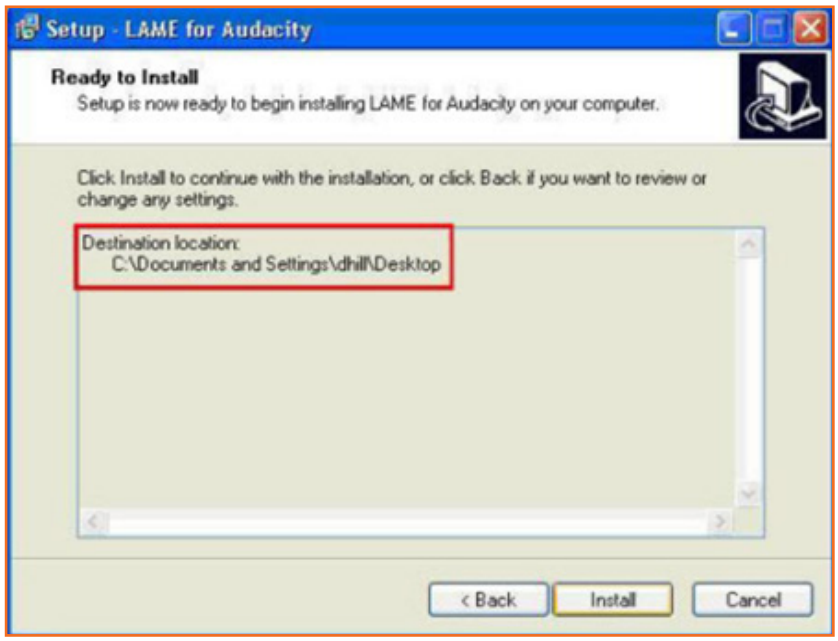


Fig.2.3.21(c): Lame Installation on Windows

8. Open the file, and then select OK to launch.
9. Select Next to start the Lame for Audacity Setup Wizard.

Note: *The first time you export to mp3 format, Audacity will ask you to find lame_enc.dll.*

Fig.2.3.21(d): Lame Installation on Windows

2.3.9 Recording in Audacity

Record

To record audio, press the record button. Then, speak clearly into the microphone and you will see the waves on the interface change as per your voice modulation.

Tip: If you get an error message you will have to install the 1.2.6 version for Mac users.

Pause

To take a break from recording use the pause button, which will allow you to come back to the recording and continue recording on the same track.

Note: It is recommended that you save your progress first, when taking an extended break as while you are away, you could lose your recording because something went wrong with your computer.

Stop

When you have finished recording use the stop button and need to save or export the track.

Note: *If you mistakenly press stop, then record again, you will begin recording a second track that will play simultaneous to the first. This means that if you export the files as are, then they will play at the same time. For more information, please see Stop vs. Pause in Audacity.*

Tip: *If the Stop button was pressed you can press the shift key while selecting the Record button to continue recording for Audacity 1.3 users.*

Editing Recordings

Usually, it is easier to first record your presentation and then edit out the errors after you have finished. When you are recording, and you stutter over a word or misspeak, just take a deep breath, keep recording, and edit when you are done.

Once you're done recording:

- To listen to the recording press the play.
- To get to the section you want to edit use the bar at the bottom.
- Highlight as much sound as you want to get rid of.
- Click Delete in the Edit menu, the highlighted area has been deleted from the track. Repeat as many times as you need.
- If you find that you have deleted something by mistake, select Undo Delete from the Edit menu.
- To export the track, use the File menu.

Tip: *If you cannot to hear playback of the recording, follow directions from the Download Audacity on changing audio settings in Audacity preferences.*

You'll have to locate the Lame library file if it's the first time you've exported a track; the directions on how to download the file are given in the Setup section. To find the Lame library file, view the establish export settings.

2.3.10 Stop vs. Pause in Audacity

The Stop and Pause options work differently in Audacity.

Use the Stop button when you are done recording a track, or want to edit or when you want to eliminate a recording and start fresh or want to export the finished recording to mp3 format.

The Pause button is to be used to take a break from recording a track.

If you mistakenly press stop, then record again, you will begin recording a second track that will play simultaneous to the first. This means that if you export the files as are, then they will play at the same time.

Tip: If the Stop button was pressed you can press the shift key while selecting the Record button to continue recording for Audacity 1.3 users.

Avoiding simultaneous playback

- In the first track field, place the cursor from where you wish to continue recording.
- Select the Record button.
- Select Stop when you're done; the two tracks will be exported together, but will not play simultaneously rather continuously. Editing the audio may be needed so it will play back smoothly before exporting to mp3 format.

Tip: *If the Stop button was pressed you can press the shift key while selecting the Record button to continue recording for Audacity 1.3 users.*

You'll have to locate the Lame library file if it's the first time you've exported a track; the directions on how to download the file are given in the Setup section. To find the Lame library file, view the establish export settings.

Taking a break during recording

1. Click Pause .
2. To resume recording click the Pause button again, it will pick up where it stopped. Before exporting, you may want to listen to it and edit as needed.

Note: *Your file is not automatically saved when you pause your recording. It is recommended that you save your progress first, when taking an extended break as while you are away, you could lose your recording because something went wrong with your computer.*

2.3.11 Re-recording Using Audacity

Let's say that you had created a recording and you don't want to keep it. Given below are the steps on how to re-record using Audacity.

1. Select the Stop button.
2. Open the Edit menu.
3. To erase the recording select Undo Record.
4. To re-record click the Record button.
5. Press Stop when you're happy with it.
6. Open the File menu and select Export.

2.3.12 Cut and Paste

If you have recorded two different tracks, after pressing Stop then Record; you may want to insert all or part of those tracks from one into the other so it will play smoothly as a single track

How to cut audio from one track and paste it into another

- Highlight the section of the track you wish to cut.
- Open the Edit menu.
- Select Cut. The highlighted part gets removed from the track.
- Place the cursor inside the other track where you want to paste the cut section from the first track.
- Open the Edit menu.
- Click Paste.
- Until the track sounds the way you want repeat the steps as many times as you need.
- Remember to close the first track before exporting so that any remaining audio is not exported with the second track. To do this, click the X in the first track's field.

2.3.13 Exporting

Establish Export Settings

Before you can export your tracks, you have to ensure that the export settings are error-free. You only need to do this once as all other mp3s will follow the same settings.

Once you have recorded the track:

1. Open the Edit menu. Mac users will need to open the Audacity menu.
2. Click Preferences.
3. Select the File Formats tab.
4. Select Find Library.
5. Find the Lame encoder file that you saved to your computer when you downloaded the LAME encoder.

Tip: *On a PC, this file is named lame_enc.dll. On a Mac, this file is named libmp3lame.dylib or lamelib.*

6. Open the file.
7. Open the Bit Rate drop down menu and set the bit rate to 48.
8. Click OK.

All future audio files recorded will be exported using the same settings.

Note: *Windows 7 users do not need to follow these steps if using Audacity 1.3.12 (Beta) or higher.*

Export to MP3 Format

Once you set the export settings, you can export your tracks to post them online for programmes similar to iTunes.

1. Open the File menu.
2. Click Export.

3. Select the place where you want to save the track.
4. Click Save.
5. To make it easier to identify the recording in a media audio player enter details like title and artist for the recording.
6. Click OK.

The track is now saved and ready to be posted online.

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3. Document and Store Media

Unit 3.1 - Meta Data

Unit 3.2 - Naming Convention

Unit 3.3 - Storing and Retrieval

MES / N 3411

Key Learning Outcomes

At the end of this module, you will be able to:

1. Knowledge of Meta Data
2. Describe naming convention
3. Knowledge of Storage and Retrieval System

UNIT 3.1: Meta Data

Unit Objectives

At the end of this unit, you will be able to:

1. Describe about the Meta Data Editor.
2. Describe the types of Audio Formats.

3.1.1 What is Meta Data Editor?

A software program that allows one to view and modify metadata tags collaboratively as well as save them is known as a metadata editor. Generally a viewer programme is favoured over a metadata editor programme for simple viewing.

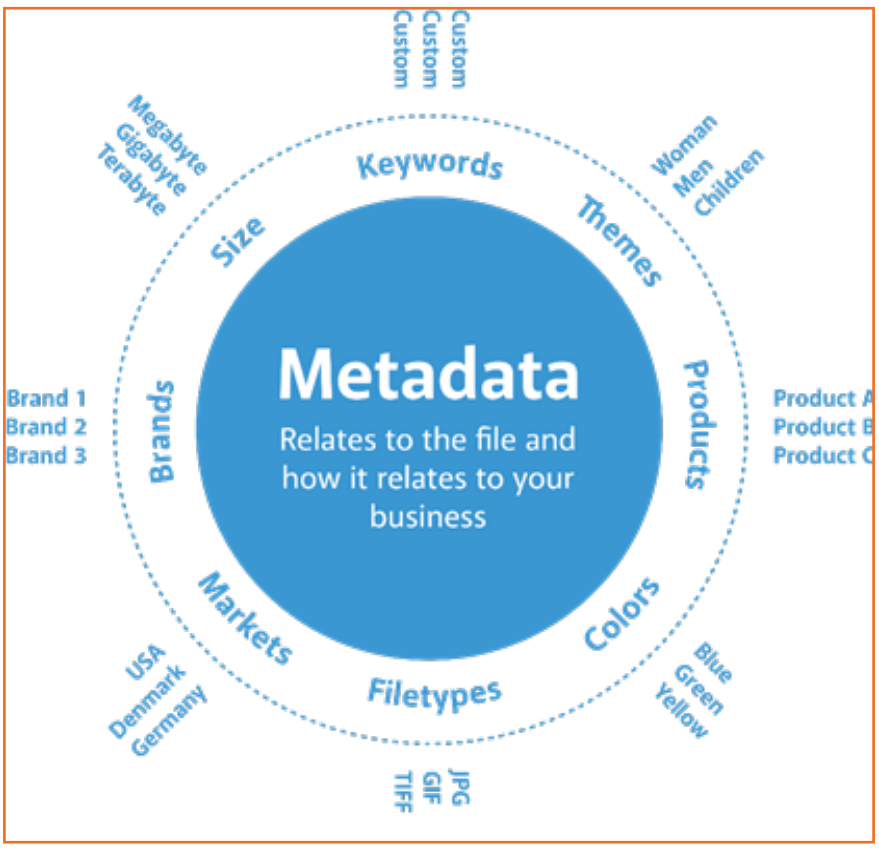

Fig.3.1.1: Metadata

Embedded metadata is displayed in software applications like iTunes® or Windows Media Player, or portable players like iPod® and Metadata Editor is used to enter or confirm such information (such as artist, year or genre) that will be embedded in any exported audio file.

Player applications support differs from all for the ID3 tags used by MP3 and MP2 to almost none for WAV whereas in most export formats in the Metadata Editor support the seven default tags. See the Frequently Asked Question for details.

- For both MP3 and MP2, only ID3v2 tags are exported. ID3v1 can be exported using Command-line export.

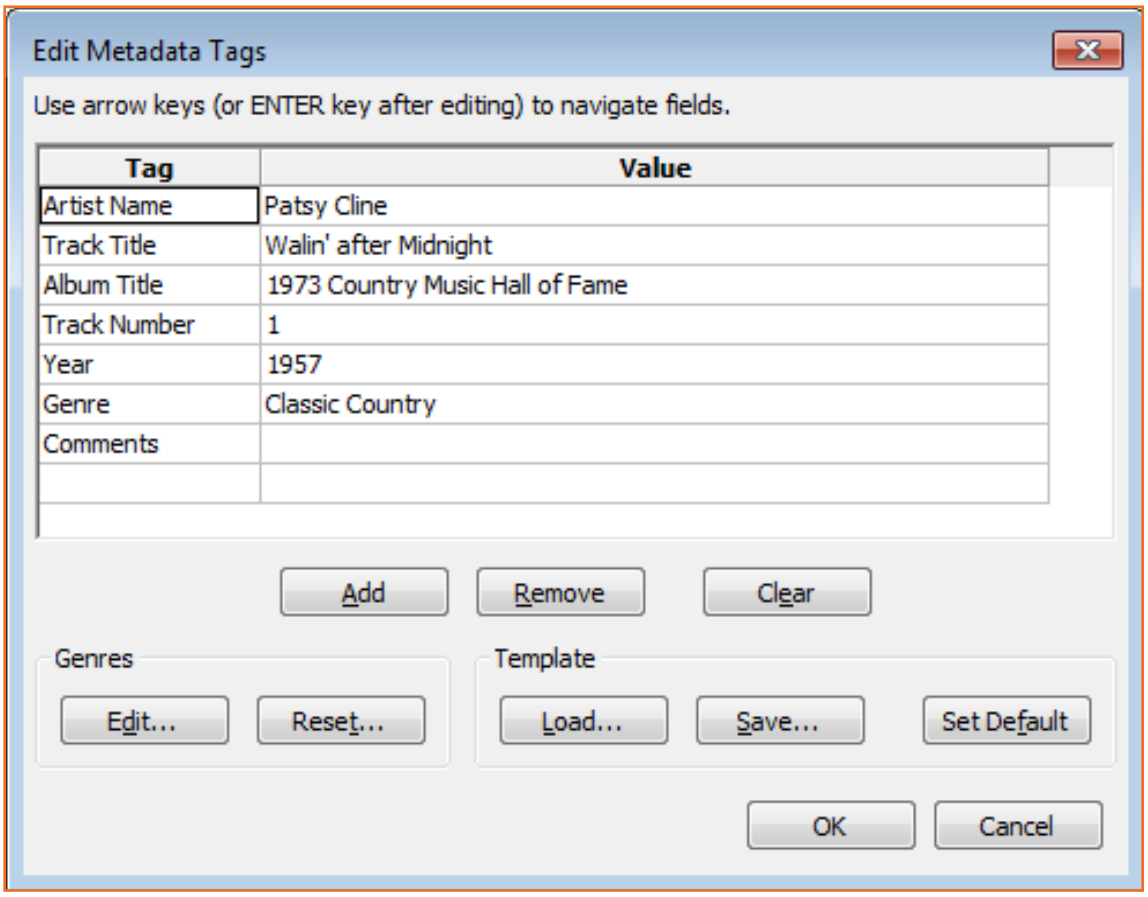

Fig.3.1.2: Edit Metadata Tags Window

- After choosing the file format in the Export Audio or Export Multiple dialogs; by default, the Metadata Editor appears for each exported file.
- Before exporting, it's often easier to uncheck "Show Metadata Editor before export step" in Import / Export Preferences when using Export Multiple, then enter any tags common to all tracks at File > Edit Metadata.... Audacity will then add the automatically generated Track Title and Track Number tags for each exported file without the Editor appearing.
- It usually does not show data for the selected track rather the most recently imported track. If you need the editor to show separate data for each track you have to import the files into separate projects.
- The Save... button only saves an optional template of Tag names and values. Thus, use the OK button in Metadata Editor to complete the Export

Tag and Value fields

Tag Name: Using the "Add" button one can add more Tag rows for customised information while the first seven Tags are permanent and cannot be modified.

Note: *"Album Title", "Track Number", "Genre" and customized tags are not supported for WAV and will not be exported or imported.*

- **Tag Value:** When exporting several files, the "Track Title" and "Track Number" tags are filled automatically. However, you don't have to fill in every value, nor do you have to accept the data already filled, instead you can type it in as you want.

Using either the mouse or the arrow keys to select a value field one can replace the information by typing Moreover, if one were to use the Tab button you can not only navigate the above-mentioned fields but also the options below the Tag and Value fields

To edit rather than replace the text in a field, double-clicking it (or select it, then use keyboard F2) will highlight the text. It will also allow cut, copy or paste using normal shortcuts or the right-click menu. Use Home, End or Arrow keyboard keys to navigate to individual characters, once a value field has been replaced or edited, press the Return key or click in any other one to select it.

Note: *To use the Genre field, double-click it then type a custom genre name or select from the dropdown list by simply clicking the downward-pointing arrow to right of the list, or use Up and Down Arrow keys. A custom genre, typed into the dropdown is not added to the list permanently - the Edit button has to be made use of to directly edit the list.*

- **Add:** By default, there is already one empty row at the bottom of the list but if more are needed this option can be used. It adds an empty row to the list for your own personalized Tag. You can select and edit the name and value fields normally.
- **Remove:** Removes only the value data from the selected permanent row or the entire selected custom row from the list.
- **Clear:** Returns the programme to seven permanent tags with empty values and one customizable row; i.e. the default state.

Genres

- **Edit:** Edits the list displayed in the Value field of Genre. The entire list is selected on open. To edit, click the required item or use the keyboard Arrow keys. To permanently add an entry, press keyboard End then type the name you want.
- **Reset:** Resets the genre list to the default.

Template

- **Load:** Loads a previously saved list made up of Tags and values.
- **Save:** Saves the current list to a file.
- **Set Default:** Makes the current list of Tags and filled values the default state whenever opening a new project. To clear the default setting, click Clear then Set Default.

If you import a file containing metadata, that information will appear in the Editor even if you set a Default setting. If you always want a preferred set to show after importing a file, you need to save it as a template then load it after importing the file.

3.1.2 Types of Audio Formats

It is significant to know the different audio formats and audio compression techniques, since each file format has a specified application. For instance, at the end of this chapter, you will understand that mp3 file format is a compressed file that utilize less space and can be easily used for podcasting and broadcast purposes. Also understanding open file formats versus proprietary ones aids one in deciding which file format to use in a specific instance.

Types of Audio Formats

There are numerous file formats in the world of audio. When we talk about file formats, we are primarily talking about digital files. Remember, digital information is only '1s' and '0s'. How these '1s' and '0s' are organized, determines the type of file format. It is the difference in organization of this information that distinguishes an image file from an audio file.

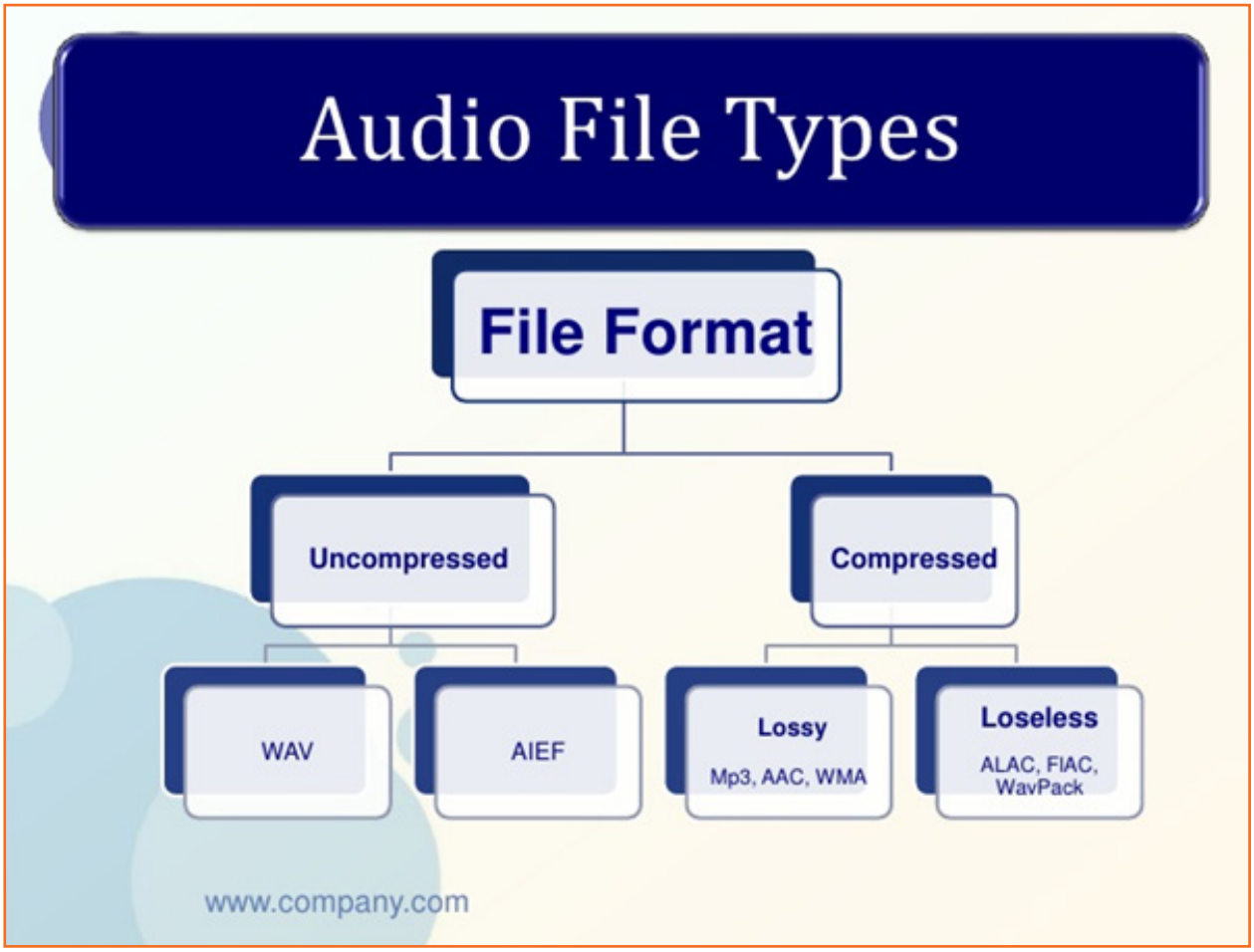

Fig.3.1.3: Types of Audio Files

File formats are nothing, but the way information is organized so the equipment or software understands them easily to function with them. For instance, when you save a Microsoft Word file, the file format is ".doc". This means that all information in that file is organized in a way to enable software such as Microsoft Word to interact with (open, edit and save) it. Some file formats can interact only with specific software/equipment, while some can interact with more than one software/equipment. For instance, an audio file such as mp3 can be opened by more than one software solutions.

Following are examples of file formats that you might encounter sometime at work:

- **Images:** BMP, JPG, SVG, GIF, PNG
- **Text document:** DOC, ODT,
- **Sound:** MP3, WAV, OGG
- **Video:** WMV, QuickTime, h264, mp4

The numerous file formats has only expanded over the years and technicians around the world have been continuously functioning on decreasing file sizes, while trying to keep the originality of sound.

However, relying on the software one uses or the computer operating system (Mac, Windows, Linux etc), audio formats are either proprietary or open standard in nature. Proprietary formats are those that will only work with specific software and on specific operating systems. On the other hand, Open standard formats will play across software and computer operating systems.

Before we begin to understanding file formats, it is essential to understand the distinctions between codec and file format.

A codec (short for Compression-Decompression or Coder-Decoder) means the manner the audio is compressed and stored. It is a piece of software that compresses an audio file and then decompresses it to be heard accurately. Some file types always use a specific codec. For instance, '.mp3' files always use the MPEG Layer-3 codec. Other files like '.wav' support can use different codecs such as 'PCM', MPEG3 and several other codecs.

In short, a file format contains the audio, the content, and the codec is like a container. Let us draw an analogy here. Say you have a book with colourful images and text. You can print it on glossy paper or on normal paper. Printing it on glossy paper will make the colourful images stand out. The text and colourful images are the contents the file format. The normal paper or glossy paper is the codec. Let's take the example of an audio file itself. Say you have an audio file which is one-hour long. If you want to stream it over the internet, you will require a certain codec like MPEG Layer-3. This manner, the file size is optimized for internet and streaming becomes easy.

The most popular file formats, both open standard and proprietary are as follows:

1. **wav:** Normal audio file format used largely in Windows PCs and commonly used for storing non-compressed (PCM), CD-quality audio files, which means they can be large sized. It is less known that these files can also be encoded with a multiple codecs to decrease the size.
2. **mp3:** The MPEG Layer-3 format is the most used format for downloading and storing music. mp3 files are compressed by eliminating portions that are essentially inaudible, while preserving decent audio quality and reduces the file size to a great extent. Because of this, Mp3 files are popular for streaming on the internet and for storage purposes.
3. **ogg:** A free, open source container format, the most popular version of which is the codec Vorbis which are often compared to MP3 files in terms of quality.
4. **flac:** A lossless compression codec. Lossless compression is like zipping a file but for audio. If you compress a PCM file to flac and then restore it again it will be a perfect copy of the original. (All the other codecs discussed here are lossy which means a small part of the quality is lost). The cost of the loss is that the compression ratio is not good.
5. **au:** The normal audio file format employed by Sun, Unix and Java. The audio in the files can be uncompressed or compressed with applicable codecs.
6. **aiff:** The format used by Apple and is like a wav equivalent for the Mac operating system.
7. **wma:** The popular Windows Media Audio format is owned by Microsoft and Designed with Digital Rights Management abilities against copy protection.
8. **aac:** A format based on the MPEG4 audio standard held by Dolby.
9. **ra:** A Real Audio format designed for streaming over the Internet. It allows files to be stored on a computer in a self-contained manner with all of the data held inside the file.

ram is a text file that holds a link to the Internet address where the ra file is stored. The .ram file itself does not contain any audio data.

Need for Compression

While discussing about compression, one must avoid getting puzzled between compression while recording and compressing audio files.

Voice has a dynamic range and same with some instruments. As a result of this dynamic range, while recording, sound goes through many lows and highs. Compression while recording decreases such extreme shifts, lessens dynamic range and polishes the sound by controlling maximal levels and maintaining higher average loudness. Compression utilizing software or hardware can also be utilized to slightly tweak an audio track to make it sound natural without distorting it in any manner. On the other hand, compressing beyond a limit can ruin the audio.

The compression about we are discussing here is data compression. But what exactly happens during compression? Compression of data necessarily decreases the number of bits by eliminating inessential information thereby converting it to a file size of lesser size. All the amazing pictures that you view on the internet were originally large files. Compression to web resolution decreases the file size by eliminating a lot of inessential information (mostly needed for printing purposes) without affecting the manner the picture looks. Images are optimized for web so that they load faster whenever you visit a web page.

Similarly, a smaller, compressed file decreases the amount of storage space needed making it possible to store more video or music on a hard drive or portable music player and files can be transferred more rapidly through the Internet or between storage devices. This means that when compressed the size of the file decreases.

Compression Techniques

Compression is the process of decreasing the file size by arranging data contained in it in a more structured manner. By doing this, one is effectively eliminating the number of bits used to store any information. For instance, in a Microsoft Word file, if you have entered text providing more space or you have unnecessary and repetitive phrases and words, it is naturally going to take more space. However, when you eliminate the undesirable spaces and unnecessary phrases and words, the size of the file is decreased.

Similarly, in the same Word file if you have used smaller images (with smaller file sizes) the size of the file would be smaller. On the other hand, if you use high resolution images the total size of the file will significantly increase.

One step further, if you use a software to convert it into a .zip file, its size is again decreased. What you have primarily done is to eliminate all unnecessary information to decrease the file size. It is now easy for you to email the document.

Compression can take place in two ways: Lossy and lossless. Say you have an uncompressed .wav file. You can compress it to another file format using the lossy and lossless method.

In the lossless method, the file size is decreased but the quality of the audio is not compromised. Lossless compression is usually used when the quality of the audio is crucial, say for instance, on a music CD.

The lossy method of compression uses data compression methods where the file size is decreased but retains information that is just about useful. The mp3 files that we download from the internet are not of great quality but just about useful to store on our portable players and mobiles to listen to them on the go.

The amount of information an audio file format holds is measured in Kilobits per second (Kbps) (the bitrate).

Format Converters

Selecting the right audio compression for a given purpose is essential. What is even more essential is the format one selects to convert the audio file into. There are two ways in which audio file formats can be converted. One method is by using software and another, using hardware.

- **Using hardware:** file as a digital file through a USB interface that can be saved using software on a computer. The USB interface (the output from the convertor) is connected to the computer, which serves as an input. The software on the computer then digitises the file and outputs the same as a digital file. This conversion

method is used when archival material is in analog format (on tapes) and has to be changed to digital format for sharing purposes. The method is used while converting audio either from digital to analog or vice-versa. For example, analog to digital audio convertors (from tape/vinyl turntable to digital audio files). The convertor uses output from the analog audio player and feeds it into a piece of hardware that converts and outputs the file in digital format.

- **Using software**: Using software primarily means that you already have a digital audio file in one format and you want to convert it into another format to suit a purpose. Conversion of the file format means that one is converting an audio file into a lossy or lossless format. An uncompressed audio file can be compressed into another file format using lossy or lossless mode. On the other hand, a file that is already compressed in lossy format cannot acquire anything even if converted into a seemingly uncompressed format.

Conversion from uncompressed to a lossy format will result in reduction of file size and quality, while conversion to a lossless format will compress the bit slightly in order without losing out on the audio quality of the original file.

There are many audio conversion software solutions, both licensed and free. One only needs to download them from the internet and use it on a computer. The audio recording/editing software Audacity too serves as an audio file format convertor. Using this format, you can convert a .wav file into an mp3 file and many other formats as given by the software.

UNIT 3.2: Naming Convention

Unit Objectives

At the end of this unit, you will be able to:

1. Know of Naming Convention
2. Elaborate the projects mix folder hierarchy

3.2.1 Mix Stem and Version Naming Convention

With several digital audio files being involved in every audio project, it is significant that Mix versions and Stem file names contain all relevant information within their file names, easy to understand at a glimpse. *For instance: LH_BodyAndSoul_Master_96k_24b_R01.wav*

The above audio file name example contains the following information, each separated by an underscore:

- **Artist Identifier:** A 2 to 4 letter name code used consistently throughout a project. Most often the artists' initials are used for this. In this example "LH" is used.
- **Song Title:** Listed after the artist initials is the song title, or useful abbreviation thereof. Capitalize each word or word fragment. Title contains no spaces, punctuation or diacritical markings (accents), so names are universally file compatible. Song title names should be less than 15 characters if possible. Lengthy titles maybe routinely abbreviated by other programs when imported.
- **Mix Version or Stem type:** After the song title, list the mix or stem identifier. "Master" is the example shown above. Again, capitalize each word or word fragment so title contains no spaces.
- **Sample Rate:** Sample rate at which the audio file was created is listed after the mix version or stem type.
- **Bit Depth:** Bit depth at which the audio file was created.
- **Revision Number:** A 2-digit revision identifier with an "R" preceding it is listed last. The higher the number, the more recent the version created.
- ***File Extension:** Generally generated during file creation, if you have the option to show or hide the file extension it should always be shown. Only one period should be used in the title and should only be placed before the file extension.

Note: *The overall file name length should not exceed 255 characters. Illegal characters include but are not limited to: / backslash, question mark, < left angle bracket, > right angle bracket, \ forward slash, : colon, ; semi colon, | pipe, ' single quote, " double quote, + plus sign, * asterisk, blank spaces, # pound sign, % percent, & ampersand, { left bracket, } right bracket, $ dollar sign, ! exclamation mark, @ at sign, = equal sig.*

3.2.2 Project Mix Folder Hierarchy

Chart A (shown below) shows a suggested folder hierarchy for a project mix folder. The project mix folder contains all parent song mix folders for the project. A parent song mix folder is created for each song of the project and placed in the project mix folder. There will be one parent mix folder per song. Additional song mix subfolders maybe created and placed inside each parent song folder in order to organize multiple audio file sample rates for each song.

All folders should follow a similar naming convention as shown above. This folder name contains the artist identifier, the song title, and contents. Since all files in the folder may not have the same sample rate and bit depth, sample rate and bit depth are not notated in the parent folder titles.

Note: *Different versions of the same song (i.e. clean or explicit) should be treated as different titles with different parent folders. Along with any new mixes or stems for this version of the song, copies of any identical mixes and/ or stems should be copied to that title's parent folder and re-named accordingly.*

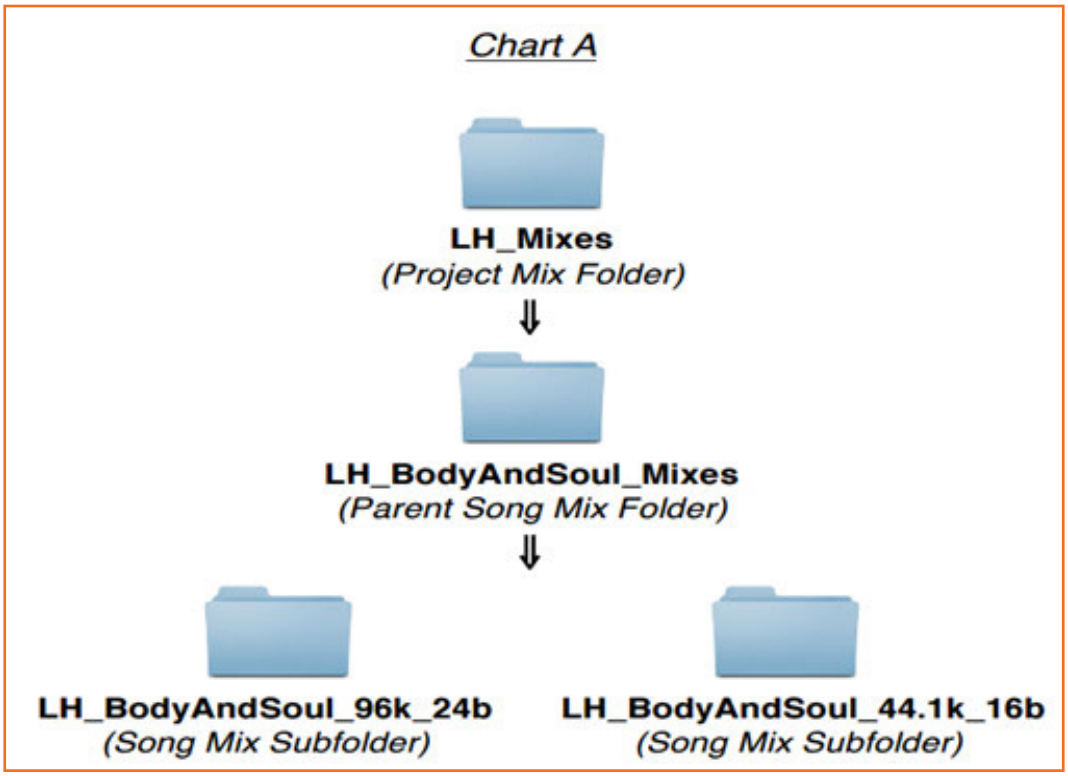

Fig.3.2.1: Project Mix Folder Hierarchy

UNIT 3.3: Storing and Retrieval

Unit Objectives

At the end of this unit, you will be able to:

1. Describe the data back-up techniques.
2. Knowledge of different storage devices.

3.3.1 Data Back-up Techniques

Audio files are life of any radio station. Losing these critical files can result in stoppage of broadcast. Significant files are habitual of being deleted, mostly by accident. However, a file once deleted will consume long time, energy and money to recreate. Thankfully, one can make a backup of all the files in use. A back-up is like making a copy of the existing files and storing them away for future use.

Backing up files is like having an insurance plan in place. Back up files always come handy when one's system crashes or someone deletes a file by accident.

For a radio station that is meant to be on air all the time, having a backup plan is critical. Every radio station worth its name will necessarily have a backup plan. A backup plan is relied on the following factors:

- **Importance of data:** It can't be stressed enough that audio files are central to the functioning of a radio station. All audio files are important. However, there are some that are considered more important than others in terms of priority. Music loops and sound effects are significant (and need back-up too), but they could be less significant than the programmes themselves that can be utilized over a period of time. For instance, if you have a programme on the biography of a national leader, you may want to back up that file for future use too.
- **The data itself:** What type of data is significant to you? Are the output files in uncompressed format or project files from your editing software or just the mp3 files that you finally use for broadcast? Account for the data itself while drawing up a backup plan.
- **Frequency of change:** How often does the data change? For instance, the CR policy needs that you backup all audio files broadcast for the last three months. This simply means that you will need to back up all the audio files that you have broadcast for each of the 90 days.
- **Backup equipment:** Your backup plan also relies a lot on the type of equipment you have. What type of media does your radio station have in order to execute the backup plans?
- **Backup schedules:** How often will you need to do a backup? Daily, twice a week, weekly, fortnightly or just monthly? Radio stations would do well to backup daily.

Broadly, backups can be classified as:

1. **Daily backups:** As the name itself suggests, one could backup either the project file or even the outputs on a daily basis
2. **Incremental backups:** by the earlier file. This means that you will now be broadcasting a more current version of the programme.

3. If the same file/programme undergoes a change over a period of time, the latest version replaces the earlier version. For example, if you were to make a programme on Right to Information (RTI) today and back it up, the changes made to the law and the programme four years later will be replaced
4. **Copy backups:** Irrespective of whether a project/file have undergone changes or not, they are backed up for future use. Take the earlier example of the programme on RTI. You may have produced a programme three years ago and backed up a file. While you make a new programme, you might use the same project file but save it under a different name. In this case, you will have a backup for programmes you produced three years back and the most recent one too.

One can backup files either on the computer itself in a different folder or on different media. While backing up files in a different folder on the computer itself can be convenient, if the hard disk of the computer crashes, one loses all data. Backing up files on external media storage would be wisest thing to do at all time

So how does one determine a backup solution? Consider the following factors:

- **Capacity:** What is the amount of data you need to backup on a daily basis? How much space would one need for a month or a year?
- **Frequency:** How often would you want to create backups?
- **Retrieval speed:** How fast can you retrieve the data? This decides the storage device on which you backup.

3.3.2 Storage Devices

Storage devices are those that can store information and support a system for accessing and retrieving the information using hardware interface. A storage device is a physical piece of equipment that can hold data/ information. The information can be anything that can be stored electronically: software programs, source code, images, audio or video files, office documents, spreadsheet numbers, and a host of other file types. Mass-storage devices typically store information in files. A file system defines how the files are organized in the storage media.

When large amounts of data needs to be stored/ transferred from one place and retrieved at another place and at the time of using a hardware interface a storage device is used.

There are primarily three types of materials that serve as storage devices:

1. **Magnetic:** All the hard disks, storage tapes etc are all magnetic types.
2. **Optical:** DVDs, CDs, Blu-ray disc etc that run and retrieve data using an optical interface are knows as optical storage devices.
3. **Solid state:** All the flash cards, memory cards, memory sticks(pen drives),etc. are all solid state storage devices.

Magnetic storage devices

These storage devices store all data/ information in the form of magnetized dots. Small electromagnets in the drive produce these dots, enable, them to erase and also read them. Magnetic storage devices can either be magnetic tapes or even hard disks (fixed or removable).

Fixed magnetic storage disks are the ones that are found in computers. These disks act as main storage device for a computer. Accessing, storing and retrieving data from these disks can be done at astounding speeds. They also have astounding capacities. For instance, toady most computers come with hard disks ranging from 100 GB to even 2 Terra bytes (2000 GB)!

One of the merits of such drives is that they make backing up and storing of files very easy. However, the demerit is that if they occur to crash all the data is likely to be lost forever.

Portable hard disks are removable types and can be taken from anywhere. They are mostly connected to the computer using a USB cable or a Firewire cable. They too come in large capacities and can be used to store a variety of data.

One of the major merits with hard disks is that information can be stored on it and it will store the data even when the computer is switched off. When the computer is switched on or when a portable type is connected to a computer, the latter recognizes it and helps us retrieve the files.

Magnetic tape

This type of storage, often called the tertiary storage types are used in large servers when the data is very large in size. Rotation per minute (rpm) is a major factor that determines the performance of a hard disk. Hard disk spins can range between 3600 rpm and 7200 rpm. The rigidity of the disk and the high-speed rotation permits more data to be recorded on the surface. The disk that spins rapidly can use smaller magnetic charge to create current flow to the write/read head. The drives' heads can also use a lower density current to record data on the disk.

Optical storage disks

An optical storage device is one in which laser technology is used to read and write data from the disk. The most popular storage devices next to the magnetic disk drives are the optical drives. These incorporate DVDs, Bluray disks and CDs.

CD stands for compact disc and is still the most universally compatible format for wide audio distribution. A standard CD-ROM can hold about 700 megabytes of data and can be played back on a computer CD drive and most DVD players.

DVD stands for digital versatile disc. A standard VCD stores video and audio data in MPEG-1 format. A standard A standard VCD stores audio and video data in MPEG-1 format. A standard DVD stores its data in MPEG-2 format. A DVD player or a DVD drive is needed to play DVDs. A DVD is a very high-density optical storage medium. It holds almost triple the data VCDs can hold. A typical movie of 2½ hr needs two VCDs. The same movie needs only one DVD. You can now understand how much audio a DVD can hold.

The following table should give you an idea of the kinds of CDs and DVDs available in the market.

Disc	Disc Types	Data Capacity	Mp3 audio
CD	CD-ROM, CD-R, CD-RW	700 MB	80 mins
DVD	DVD-ROM, DVD+R, DVD-R, DVD RW	4.7 GB	72 hours
	Single layer, double sided	9.4 GB	140+hours
	Dual layer, single sided	8.5 GB	120+hours
	Dual layer, double sided	17 GB	240+hours

Fig.3.3.1: Kinds of CDs and DVDs

Although optical disks are greatly available in the market and closely all computers come with optical disk drives and software to write and read data, these are soon losing out to hard disk drives. The main reason for the diminishing popularity of optical disks is that they are extremely delicate and any scratch on the disk means that the data can't be retrieved. On the other hand, Hard disks are very durable and can retain data for a much-prolonged period of time.

Solid state storages

These new storage devices don't have any moving parts. Today Pen drives and Flash memory drives are very common. Flash memory is generally found in digital camcorders, mobile phones and digital cameras. A suitable drive is required to write/read on flash memory. Same technology is also used by Pen drives to read and write

data. Currently, pen drives able of storing more than 32 GB of information. Recent pen drives are coming with an inbuilt mp3 player too. A USB drive is needed to connect a pen drive to your computer.

Major merits with pen drives is that they are portable, compact, faster to use, removable, comes with high storage capacities and are more reliable, since they do not have any moving parts.

Other types of solid state storage devices, include memory cards. There are many different kinds of memory cards but for purposes of our study we will study the following:

- **Secure Digital card (SD):** An SD Card (Secure Digital Card) is an ultra small flash memory card designed to provide high-capacity memory in smaller size. SD cards are used in several small portable devices such as handheld computers, digital cameras, digital video camcorders, mobile phones and audio players.
- **MiniSD Card with an SD card adapter:** A Micro SD card and Mini SD card is a type removable flash memory card used for storing information. Micro SD card are sometimes referred to as µSD or uSD. SD is an abbreviation of Secure Digital. The cards are used in mobile phones.
- **CompactFlash (CF-I):** CompactFlash (CF) is a flash memory mass storage device used mainly in portable electronic devices. Subsequent formats, like SD/MMC, varied Memory Stick formats, and xD-Picture Card offered rigid competition.
- **Memory Stick:** Memory Stick is a data storage device with 10 times the capacity of a 3.5 diskette. Memory Stick is a new way to transfer and share data like sound, pictures etc between different compact electronic devices like digital camcorders and cameras. Memory Sticks come in 4mb, 8mb, 16mb, 32mb and 64mb sizes and are approximately the size of a flat AA battery. They are smaller than similar storage gadgets, including smart media and compact flash memory.
- **MultiMediaCard (MMC):** Secure Digital (SD) The MultiMediaCard (MMC) is a memory card norm used for solid-state storage and in devices that can hold SD cards. Usually, in a form that can easily be removed for access by a PC, an MMC is used as a storage medium in portable devices like cameras.
- **SmartMedia:** SmartMedia memory cards are no longer manufactured, but they were a flash memory card standard owned by Toshiba, ranging from 2 MB to 128 MB in size.
- **xD-Picture Card:** xD-Picture Card is a flash memory card format, formerly used in digital cameras made by Olympus and Fujifilm. The xD in the xD-Picture Card stands for eXtreme Digital.

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4. Sound Mixing

Unit 4.1 - Mixing

Unit 4.2 - Mixing and Export Audio

Unit 4.3 - Interact and Communicate Effectively with Colleagues

MES / N 3412

Key Learning Outcomes

At the end of this module, you will be able to:

1. Identify the Mixing
2. Know about the mixing and export audio.
3. Effectively communicate with colleagues

UNIT 4.1: Mixing

Unit Objectives

At the end of this unit, you will be able to:

1. Mix perfectly the sound/audio clip.

4.1.1 Mixing

If you have successfully done your editing work to the fine cut stage, it means you will now have a session file here:

- The clips have already been arranged on the timeline in their appropriate tracks (Voice on 1 and 2; Music on 3 & 4; and Sound Effects on 5 & 6 or whatever convention you have decided to follow).
- The audio clips have been trimmed to their appropriate lengths (i.e., we have only retained the portions of the recorded audio that we need in the programme).
- Each clip is in the accurate position on its track, where it is needed with the proper breathing space in the edit for the Mixing sound audio playback to sound natural and well-paced.

Fig.4.1.1: Mixing Sound

- The primary transitions have been executed with fade-outs, fade-ins, cross fades and other transitions already in place.

In this unit, you will now understand three advanced procedures that require to be executed in order to finalize the audio, and make it ready to listen to: audio balancing, panning and levelling. Together, the three processes allow you mix the audio: adjust the audio levels of the varied segments and components, so that we can hear the audio clearly comfortably, with our attention being drawn to the correct portion of the audio as needed. Let us look at each of these processes in turn.

4.1.2 Levelling: The Need to Adjust Clip Levels

The process of lowering or raising the audio levels of individual audio clips in order to make them sound less or more of the same perceived volume is called Audio levelling.

But why do this at all? If we have recorded the audio keeping in mind the audio levels, then surely, we have adequately addressed the issue already?

The answer is not that simple. Recording each individual item at the appropriate recording level may mean the clip itself has been recorded pretty well, but that does not ensure that the clips will sound good when you place them next to each other. Therefore, we have to move further to a second process levelling, in order to adjust the levels of the clips with reference to each other and to our programme level.

We need to do this so that:

- The clips transition smoothly from one to the other as we hear them, making the programme feel like one smooth whole, rather than the segmented composite.
- The clips can all stay within a definite audio level range, which will ensure that the audio does not contort by going outside the range, the equipment can handle (this will also ensure that we are able to combine the audio with the radio carrier wave for broadcast with no quality loss).

Of course, the biggest reason we need to do this is so that our listeners can have an easier time of it, staying at a constant distance from their radio units rather than alternately leaning closer to hear better, and putting their fingers in their ears. If each clip were to play at a different level, it would make for a very awkward listening experience and would not let us concentrate on what was being said at all.

Naturally, it is significant for us to still preserve some sections as relatively softer or louder than others. If people are naturally soft spoken, we require to keep their voices boosted, but still a shade less than the average voice on the programme. Similarly, if someone speaks in a booming, loud voice, we require to keep that slightly higher in level than the rest. Only then will the natural differences between the voices show up clearly. If we have to adjust all the voices mechanically to one level just by looking at the VU meter, this would be very unnatural. So, one must use judgement and subjective hearing to make some of these calls.

Physically, the act of decreasing or increasing the level of a single clip is achieved in most audio editing software by one of two processes (much software permits you to do it both ways). By opening the property attributes of a given clip and decreasing or increasing the levels on a sliding scale, or by generally typing in the desired dB value in a box or by graphic interface. The graphic interface is generally in the form of a level overlay on the clip itself. Dragging the overlay line towards the bottom decreases the level below its current level. (Note that the same overlay generally lets you assign points, change or nodes, and make fade in and fade out. But, what the graphical interface will generally not let you do is boost the levels beyond their current levels).

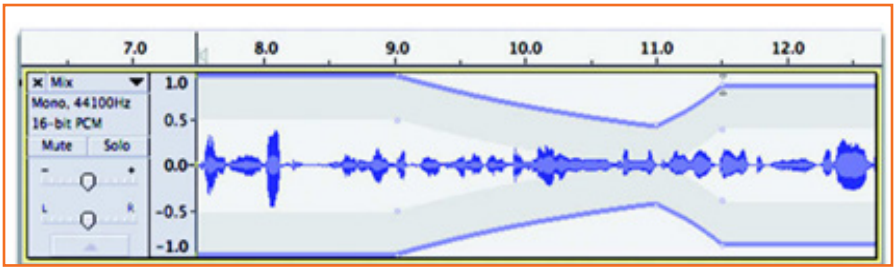

Fig.4.1.2: Sound Wave Generated on Screen

4.1.3 Balancing: The Need to Adjust Track Levels

Though, we will incorporate variety of audio besides spoken words, but we will always favour the spoken word in most programmes in terms of clarity and audibility. Therefore, we require to adjust the level of the music track in such a way that the music is heard, but does not overpower the voice. Similarly, sound effects require to be heard in as natural a way as possible, but without blocking the clarity of the spoken word. A thunderclap may be a significant part of setting the scene in a dramatic production, but must be timed to a gap in the dialogue, with rumble of the thunder extending under the next stretch of dialogue without preventing the listener from hearing the dialogue itself.

The ability to adjust track levels as a whole is especially significant in multitrack music recordings, where the ability to adjust the percussion (table/drum) track against the vocal track and the key instrumental (veena, harmonium,

violin/ sarangi) tracks will make a difference between a good sound track and a puzzled one where you may not be able to hear the lyrics of the song clearly, or hear the soloist play his/her piece.

By merging our individual adjustment of clip levels (levelling) with the raising of lowering of track levels as whole, we will eventually be able to gain a perfect combination of levels that not only lets us hear everything with the emphasis that we desire. This adjustment levels across tracks is known as balancing and as we shall see balancing along with the process of panning, is the core in the act of mixing audio.

As in clip levelling, there are controls that permit you to adjust the level of the track as a whole. These will generally be in the form of a set of controls on the far right or far left of the track display. The tools may incorporate a window, where you can type in a physical value (in dB) for the adjustment needed, or a software knob that can be turned right or left to adjust the track level. Some software has a slider in the same place which is used for the same purpose.

As we have already seen, a good and systematic audio editor tries to bunch similar types of audio into the same track(s), so that it becomes easy to edit a given type of audio. Having all the voice clips in Tracks 1 and 2, for instance will save us from the bother of scrolling up and down in the timeline, while we are editing the voice segments of the programme.

There is another reason for this: once we have levelled the clips on a given track to a target value, having the same type of audio on a track permits us to raise the volume or level of the track as a whole, affecting all the clips on the track together. Let us see why we would require to do this.

On the average, the most significant part of an audio (radio) programme is the spoken word, because it is only through the words that we hear on the programme the concepts and ideas become clear. (The exception is probably instrumental music based programmes where words are not needed to the listeners to appreciate the programme. But spoken words will be needed in some point if not many times to introduce the artiste and the show).

Fig.4.1.3: Sound Leveling and Balancing

4.1.4 Panning: Adjusting Spatial Distribution

You are already familiar with the concepts of stereo and mono sound. The basic dissimilarity is that in stereo audio, different audio channels are fed to the right and left monitors, resulting in a spatially distributed audio experience. In mono audio, irrespective of the number of monitor (speaker) units attached to the output, the same audio is fed to all the monitors, giving no spatial distribution to the sound. Some sounds are heard from just the left speaker, others only from the right speaker, and some from both speakers, resulting in a lifelike sense of distribution of the sound sources across the entire arc in front of us.

This effect is made not while recording the audio, but after the editing is done, at the time of finalizing the audio. Controls for the purpose permit us to decide which channel a particular clip or track will be directed to and by how much. We can thereby make the sense of spatial distribution we have discussed.

This spatial distribution of audio is known as panning the audio. The original control used for this purpose used to be a resistor knob on hardware mixers known as the panchromatic potentiometer, shortened to PAN-POT for convenience. This knob would be physically turned right or left of a central point to make the distribution of the audio across the two channels with extreme right being 'only right' and extreme left being 'only left'. Points in-between would result in a partial distribution. The act of using the PAN-POT came, naturally, to be called, 'panning'; and continues to be the term of choice for the process today.

In modern software audio editors, there are sometimes similar software knobs offered next to each track, near to the level controls to perform the same function. Several software auditors also permit you to gain this with a graphic interface based tool, generally an overlay line horizontally in the middle of the clip. Raising the line towards the top of the clip pans the audio to the left and lowering it to the bottom of the clip pans the audio to the right speaker. It goes without saying that a lot of people, new to editing on software platforms get puzzled between the overlays for level adjustment and panning and get the two mixed up, a costly and time-consuming mistake to make.

Using the panning function takes experience; a keen ear and a sense of music production that lets you understand how the acoustics of performances works. It is not something that you should experiment with till you consider yourself an advanced user of the system.

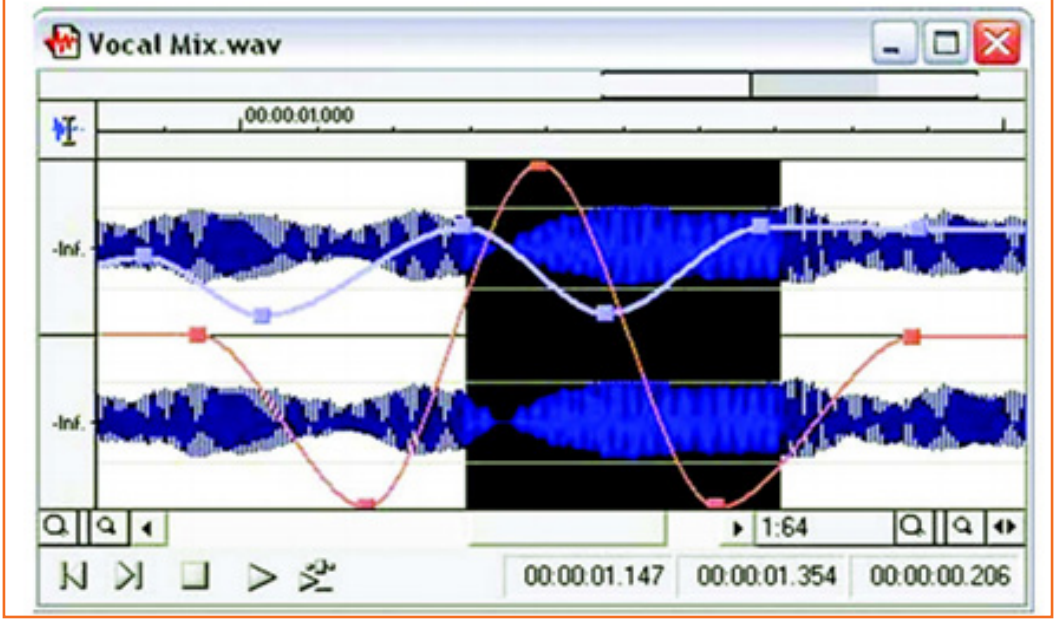

Fig.4.1.4: Panning

Note the graphical PAN overlay on the clip, which lets you pan individual clips.

UNIT 4.2: Mixing and Export Audio

Unit Objectives

At the end of this unit, you will be able to:

1. Knowledge of mixing audio
2. Elaborate mastering and export.

4.2.1 Mixing Audio

We can now summarize the process of mixing like this:

- Levelling the audio at the individual clip level.
- Balancing the relative levels of the various tracks.
- Adjusting the spatial distribution of the audio to create the stereo effect.

Between the three, we have achieved our motive of making the audio listening-worthy, so to speak, in matters of its clarity, emphasis and in its capability to convince the listener pay attention to the specific part of it we would like him or her to focus on.

The most significant thing to remember while mixing is that it is significant to set a target audio level for the final mix that we can standardize across programmes, so that our station's programming as an entire will be heard at less or more the same volume setting. Broadcast agency and every station has its own regulations concerning where this target level should be, based on its technical setup ant its preferences.

The perfect rule that one can follow is to set a target standard level between -6db and -12 dB, with the softest sounds going no lesser than -16 dB or -18 dB and the loudest sounds reaching no higher than -3 dB. If most of the programme lies around the -9 dB mark, this protects a sensible variation in the audio. You should be heedful to see that not any of the audio goes to the 0 dB mark at all, because that is the boundary of what the system will handle carefully without contorting the audio.

As noted in a previous section, if we skip the third step and leave all the tracks evenly disseminated across both channels known as centering the audio, we will finish up with what is called a mono-mix. The output will be mono audio with no variation between the signals going to the right and left speakers, if they are available. If there is one speaker, as found on several small transistor radios, this will not make a difference either way.

If we perform the third step, and allocate structural values to each clip and/or track by panning, we will finish up with a stereo mix: an audio mix that will have the audio disseminated across an imaginary arc in front of the listener. Like a mix, when played out through a pair of right and left speakers will recreate the sense of stereo listening that we generally feel by virtue of our ears. Of course, this supposes that we have suitable equipment to play out the stereo mix to a pair of speakers, the effect does not function with only single speaker.

Again, given that most CR stations have very low power transmission systems, it is great not to attempt outputs and stereo mixing. These are not only time taking and need greater proficiency, but needs stereo transmission systems if they are to be broadcast successfully. Stereo transmission systems are more costly than mono transmission systems, and also give a lower transmission range for the same power output; both are serious considerations for a small CRS. The enormous majority of CRSs generally prefer a mono transmission system as a result.

As the final product of the mixing process, some editors like to select all the clips tracks and clips for which they have made adjustments, and generate a fresh combined clip that includes all the elements together. This fresh clip is generated on one of the free tracks left after the audio has been laid on the first few tracks. This process is often known as mixing down or bouncing the tracks/clips.

4.2.2 Mastering and Export

To put it simply, mastering is the process of generating the edited finalized audio programme as a single mixed audio file in a format of one's choice.

During editing, the programme is composed of number of pieces and segments. In order to manage the programme all these segments have to be put into a single piece, so that it can be lined up for playout and broadcast. If the programme remains as different component pieces then it would become a strenuous task to line up the pieces. Mastering permits the generation of this mixed and finalized file with the levels differing as per the mixing settings and adjustments that one has previously made.

Before, we discuss the process of mastering further, let us look at some of the parameters which we have to keep in mind, while generating the audio programme in its final form. You may have to refer to the Unit on analog and digital audio (Unit 10) to brush up on some of these terms and parameters.

1. **Mono or stereo:** As we have seen, relying on the mix, and availability of our skills and the infrastructure we have to make a stereo or mono final output.
2. **Sampling rate:** This is the number of samples each second of audio in your audio is divided into. You would have to set this while setting up the audio editing software. Typically, CD quality audio is sampled at 44100 hz (or 44.1 kHz). Audio for video use is sampled at 48 kHz
3. **Bit rate:** This is the amount of data per second that is transported in the stream of data that gets played out, while you play certain kinds of audio files. It is generally measured in kilobits per second (kbps). Typical values for FM quality audio are 96 kbps. CD quality audio will range from 128 – 192 kbps. Higher than this is strictly prohibited for playback use on the system, rather than broadcast. Some software's permit you to choose between Variable Bit Rate (VRB) files and Fixed Bit Rate (FRB) output files. In VBR files the system decides in which portion of the file, relying on the complicacy of the audio, to use a lower bit rate and where to use a higher bit rate. In the interests of interoperability between systems, it is wise to stay with fixed bit rate files, where the entire file is encoded at a standard bit rate, as given above.
4. **File format:** The final audio can be exported in one of many types of audio formats (or file types) that are commonly used. Usually, while recording and editing, we keep audio uncompressed and so record and edit in the WAVE (.wav) format. The final master file can be in WAVE format (larger file size) or MP3 (smaller file size). Depending on the other parameters selected, selecting the MP3 option could create a file many times smaller than the equivalent WAVE file, resulting in huge space savings. MP3 files are fine for most broadcast purposes, and have the dual advantage of being easy to line up in most audio player software on computers.

Thus, a typical output format for a CRS programme would be:

MP3/Mono/44100 Hz/128 kbps

In most editing software, the next step is to export the finished file. This is usually achieved by using the menu command: File > Export. Within this command, you may be prompted to select between several choices (selected audio/all audio etc.): select the options that let you export the entire audio. You may then be presented with a window where you can select the other parameters, and name the file that is going to be exported.

Once all the settings are set, and all parameters selected, clicking on OK should generate the final master file, which can then be saved in a location of your choice on the DAW. Note that the 'export' command actually performs the mixdown or bounce function, saving us from the additional step.

It is good practice to keep the master exported file of the programme in the same programme folder, which also contains the component recordings related to the programme and the connected session files. An additional copy of the file can be stored in a separate folder, from which playouts can be lined up. In fact, as a general principle, it is a good idea to keep two copies of all recordings for a programme, preferably on a different disk on the same computer or on an external backup device. This ensures that even if something gets accidentally deleted on the system, you have what is known as a safety copy of every file.

It is best to discuss and settle on a standard file naming system for final master files, as well as common parameters for final master file generation. This will make everyone export their final programme files at the same settings, and will lead to an even sounding broadcast, not to mention make recognizing the master outputs easy.

Where the process of mastering goes, once the editing is complete and the clips have been levelled and balanced, we select all the clips on all the tracks on the timeline simultaneously. This can be achieved by selecting one clip and then using the CTRL+A command to select all the clips, or by shift-clicking the individual clips (which is more time consuming).

UNIT 4.3: Interact and Communicate Effectively with Colleagues

Unit Objectives

At the end of this unit, you will be able to:

1. Know how to build relationship with colleagues
2. Understand the working with colleagues & Customer
3. Know how to get along with your colleagues
4. Know about social interaction
5. Understand the negative work environment
6. Why positive attitude and thinking
7. Providing customer service skills

4.3.1 How to Build Relationship with Colleagues?

As everybody has their own role to play in a company, it is important for everybody to get along – not only for the sake of the work environment, but also for the sake of the company and its success. But to begin with how do you build relationships with colleagues? Here are five ways:

Be Honest and Communicate

Where it concerns building relationships with your colleagues, be honest and open. Some people see work as a place to show up, do what they need to, and go home, while others see it as a place to spend half of their waking life and a chance to build social relations. Encourage people and be honest with your colleagues about having a social relation, tell them that you would like to get to know them better in order to work better as a team.

Fig.4.3.1: Be Honest

Be Likable

Sometimes being honest and open about building a relationship with your colleagues won't get you the result you are looking for. However, do not entirely write-off someone who is not interested in building a relationship.

Even if they do not want to engage and build a social or friendly relationship, you may end up debarring them or depreciating them, and that ends up making a negative relationship and possibly hurting the company.

Instead, be sure to communicate with them for work-related tasks and offer assistance and support.

Be Observant

Some people may not know a right way to build a good relationship with colleagues. Encourage them to see the company's culture and use that as one of the factors to inform their decision regarding if and how to engage with fellow employees outside of regular work activities.

If you are not sure about calling colleagues for some dinner after work, or go out for a run over the weekend, why not begin small and ask them out for lunch? You do not have a lot to lose and, it can be a regular thing and help you grow as a colleague if you have a good time.

Fig.4.3.2: Be Likable

Find a Common Interest

For some, it can be tricky to get to know a complete stranger. However, at one point many people who we regard as close friends were strangers at one point. This can offer some comfort if you are feeling difficult about befriending a colleague you do not know.

Another way to make this easy is to concentrate on an interest you both have in common. Maybe you both went to the same college, you both own dogs, watch the same TV show etc. This common interest can result in a good base for a good relationship.

Don't Be Afraid To Aim A Little Higher (Or Lower)

Mentor relationships in the workplace benefit both parties and the company gains when more employees are engaged and supporting each other.

Know that ranks in companies change. The person who was once in charge of you may not be if you are someone who plans on growing in the company. If the ranks between colleagues are reversed, having already established a good relationship makes the transition run more smoothly.

Though it may be easy to build a relationship with a colleague who has the same working status as you, it does not mean that you can't try to build a relationship with a colleague who outranks you – or even one you outrank– in the company.

4.3.2 Working with Colleagues and Customers

- Communication is much more than just talking; it incorporates all five senses- sound, sight, touch, smell, taste and the more senses we use the better we are able to communicate our message.
- Most of us assume that 'talking' means communicating; whereas talking is a type of communication, it does not mean that effective communication has taken place
- Communication is about disseminating information from one person to another. It can be down or up, as in a conversation with a friend, as in a chain of command or sideways. Communication, to be successful, ought to be two- way.

Fig.4.3.3: Working with Colleagues

- Effective communication takes place when encoding and decoding of message is done successfully between the sender and receiver. It is more easily decoded if the message is relevant to the receiver's requirements and interests.
- Communication takes place every day between a variety of people and in various ways. Its effectiveness is often determined by how we communicate and the relationship we have with each person with whom we communicate. Whichever way we look at it, communication is about someone sending a message, and the receiver indicating-by giving us feedback-that the message is understood. Or is it?

4.3.3 How to get along with Your Colleagues?

Fig.4.3.4: Get Along with Your Colleagues

You can pick your friends, but you can't pick your co-workers. Yet, you require them in many ways than one. You don't have to necessarily be friends with your co-workers, but you do need to be friendly to them.

Say a Cheery 'Hello' in the Morning

Do you trudge in the office, eyes down; shoulders slumped, and immediately begin work? If so, you are likely to find that co-workers avoid you (at worst) or ignore you (at best). Cultivate the habit of greeting everyone when you arrive in the morning or start shift and also the habit of smiling. It's wonderful how quickly little politeness can break the ice in chilly workplace relations

Learn the Art of Small Talk

Ask your colleagues about their interests – their favourite movies, music, books, hobbies. Showing a genuine interest in them will make them feel more comforting around you.

Join the Office Sports Team

Several offices have a sports team, be it cricket, football, tennis or rounders, and joining in is a great way to be fit, enjoy exercise while you get to know your co-workers in an informal setting.

Accept Good-Natured Teasing

Other workers sometimes tease and play jokes to test what kind of person you are. So, if they mischievously put a funny screensaver on your computer or if they prod fun at your new shoes, don't get annoyed. Let them assume that you enjoy a good joke-if it's on you sometimes. Of course, if the teasing becomes personal (about your looks or ethnicity, for instance), or makes you uncomfortable because of its sexual implications or makes it difficult to do your job, you may require to bring up the matter with your supervisor.

Ask What They Think

People love to be asked their opinion about things, so often ask, 'What do you think is missing from this report?' or 'how do you think I should handle this situation with X?' Then sincerely thank the person, even if their ideas are not helpful.

Avoid Gossip

You don't want anyone talking on your back, so return the favour. When a co-worker approaches you bearing a titbit of gossip about an office romance or someone's impending dismissal, react with, 'Really?' then either change the subject or get back to work. The gossiper will move on if you don't respond – and you'll retain the trust and respect of your colleagues.

Difficult Colleagues

When dealing with a difficult co-worker, pretend your kids are watching. This easy visualization method will help you to keep a cool head. After all, you have taught your kid to have good manners. With them 'watching you,' it will be difficult to stoop to the level of your infuriating co-worker.

4.3.4 What is Social Interaction?

- The way you conduct yourself with others is called Social interaction.
- It occurs on all occasions when you deal with others.
- It reflects your attitude towards them, establishes that you feel comfortable with them and invites them to react to you in the same way.
- Being approachable and friendly generally means that people will be the same with you

- You must interact socially with staff and customers in a variety of ways.
- Listen attentively to the customer
- Ask questions within the topic of conversation
- Maintain good posture
- Stay at a social distance, about one metre, when speaking to customers
- React immediately to a customer's query or complaint

Fig.4.3.5: Social Interaction

4.3.5 Etiquette and Manners

- The principles of good manners is that they should demonstrate appropriate behaviour – What do you think is good manners?
- Demonstrate your good manners by not only saying the right thing – but doing and meaning them

Points to remember include:

- Forms of address and conversation
- Making introductions
- Getting names right

4.3.6 Negative Work Environment

- Everyone Fighting to get ahead
- No one Appreciates your contribution
- Too much work…. No much Help!!
- Deadlines are unrealistic
- Longer hours… additional work
- Budget Constraints
- Competition is eating us alive
- Poor management direction
- Job Insecurities

Fig.4.3.6: Work Environment Tension

4.3.7 Why Positive Attitude and Thinking?

If you are mainly negative, you will be focused on sad thoughts, bad things, and unsuccessful results. Else- if you are mainly positive, you will be focused on happy thoughts, good things, and successful thoughts.

The benefit of a positive attitude:

- Helps achieving goals and attaining success.
- Success is achieved faster and easier.
- More happiness.
- More energy.
- Greater inner power and strength.
- The ability to inspire and motivate yourself and others.
- Fewer difficulties encountered along the way.
- The ability to surmount any difficulty.
- Life smiles at you.
- People respect you.

4.3.8 Providing Customer Service Skills

What is good customer service?

Hospitality is a service industry. Part of your job is to give customers a happy experience so they will return and recommend your establishment to others.

Here are the four steps to providing good customer service:

- Connect with the customer.

- Meet the customer's needs and requests.
- Add a little bit extra when you can.

Good customer service is based on good communication.

You need to use your toolbox of communication skills with customers to provide good customer service.

Connect with the customer

This helps customers feel confident that you will take good care of them.

- Use an open question in your greeting e.g. 'Good morning, how can I help you?'
- Use active listening to show the customer that you are genuinely interested in what they are saying.
- Use open body language.

Find out what the customer wants

Use a mix of open and closed questions. Use open questions:

- To show interest in customers and get them chatting
- To seek information so you can start to work out what their needs are.

Use closed questions:

- To get facts
- To control the discussion and keep the customer focused.

Watch your customer's body language. Are they happy with your service? Do you need to find out more?

Meet customer requests

Do your best to meet customer requests promptly. If there is a delay, keep the customer informed.

If you can't meet a customer's request in a reasonable timeframe you should:

- Apologies
- Recommend an alternative
- Refer them to your supervisor or manager.

Your scope of authority

This means that you shouldn't do things or make decisions which are not part of your normal job role. If a customer makes a request that is outside the scope of your job, you should:

- Seek help from another staff member
- Refer the customer to your supervisor.

Customer requests must be reasonable.

You are not expected to:

- Break the law
- Humiliate or demean yourself (make yourself feel bad)
- Do anything that is unsafe or dangerous.

If you are ever asked to do something you feel is not right, excuse yourself and immediately contact management.

Add a little bit extra when you can

This will depend on the department you work in. You can do this through things you say and things you do.

Things you say:

- Is there anything else I can help you with?
- Nice to see you again.
- I look forward to seeing you again soon.
- Use the customer's name if you know it.
- Put a 'smile in your voice' on the telephone.

Things you do:

- Smile.
- Use open body language.
- Listen actively if a customer wants to chat.
- Open the door for a customer or let the customer walk through first.
- Give information – suggest things to do, place to go, talk about venue facilities.
- Offer to help if you can see that a customer needs it.

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5. Maintain Workplace Health and Safety

Unit 5.1 - Maintain Workplace Health and Safety

MES/N 0104

Key Learning Outcomes

At the end of this module, you will be able to:

1. Understand and comply with the organization's current health, safety and security policies and procedures.
2. Understand the safe working practices pertaining to own occupation.
3. Understand, the norms and policies of the government related to health and safety, which also includes some emergency procedures for accidents, fires and illness or others may involve evacuation of the premises
4. Identify the people responsible for health and safety in the workplace, including those to contact in case of an emergency.
5. One should be fully aware about the security measures such as fire alarms, safety exit, medical and first aid availability.
6. Identification of aspects for potential risk at workplace is must for owns and others health and safety.
7. One should ensure health and safety of others and himself at workplace through precautionary measures.
8. Identification of opportunities related to health, security and safety should be done and recommended to the designated person.
9. Identify and correct risks like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority.

UNIT 5.1: Maintain Workplace Health and Safety

Unit Objectives

After the completion of this unit, the major things covered will be:

- Making certain of own health and safety, and that of the other people around by taking necessary precautionary measures.
- Recognize the risks like illness, accidents, fires or any other natural calamity and correct them ensuring the limits of individual's authority.
- Recognize the people in charge of health and safety in the workplace, including those to contact in case of an emergency.

5.1.1 Introduction

Emergency evacuation is needed when staying within the building not safe anymore. Every organization has an evacuation procedure. Every organization has a safe place within the organization compound or outside the organization compound where all employees are expected to assemble in case of an emergency evacuation. The team leader guides the team and takes them to safe place. It is very important in these cases, to assemble at the safe area immediately.

If you do not reach the safe area on time, the team leader who is responsible for your safety will send someone to look for you. This will put the other person's life in danger.

Conditions for Evacuation

Emergencies which require evacuation include:

- Destructive burning objects
- Sudden Violent Explosions (Explosions)
- Overflowing conditions of water (Flood)
- Violent ground shakes (Earthquake)
- Storms or violent wind calamity (Hurricanes)
- Cyclones and tornados
- Toxic material releases
- Civil disturbances
- Workplace violence

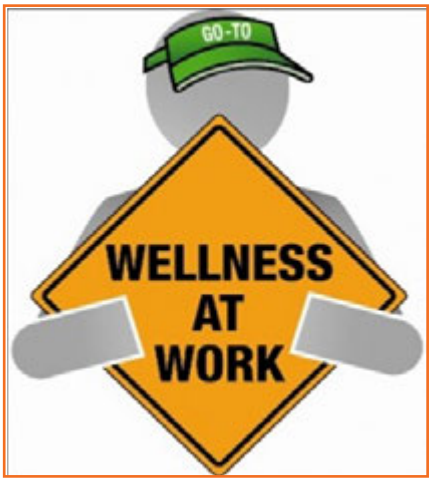

Fig.5.1.1: Conditions for Evacuation

Every company has:

- **An evacuation policy.** All the TLs are responsible for informing their employees about it. When the TL is informing you about these details, pay attention. This negligence could cost lives.
- **A designated place for emergencies.** Ensure that you know where it is.
- **A "buddy system" for individuals with special needs or disabilities.** If you are a buddy to someone, ensure that your buddy is safely out of the premises with you.

- **Floor plans with evacuation routes in work areas.** Ensure that you understand it so that you can use it in time of need.
- **Assembly areas.** These are the areas where you are required to assemble after evacuation.
- **Periodic evacuation drills.** Ensure that you pay attention during those drills. You need to save your life and you can be helpful in saving someone else's life too.

5.1.2 Mock Drills/Evacuations

Fire safety and evacuation does the duty of planning outline duties of the staff and the responsibilities at the time of emergency. For ensuring the awareness of the duties and responsibilities of the staff ongoing training is required. Fire drills serve as an opportunity for staff members to demonstrate, under simulated fire conditions, that they can perform those duties and responsibilities safely and efficiently. It's also a time for them to show that they are aware of defend-in-place strategies and can take advantage of your facility's fire safety features and egress facilities to protect the people in their care.

In order to evaluate staff response to a stimulated responsibility fire drills are more than an exercise for them. It is a test for ones safety from fire at the facility. Fire drills may not always be smooth. That's okay, so long as staff and management learn from them and correct mistakes made. It's important, therefore, that there be a critique of each drill so that any problems encountered can be addressed. Perhaps the problems are due to incomplete or outdated fire safety/evacuation plans. Perhaps there's a need for additional staff training.

The two most important aspects for fire safety and preparedness are following:

First is an action plan in case of any emergency, which details the measures when fire occurs

Second is the prevention plan, which illustrates methods for prevention during fire. You need to participant in fire drills arranged by organization for your personal safety and also for others safety. These drills help you in understanding the safety signage and action plan of organization in case of fie

Fig.5.1.4: Mock Drills

5.1.3 Medical Emergencies

Everyone plans for emergencies. That is the reason why we keep a first aid kit with ourselves. At work, however one is exposed to a lot of stress and physical activity. This could lead to certain medical emergencies. It's better to be prepared with the first aid measures and knowledge of implementing them on ourselves and on others. This module equips you with that information. Pay attention to these medical emergency procedures to understand how to conduct you in theses crucial movements. Pay attention during these sessions. You might be able to save your own and your friend lives.

5.1.3.1 Dealing with Medical Emergency

A medical emergency is an accidental injury or a medical crisis that is severe. These could be situation where:

- The person is not breathing
- Stroke or heart attack
- Severe bleeding
- Shock
- Poisoning
- Burns

A medical emergency requires your immediate attention, sometimes even before you call emergency services for help It is crucial that you know the Emergency Medical Service (EMS) number, for your own safety and the safety of others.

DO Not

- Give the victim anything to eat or drink.
- Restrain the victim.
- Splash or pour any liquid on the victim's face.
- Move the victim to another place (unless it is the only way to protect the victim from injury).

Bleeding

- Use a pressure bandage to the wound and apply pressure with the help of your palm.
- Elevate the wound to slow the bleeding.
- Pressure points when necessary apply additional pressure to help reduce bleeding.

Fainting

- Fainting is a brief loss of consciousness that is due to a momentary reduction of blood flow to the brain.
- A brief loss of consciousness causing the casualty to fall to the floor.
- A slow pulse.
- Pale, cold skin and sweating.

Causes of fainting:

- Less intakes of food and fluids which causes dehydration.
- Low blood pressure.
- Lack of sleep.
- Over exhaustion.

First Aid for Fainting:

- Allow the victim to rest on his/ her back and pull his legs about heart level.
- Check the victim's airway to ensure it is clear.
- Be aware of the patients breathing, coughing, or movement.
- Loosen clothing (neck ties, collars, belts etc.).
- Call for EMS after waiting for one minute for to patient to gain consciousness.

Shock

Shock is a phenomenon which is caused due to the failure of circulatory system which leads to insufficiency of oxygen in the tissues. It treatment does not reach in time, vital organs may fail, which may cause death in worst condition. It is worst at time of fear and pain.

First Aid for shock:

- Keep the victims lying down (if possible).
- List the leg upward for about 10 to 12 inches and see if there is any back injury or broken bones.
- Keep the body of the victim covered to maintain the body temperature.
- Allow fresh air and space to the victim.
- Place the victim on his/her left side if he/she starts vomiting.
- Loosen restrictive clothing.

Muscle Cramps

- To counter cramps stretch the affected muscle.
- Firm massage to the cramped muscles may help.
- Moist heat to the cramp might be beneficial.
- Call for medical help if the same persists.
- Rest- avoids movements and activities that cause pain.
- Ice- helps reduce pain and swelling.
- Compression- light pressure from wearing an elastic wrap or bandage can help reduce swelling.
- Elevation- raising the affected limb about the level of the heart reduces pain and swelling.

Fractures

A fracture is a break or crack in the continuity of the bon

Dislocation

A dislocation is the displacement of one or more bones at a joint. It occurs usually in the elbow, shoulders, finger, thumb, and the lower jaw.

First Aid for Dislocations & Fractures:

- Immobilize the effected part.
- Stabilized the effected part
- Use a cloth as a sling.
- Use board as a sling.
- Carefully transfer the victim on a stretcher.
- Call a doctor.

5.1.4 First Aid

First-aid boxes should be clearly marked and located so that they are Readily accessible in an emergency. They should not be more than 100 meters away from any place on the work site. Ideally, such kits should be near a wash-basin and in good lighting conditions. Their supplies need to be regularly checked and replenished. The contents of a first-aid box are often regulated by law, with variations according to the size and the likely industrial hazards of the enterprise.

Fig.5.1.3: First Aid Box

A typical basic kit may include the following items in a dustproof and waterproof box:

Sterile bandages, pressure bandages, dressings (gauze pads) and slings. These should be individually wrapped and placed in a dustproof box or bag. Sufficient quantities of the different sizes should be available at all times to treat small cuts and burns. Medical adhesive tapes (strip plaster) for fixing bandages and dressings are also needed.

- Cotton wool for cleaning wounds
- Scissors, tweezers (for splinters) and safety pins
- An eye bath and eye wash bottle
- Ready-to-use antiseptic solution and cream
- Simple over-the-counter medicines such as aspirin and antacid
- A booklet or leaflet giving advice on first-aid treatment

First aid requires some training, but this is not difficult to arrange in most places. The names and location (including telephone number) of those responsible for first aid should be put on a notice board. Worker involvement, especially for emergency situations, is strongly advised and everyone should know the procedures for obtaining medical assistance. Small establishments without their own facilities should keep contact with a nearby clinic or hospital, so that the time between the occurrence of an accident and medical assistance is very short, preferably much less than 30 minutes. Transport to the clinic or hospital should also be pre-arranged. An outside ambulance may be called in, if necessary. It is also desirable to have a stretcher available.

Vital Signs	Good	Poor
Heart Rate	60-100 beats per minute	Less than 60 or greater than 100 beats per minute
Respirations	14-16 breaths per minute	Less than 14 breaths per minute
Skin	Warm, pink and dry	Cool, pale and moist
Consciousness	Alert and orientated	Drowsy or unconscious

Fig.5.1.4: Vital Signs

Fig.5.1.5: First Aid Pyramid

While delivering First Aid always remember:

- Prevent deterioration.
- Act quickly and confidently.
- First 60 min after an accident are golden hours.
- First 15 min after an accident Platinum Period
- Prevent choking.
- Stop bleeding quickly.
- Loosen clothes of victims.
- Avoid over-crowding around accident area
- Take victim to hospital.
- Attend emergencies confidently
- Don't overdo, Remember you are not a doctor

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6. Soft Skills and Communication Skills

Key Learning Outcomes

At the end of this module, you will be able to:

1. Understand the use effective Communication as an important tool in your workplace .
2. Make effective Communication with co-workers and Peers
3. Understand the use of basic reading and writing skills in the workspace

UNIT 6.1: Introduction to the Soft Skills

Unit Objectives

At the end of this unit, you will be able to:

1. Understand what it means and the importance of soft skills in work place
2. Understand the importance of work readiness

6.1.1 What is a Soft Skill?

Soft skill essentially describes the ability and attributes of the individual to interact and socialize with people around. Soft skills is very important for a successful hairdresser or a makeup artist. It is a term which is used to depict the hairdresser or a makeup artists emotional quotient, personal habits, optimizing, friendliness towards other colleagues or clients, social graces etc. Soft skills add on to the skill that the hairdresser or the makeup artists possess. Apart from the services provided to the client the manner in which the employee interacts with the client makes a lot of difference in the client satisfaction.

Soft skills deal more on who we are than how much of skills the employee possesses. For example the hairdresser needs to be an active listener, empathetic, understanding, and soft towards all the clients. This is irrespective of how much skill the employee possessors. Soft skill is also important for the employee to be happy in the working environment.

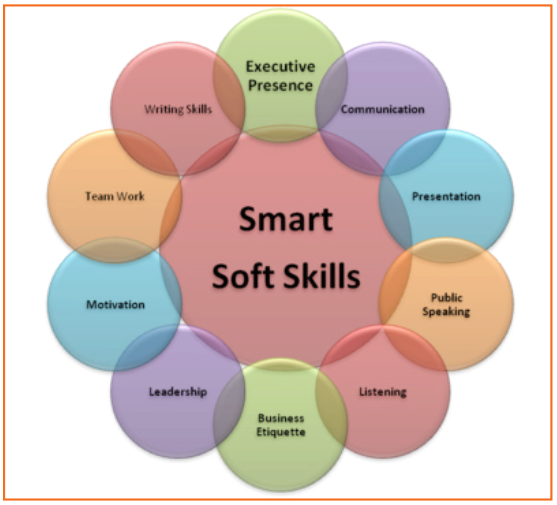

Fig.6.1.1: Soft Skills

6.1.2 Components of Soft Skills

- **Adaptability:** It is the ability of an individual to manage change. It's about how fast and smoothly a person is able to blend in and be productive in an changed environment.
- **Emotional Strength:** This involves managing mood and having control over it. An emotionally strong person succeeds in directing his moods and emotions such as anger frustration and excitement.
- **Leadership Quality:** How one manages conflict in personal and professional situation and convinces people reflects upon his leadership quality.
- **Team Playing Ability:** It is the ability to manage different types of people and make them work harmoniously with each other.
- **Decision Making:** This reflects upon how one manages his time and other resources in efficient and productive manner.
- **Interpersonal Communication:** This is an individual's ability to effective communication with other and in the process creating a positive image of him.
- **Negotiation Skills:** This is how one negotiates with others and reduces the level of stress in work, professional and personal environment.

6.1.3 Benefits of Soft Skills

Having good soft skills has several benefits. Some of them are

- Good customer satisfaction
- Credibility with the clients/peers goes up
- Increased productivity
- Gets an edge over the competition
- Easier to meet the expectation of the client/peers/superiors
- Increased employment opportunities/promotion
- Self-satisfaction on being able to be good with others

6.1.4 Work Readiness

Having the right attitude at work in crucial for a successful artist. The artist should have

- a clear positive attitude in the work place
- the ability to work in a mature environment without support
- a good attitude towards the owner
- good interest in all the work that is being done
- expectations of the work that a fresher will be able to do at a workplace with financial goals to achieve
- the attitude to accept the instructions from a supervisor
- the maturity and confidence to ask the right question
- the ability to communicate clearly and crisply with people
- ability to listen to the customers and provide necessary intervention when needed.
- be punctual in all the activities that is being done.
- the attitude to learn new techniques of hairdressing/make up and the attitude to upskills regularly.

Fig.6.1.2: Work Readiness

UNIT 6.2: Effective Communication

Unit Objectives

By the end of this unit, you should be able to:

1. Speak confidently in public
2. Talk about likes and dislikes of a person.
3. Know the basic etiquette of conversation.

6.2.1 Introduction

Today we are living in an age where communication is an integral part of our lives. We have to communicate send, receive and process large number of messages every day. But communication is not just passing information to one another. An effective communication is understanding the objective and the emotion behind the information. This helps us in various environments like home, work, and in social situations.

Effective communication is a skill can be improved over time with practice. There is one clear formula for success but is effective when it is spontaneous

6.2.2 The Communication Process

Communication is nothing but conveying the information through ideas, thoughts, feelings, intentions by writing, gestures, speech etc. as long as the information is conveyed. The information exchange should be meaningful .

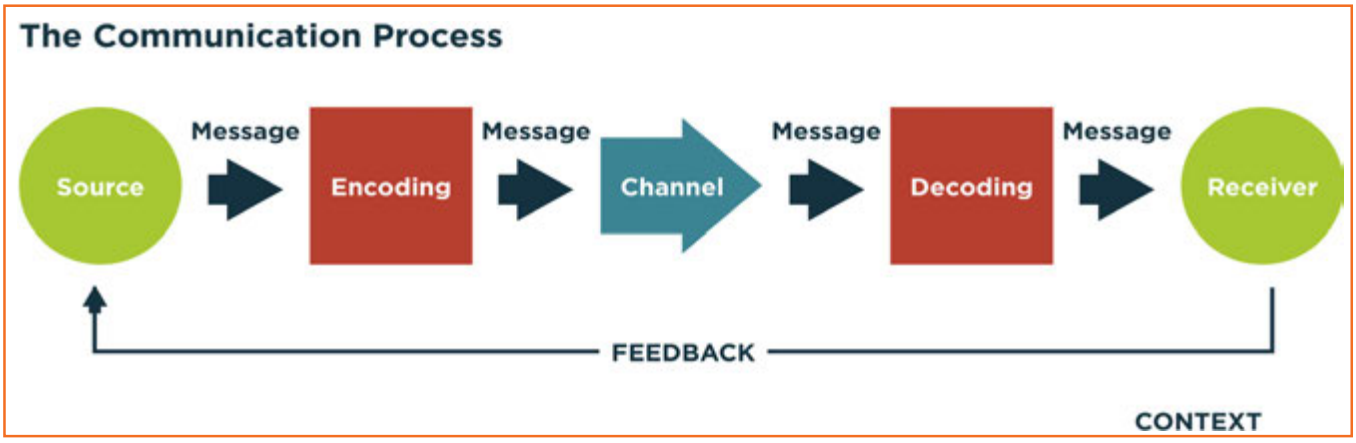

Fig.6.2.1: The Communication Process

A Communication consists of the sender, a message, a medium and the recipient. If a receiver does not comprehend the sender's message it is not effective communication

Communication involves three basic steps:

1. **Message:** This is the information that is available in the senders mind
2. **Encoding:** A message is sent to the receiver in encoded language/format.
3. **Decoding:** The receiver receives the information and decodes the information to decipher the information which makes sense to the receiver.

6.2.3 Verbal and Non-Verbal Communication

Verbal Communication: As the word indicates "verbal Communication" involves speech and the receiver listens to the communication. Feedback in this case is immediate.

Written Communication: As the term indicates it uses visual medium to communicate using written text and language. Letters, new paper, books etc. are examples. They are normally asynchronous in nature.

Nonverbal Communication: This can also be called Body language because this communication does not involve any verbal interaction but mere observation of the people involved in the communication. Both verbal and written communications convey nonverbal communication and are also supported by body language, eye contact, facial expression, posture, touch and space.

According to a study only seven percent of the receivers comprehend the message sent by the sender's actual verbal communication, 38 percent relies on vocal communication and 55 percent relies on nonverbal cues.

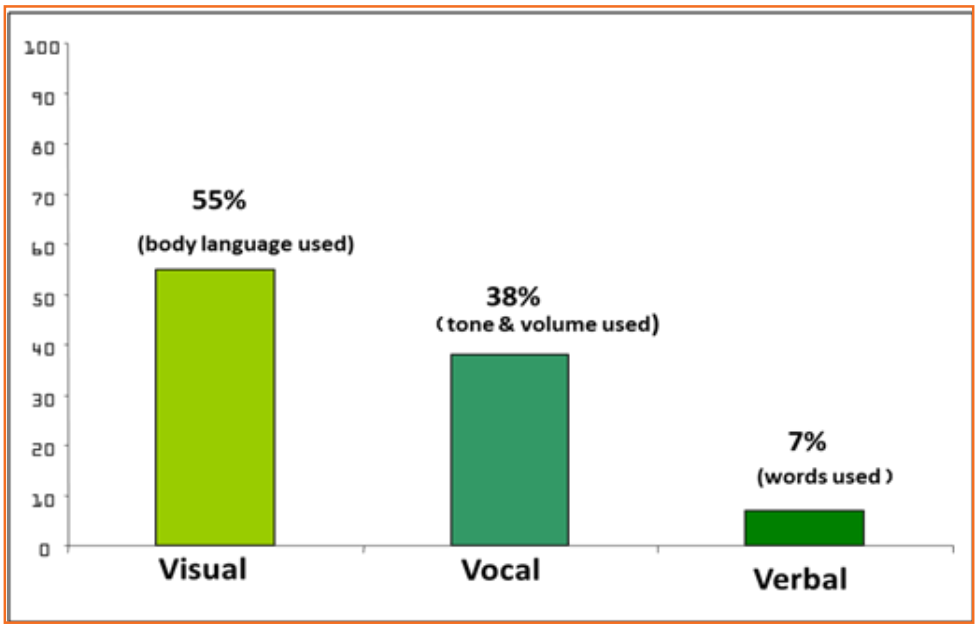

Fig.6.2.2: Categorization and Ratio of Verbal and Non-Verbal Communication

6.2.4 Communicating Effectively Identifying Barriers

There are many reasons why the communication is not effective and these reasons need to be known. There are many barriers which make the communication distorted and cause more confusion between the sender and the recipient.

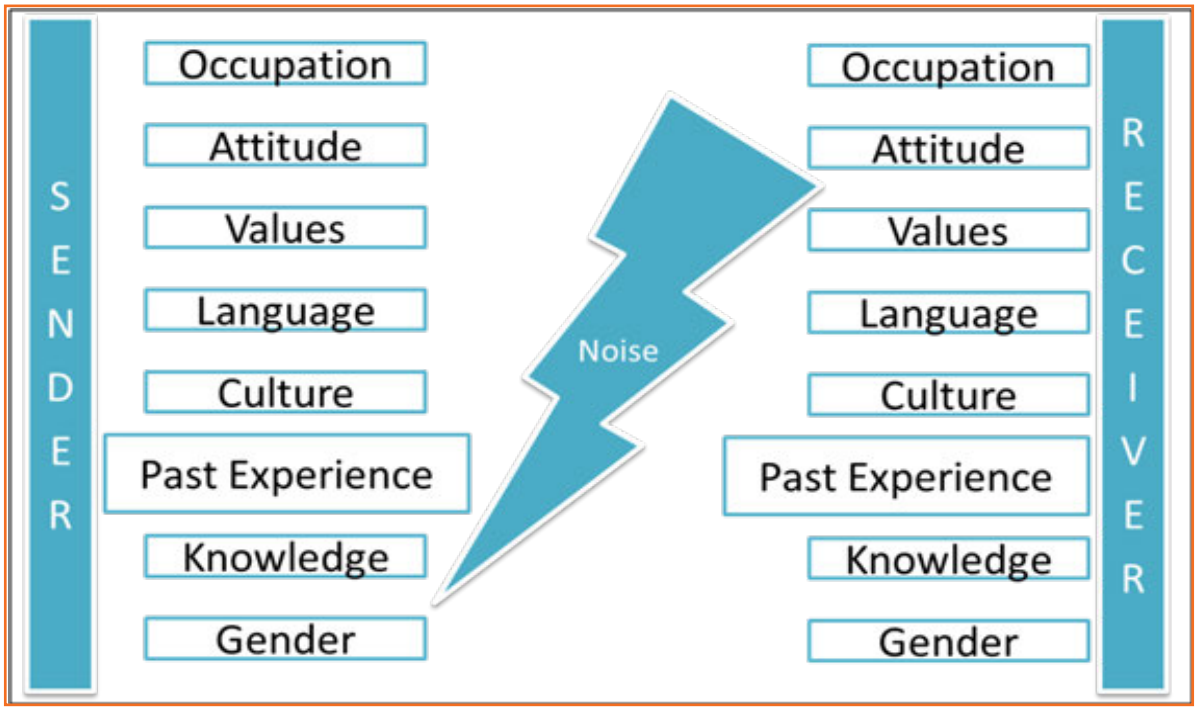

Fig.6.2.3: Barriers in Communication

The artist should know these barriers and try to minimize the impact of these barriers by comprehending the message regularly and giving correct feedback. The communication needs to be a two way communication.

How to deal with these Barriers

- Keep the communication simple and use simple words and language commonly understood.
- If the client is speaking in another language and you are aware, be prepared beforehand or ask for help
- Keep asking for feedback and give feedback to minimize miss communication.
- Be physically alert to various cues. This could be nonverbal as well.
- Always listen
- Ask for feedback even if the client does not give any feedback.
- Share opinions, perceptions

6.2.5 Effective Communication-Practice

Active Listening

Active listening is one of the most important skill to process for a makeup artist or hairdresser. There should be no gap in the understanding between what the client/peer/seniors communicates to your understanding.

6.2.5.1 Some Tips for Active Listening 

- **STEP 1:** Concentrate what the person is talking about and not on noise or other external distractions.
- **STEP 2:** Understand his emotions and you get it all right. Is the speaker angry, happy or plainly inquisitive?
- **STEP 3:** Do not interfere when the speaker is speaking. It might break the chain of thoughts.
- **STEP 4:** Don't avoid completing sentences of the speaker. Let them speak and speak only after they finish.
- **STEP 5:** In case you did not understand, ask the speaker to repeat. There is no harm in asking
- **STEP 6:** Practice makes a man perfect. Keep listening and comprehending in various scenarios

UNIT 6.3: Grooming and Hygiene

Unit Objectives

By the end of this unit, you should be able to the following

1. Maintain cleanliness and hygiene.
2. Keep their dress clean and tidy.
3. Maintain positive body language while speaking.
4. Enable to perform more of the do's than the don'ts.
5. Understand good eating habits and understand the impact on your health.
6. Avoiding bad things such as gutkha and alcohol.
7. Learn about AIDS and its prevention.

6.3.1 Personal Grooming

As a hair dresser or a makeup artist you will be meeting a lot of new people every day. Your first impression with the clients is very important. The first impression comes from the way you look and carry yourself. Your image is the image of the organization for the client. Hence personal grooming is very important in your profession. It is about taking care of your appearance and demeanor.

Fig.6.3.1: Personal Grooming

It not only makes you presentable but it also helps you in confidence building. In the long run it also helps in your good health.

There are a few habits that are considered personal grooming. They are Dressing, Bathing, Removal of unnecessary hair, oral health, skill health, body odor, nails and attire.

Appearance

- Your appearance is the first thing that you as an employee impact the organization. As the customer walks into your store your appearance will either give a good impression or leave the customer with a bad taste. A neat clean and a pleasing experience is what you would want to give to your clients.
- You are expected to be well dressed neat clean and in the company uniform which is well ironed and clean. There should not be any visible stain, torn shirt/ trouser etc. Buttons should all be in place and no loose thread hanging from any part of the attire.
- Your shoes should always be polished and clean. Avoid Sport shoes with white socks, Sandals, slippers etc. to work. It gives an unprofessional look.
- Nails should always be trimmed and clean.
- Hair should be clean and well combed. Since you are an artist working on the beauty of the client your appearance should act as an example to the client. The hair style need not be fancy but should be neat and pleasant.

6.3.2 Specific Uniform Guidelines

Sr. No.	Specifically for Men	Specifically for Women
1	Uniform prescribed should be clean and pressed.	Hair should not be oily. It should be well combed and neatly tied. No loose hair should be seen
2	Shoes should be clean and polished.	Avoid long nails and bright nail polish which will impair work.
3	Hair must be short, clean & tidy.	Minimum, non-flashy jewellery should be worn.
4	One is expected to have a clean shaven look.	Dangling earrings, noisy anklets & bangles must not be worn on the floor
5	IF you beard or mustache it should be clean and well-trimmed.	Make up should be light and pleasing.
6	Neatly cut/ trimmed nails	Avoid bracelets, studs to work.

Fig.6.3.2: Specific Uniform Guidelines

6.3.3 Body Posture

- You need to keep your hands clean. As your hands will be in close contact with customers.
- Avoid biting nails on the floor.
- No body odor & bad breath should be there. No customer will like it.
- Maintain straight & upright posture on the shop floor.
- Slouching on the floor, putting hands in the pockets, keeping your hands on the hips should be avoided.
- Avoid sitting with your legs crossed.
- Look confident when you stand next to the customer
- Always keep a smile on your face

For creating a first positive good impression always follow these things:

- Be on time
- Be yourself and be at ease
- Present yourself appropriately
- Always smile
- Be courteous and attentive
- Be positive

6.3.4 Positive Body Language

While meeting someone for the first time always remember that not only you should talk positively but your body language also needs to be positive. There are some tips for positive body language as:

- Avoid keeping hands in your pockets. Hand in pocket shows we are uncomfortable and unsure of ourselves. Keeping our hand in open indicates confidence and show that people has nothing to hide.
- Don't Fidget. Fidgeting is a clear sign of nervousness. An individual who can't keep still is an individual who is worried, tense and not confident. Keep your gesture calm and under control.
- Keep your eyes forward. This indicates that you are interested in communication with other.
- Stand up straight with your shoulders back. It communicates confidence.
- Take wide steps. It makes you seem purposeful and suggest a personal tranquility and denotes confidence.
- Firm handshake. Grip other persons hand firmly and confidently instead of getting a palm full of dead fish. Firmness adds warmth and enthusiasm to the handshake. But make sure that you don't squeeze the hand and don't shake the hand for too long.
- Don't cross your arms when meeting other persons. This is a protective posture.
- Keep eye contact and a smile on your face.

6.3.5 Personal Hygiene

What is Personal Hygiene?

Personal Hygiene is the set of practices to follow to preserve one's health. Personal hygiene will also boost your self-esteem. Some of the personal hygiene habits are given in the figure below. Make your personal hygiene a personal habit.

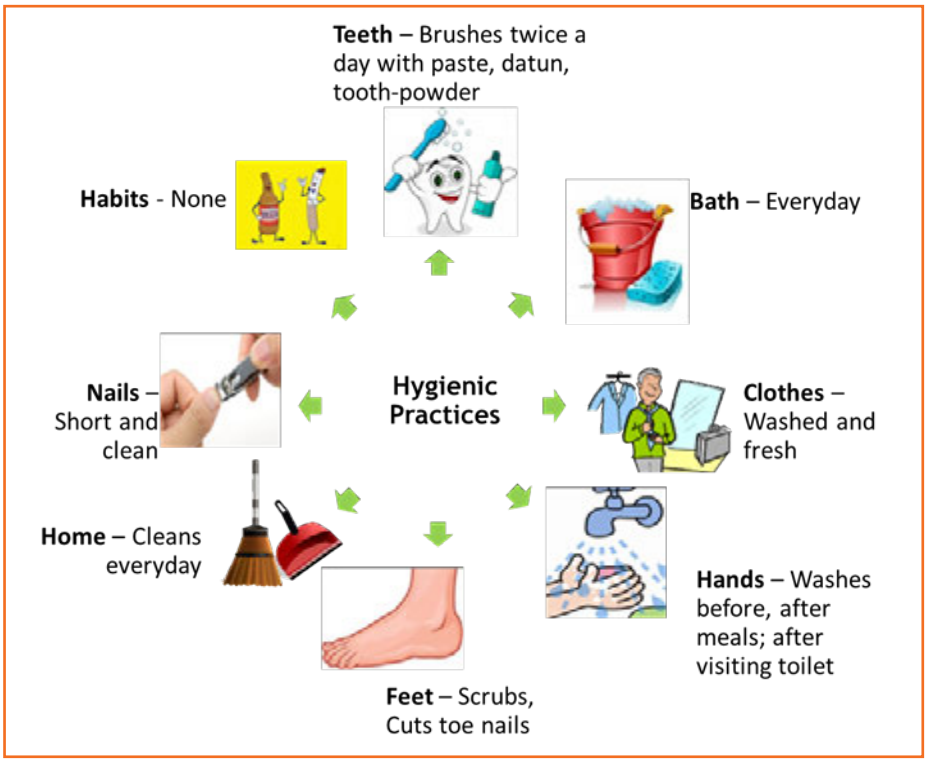

Fig.6.3.3: Personal Hygiene

Why to brush teeth?

.....

.....

.....

You should brush your teeth in the morning as soon as you wake up as well as night before you go to bed with paste, datun or tooth powder

Fig.6.3.4: Brush Teeth

Fig.6.3.5: Take Bath

Why to take bath?

.....

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Fig.6.3.6: Clean Clothes

Why to wear clean clothes?

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Fig.6.3.7: Cut Nails

Why cut nails?

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Fig.6.3.8: Wash Hands

Why wash hands?

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6.3.6 Physical Fitness

Apart from following these hygienic practices, one should also be physically fit. Physical fitness is an outcome of regular exercise. Exercise may be of many different forms. Jogging, morning-walk, weight-lifting, gym, swimming, cycling, yoga and many more.

Fig.6.3.9: Physical Fitness

Advantages of Physical Fitness

- It maintains optimal body weight.
- It reduces risk of diseases.
- It boosts confidence and self-esteem.
- It reduces stress, anxiety and depression.

Healthy Eating

We can follow hygienic practices and exercise regularly, but what we eat has the biggest impact on our health. To be healthy, one has to eat healthy. But what do we mean by eating healthy?

Eating a healthy, balanced diet provides nutrients to our body. These nutrients give us energy; keep our brain active and our muscles working.

Fig.6.3.10: To Eat

Fig.6.3.11: Not to Eat

What are healthy eating habits?

- Always try to eat home-made food
- Avoid oily food
- Always cook and eat fresh food
- Avoid junk food like burgers, carbonated drinks etc.
- Eat fruits regularly
- Drink lot of water

Things to be avoided

There are certain habits that have severe ill-effects on one's health. Such habits should be avoided for a healthy life.

Alcoholism

Consuming alcohol and getting to work is strictly prohibited. The client will never work with any makeup artist or hairdresser who has consumed alcohol before work. It will not only impact the individuals place in the organization but can also jeopardize the organizations reputation as a whole.

Alcohol also impacts the health of the individual in the long run. Alcohol has the potential to interrupt almost every organ in the body as well as the brain. Uncontrolled consumption of alcohol not only affects a drinker's health but also human relationship and social standings.

Fig.6.3.12: Effects of Alcohol

Tobacco

The order of tobacco can irritate the client. Since you will be working in close proximity to the client avoid smoking during work hours. If you ever have to work with a client after having consumed tobacco/ cigarettes then ensure that you have gargeled and washed your mouth. Use a mouth wash to remove the tobacco odder.

Tobacco is also the second largest cause of death in the world. It claims one death in every six seconds. Smoking is a practice of burning a substance and inhaling the smoke coming out of it. Common smoking implements include cigarette, bidi, hookas and pipes.

Having tobacco increases the risk of oral or throat cancer.

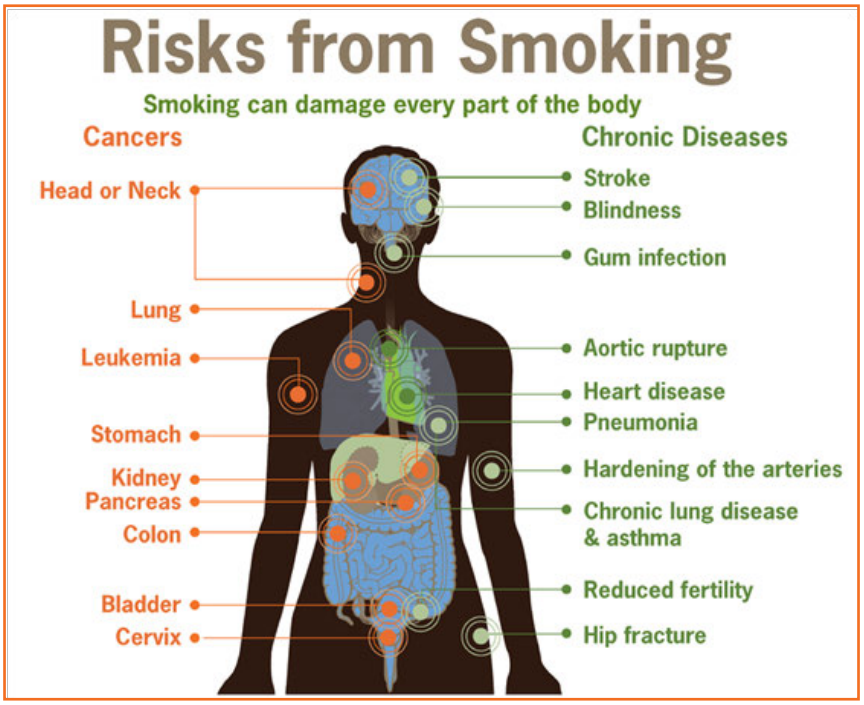

Fig.6.3.13: Risks from Smoking

It's effects:

- It is the biggest reason for oral cancer which effects mouth, tongue, cheek, gums and lips
- Chewing tobacco lessens a person's sense of taste and ability to smell
- Smokers face a greater risk of suffering from lung cancer

Gutkha

Gutkha is extremely habit-forming and a acknowledged substance. Excessive use of gutkha can cause serious health issue.

Impact of Gutkha on health:

- Loss of sensation in tongue
- Disfigured mouth
- Increased sensitivity to heat, spices, cold and spices
- Inability to open the mouth
- Swelling, lumps, rough spots on gums or in other places inside the mouth
- Unexplained bleeding in mouth
- Difficulty in swallowing and finally Mouth Cancer

Fig.6.3.14: Oral Cancer

6.3.7 AIDS/HIV Awareness

According to a survey number of AIDS patients in India is between 2 to 3.1 million almost 50 % of total patients of AIDS. More men are HIV positive than women. A total of population of 0.29% females are suffering from AIDS while 0.43 % males are suffering.

Acquired Immunodeficiency Syndrome also known as AIDS is caused by a virus called HIV -Human immunodeficiency Virus.

AIDS is transmitted by:

Fig.6.3.15: NACO Logo

- Unprotected sexual relationships
- Contaminated blood transfusion
- Hypodermic Needles
- From infected mother to child

As per studies in India HIV/AIDS is largely due to unsafe sex worker interactions. Most of the HIV cases is due to unprotected sex. Migrant workers, truck drivers and majority of men who have sex with men pose greater risk of infecting their spouse and unborn children.

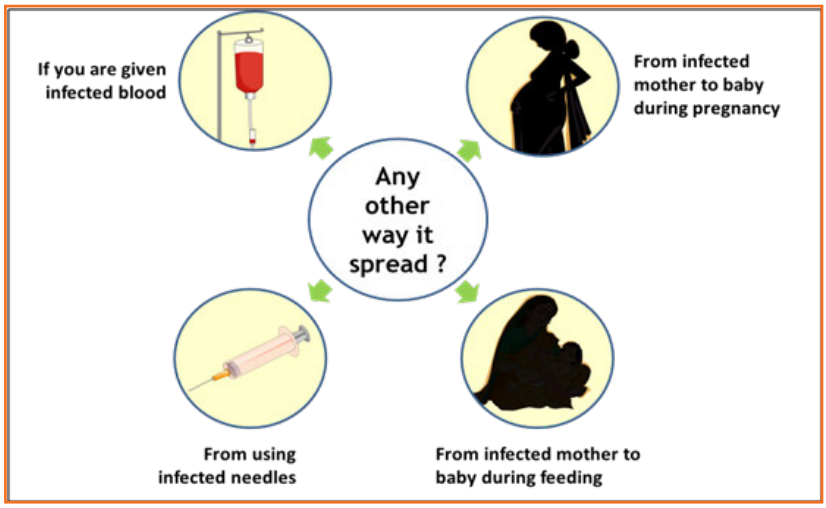

Fig.6.3.16: AIDS Transmition

There are no medicines or vaccines for AIDS so far. The treatment and medicines which are available in the market are expensive and have side effects.

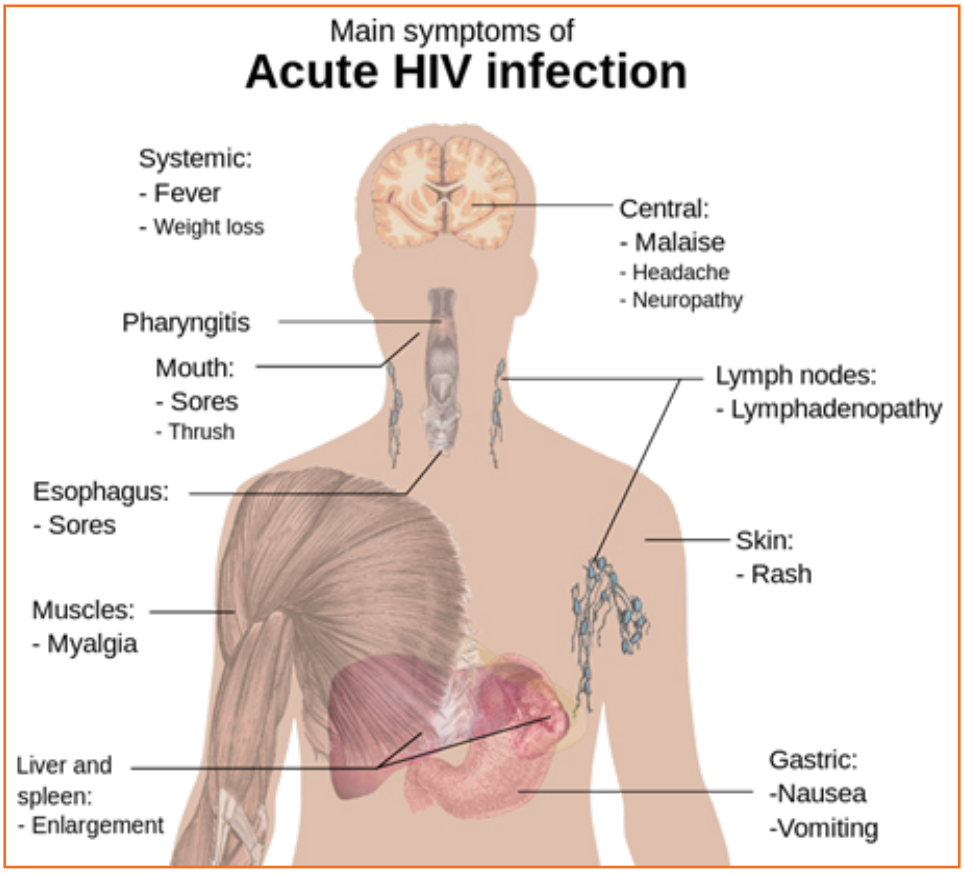

Fig.6.3.17: Acute HIV Infection

AIDS is not a disease like cancer or malaria, but is a condition that weakens a person's ability to fight diseases (immune system).AIDS not only affects you, but also has severe impact on family and friends. Even one mistake is enough to get HIV positive.

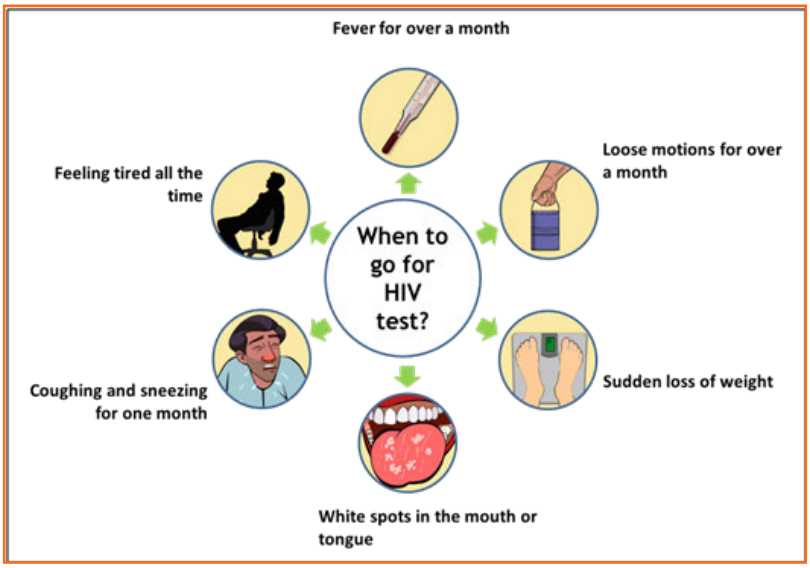

Fig.6.3.18: AIDS Non-nispersing Deseases

Stay faithful

- In India large number of people move around for work, mostly men.
- Are you one of them?
- Take care. See that you don't catch any infection from AIDS.
- Even one visit to a sex worker may result in HIV infection.
- So it is advisable to avoid multiple sex-partners and always use protection (condoms/nirodh) during intercourse.

Fig.6.3.19: Condoms

AIDS does NOT spread through

- Sitting close
- Working together
- Hugging
- Touching hands
- Mosquito bite
- Saliva or cough
- Taking care
- Sharing clothes
- Eating together or sharing utensils

6.3.7.1 Case Study

Gautam is a plumber. His family lives in a village. He travels from place to place. Once he visited a sex worker. After one month he fell ill. He went for a checkup and found he had AIDS. Gautam did not know it, but that sex worker had AIDS. He was infected from that one visit.

Share four things that you know or learnt about AIDS.

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Always remember:

- AIDS has no cure but can be prevented, therefore be cautious of it not afraid of it.
- Be faithful to your partner and always use condom while making any sexual contact.
- Take blood only after checking proper medical certificates.
- Do not discriminate HIV positive people.

UNIT 6.4: Interpersonal Skill Development

Unit Objectives

By the end of this unit, you will:

1. Work towards a positive attitude and behavior.
2. Understanding Goal Setting.
3. Motivated for team participation at work.
4. Learn how to manage relations.
5. Learn about Stress and anger management skills.
6. Learn to develop leadership qualities.

6.4.1 Introduction

Interpersonal skill development is the blend of different traits of day to day life that play an important role in creating our impression in other's mind. It starts from inside. The role of interpersonal skill development is to help us understand how to make choices about our attitudes and actions. It enables us to understand:

- Where are we now?
- How change and growth occur successfully?
- How we can change our attitude to get results we want and to be more effective in work and personal life?

One can learn to control over many aspects of our job and their environment by making appropriate choices and responses.

These include various traits like:

- Positive Attitude
- Motivation
- Goal Setting
- Team Work
- Managing Relations
- Etiquette
- Stress and Anger Management
- Conflict Resolution

6.4.2 Positive Attitude

What is attitude?

- Our approach...
- Our outlook towards situations and others...

- The emotions we express towards others.
- Our attitude must be positive and hopeful.

Remember:

- Luck favors those who help themselves
- Make things happen and don't wait for it to happen
- Stay away from negative influences
- Start your day with something positive
- Learn to like the things that need to be done

Fig.6.4.1: Positive Attitude

Positive attitude shows in the following ways:

- Positive thinking
- Constructive things
- Creative thinking
- Optimism
- The motivation and energy to accomplish goals.
- An approach of happiness

Positive thinking results in satisfaction and success

6.4.2.1 Story of Carrot, Egg and Coffee Beans

Raju works as a Supervisor in a factory. He is not happy with his job. One day he spoke about his dejection to his elderly friend, Prashant, who runs a small canteen for the factory workers.

"Prashant I am not satisfied with my job. There are so many problems in the factory. If I solve one, another one crops up. The problems seem to be never ending. I am quite fed up and wish to quit."

Prashant said nothing. He quietly put three pots with water on the stove. He put some carrots into one pot, some eggs into another and coffee beans into the third pot. The water in the pots began to boil.

Raju wondered what was going on! "Oh, here I am with my tale of woes, and this illiterate cook goes about his business!"

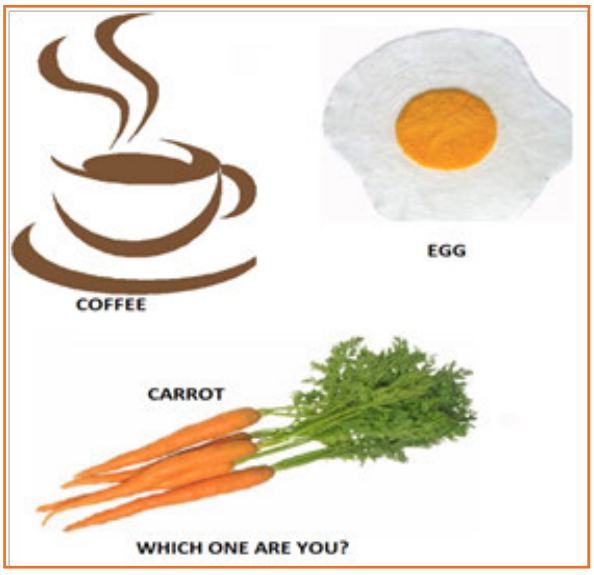

Fig.6.4.2: Story of Carrot, Egg and Coffee Beans

After some time, Prashant switched off the stove and put the carrots, eggs and the beans in different bowls. He then said, "My friend, so what do you see?" "Carrots, eggs and coffee", said Raju irritably. "Of course! Now come and touch them one by one", said Prashant. " What do you want to prove?" asked Raju controlling his anger. "The carrots have turned soft. The egg is hard boiled beneath its shell and the coffee is stronger in aroma". "Exactly" said Prashant "Each of them faced the same degree of heat, but each reacted differently. The carrots that were

so hard before and is now soft. The egg was delicate with its thin outer shell, but after boiling it became hardened and the inner liquid portion became hard boiled. But the coffee beans are unique. After boiling in water, they became stronger and richer. So my friend, tell me, are you the egg the carrot or the coffee bean? How do you respond to difficult situations? Are you like the carrot that is hard to look at but with the slightest difficulty becomes weak and soft? Are you the egg born with a soft heart but became tough and stiff after a difficult or a bitter experience? Or are you like the coffee bean that gets stronger and tougher and reaches its peak in extreme adversity or difficulty?

When things get worse, you get better.

"Thank you Prashant. You've opened my eyes. I shall strive and do my best."

What have you learnt from the story?

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6.4.2.2 Some Successful People

Dirubhai Ambani - Founder of the Reliance brand

Born in Junagadh in a middle class family, son of a school teacher. His mother who had difficulty meeting the ends with his father's income, nagged him to begin earning some money. He snapped at her "Phadia, phadia su karo chho ...paisa no to dhanglo karees ..." Just to show that that he was serious, he once bought a tin of groundnut oil on credit from a local whole seller and sold the oil in retail sitting on the roadside, earning a profit of a few rupees that he gave to his mother.

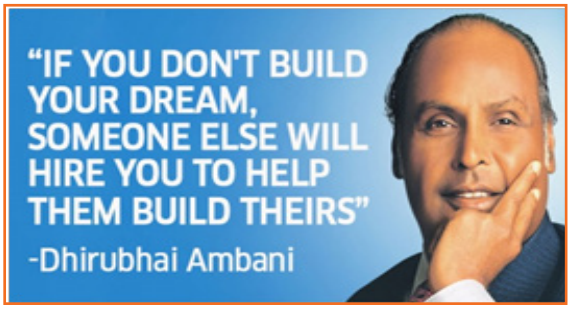

Fig.6.4.3: Dirubhai Ambani - Founder of Reliance

Next, he began setting up onion and potato fries stalls at village fairs during weekends when his school was closed. When he grew up, he came to Mumbai with very little money and lived in a two room chawl with his family. But dreamt big and worked towards his dreams.

Fig.6.4.4: Rajnikanth: Super Star of Tamil Cinema

Rajnikanth: Super star of Tamil cinema

- *Hero and demi-God for many thousands*
- *Original name Shivaji Rao Gaekwad*
- *From bus conductor to super star*

Early life:

- *Driven by poverty, went through extreme struggle*
- *No education; Worked as a bus conductor*
- *Entertained passengers in the bus*
- *Got a break in Tamil cinema*
- *Worked with a single mind to become a super hero*

What have you learnt from these two people?

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6.4.3 Goal Setting

Goal setting is to visualize your ideal future and realizing what and where you want to be. The method of setting goals helps you in being clear on where you want to be and what you want to do in life.

This consists of establishment of specific, measurable, achievable, realistic and time targeted aim. Goal setting helps individuals to be clear on their own objectives in life and work towards it. They help motivate you to move forward in life and to achieve what you want to achieve. To set up the goal set SMART goals:

- S stands for: Specific
- M stands for: Measurable
- A stands for: Attainment
- R stands for: Relevant
- T stands for: Time bound

Fig.6.4.5: Goal Setting

Identify

- What you want to achieve,
- Where you have to concentrate your efforts
- Also spot the distractions that can, lead you astray.

First create your "big picture" (10 years from now)

- Identify the long term goals that you just wish to achieve.
- get smaller targets in place which needs to be met to achieve the long term target
- Once the plan is in place you work on the plan to achieve the long term goal

Setting goal is important for an individual because:

- Goals narrow attention and direct efforts to goal related activities.
- Goals lead to more effort.
- One works through setbacks if he is pursuing a goal.
- It develops and changes individual's behavior.

Categorization of Goals

It is important to categorize the different kinds of Goals

- **Career:** In your professional career where you want to reach and what do you want to do?
- **Financial:** How much you want to earn, by what stage? Is it related to your career goals?
- **Education:** To achieve the long term goal what skills and education do you need over time?

- **Family:** How you want to be seen by your spouse and family members?
- **Health:** Do you want to stay healthy in old age? How are you planning to achieve this?
- **Public Service:** Do you want to have social goals? What are those?

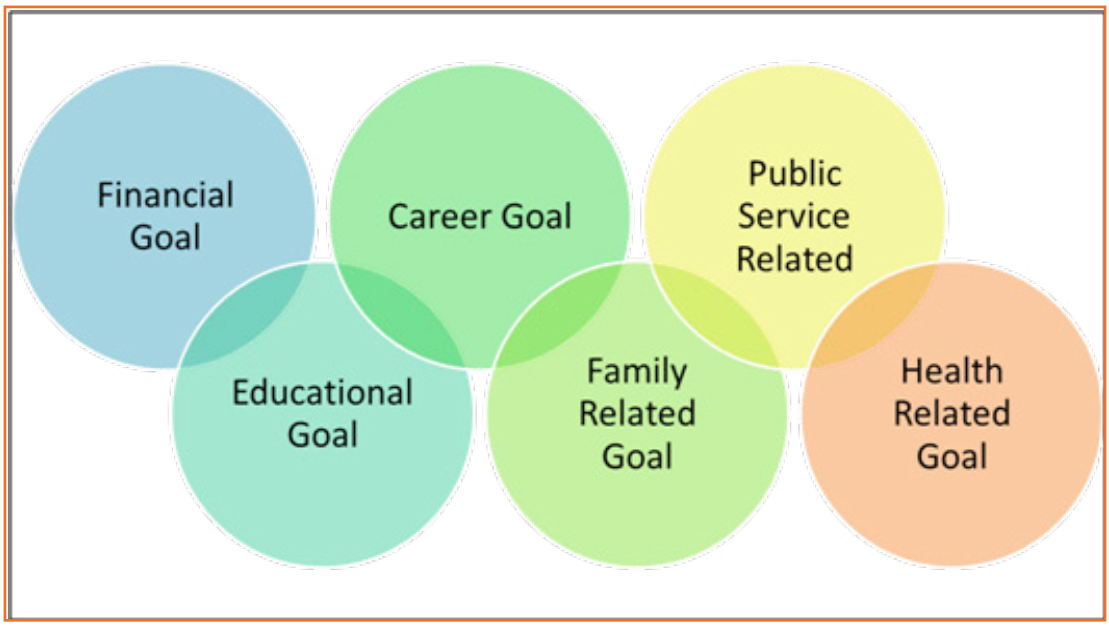

Fig.6.4.6: Categorization of Goals

Write down your two financil goals.

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Write down your two career goals.

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Write down your two educational goals.

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Write down your family related two goals.

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Write down your health related two goals.

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Write down your public service related two goals.

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6.4.4 Team Dynamics

A team is made up of a group of people associated to a common purpose. Teams are especially made to conduct complex works. A team is an example where a people share a goal. This creates a dynamic bond amongst the team members as they are dependent on one another for success. For example a sports team wins or loses as a whole.

Fig.6.4.7: A Teamwork

As a team members need to learn:

- How to work with one another.
- Understand each other's strengths
- Prepare the atmosphere that is familiar with each member to work beyond their strength.

Factors of Team Dynamics

- Tolerance and Cooperation
- Set aside feelings of caste, creed, profession
- Put up with each other
- Identify strengths of each
- Who can do what

In a team, there is no room for personal gains and definitely not betrayals. In a team:

- A single person cannot achieve a big task single handedly.
- Big and difficult tasks can be accomplished only through collective effort, through teams.
- In a team, the team members stand by each other during good and bad times alike.
- Work together towards a common goal.
- Tasks are divided and the burden shared
- Help each other and ask for help from others.

6.4.4.1 Story: Small Fishes and Big Fish

Once there was a shoal of tiny red fish living in the sea. One among them was a little different. His name was Swimmy and he was black in colour. Swimmy was the fastest swimmer in the shoal. The fish would swim around in the sea looking for food. One day when they were busy searching for lunch, Swimmy who was far ahead of the others saw a big fish coming in their direction. The big fish was also looking for his lunch---smaller fish. Swimmy was scared! If the big fish would spot his shoal, all of them would be eaten up. Swimmy thought hard of a way out and quickly came up with a plan. He quickly swam back to his shoal and told all the fish about the big fish and also explained **his plan to escape from being eaten.**

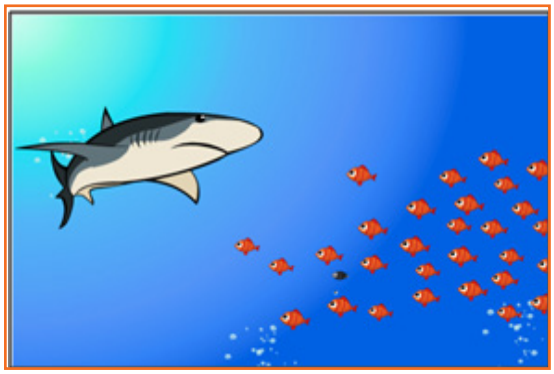

Fig.6.4.8(a): Small Fishes and Big Fish

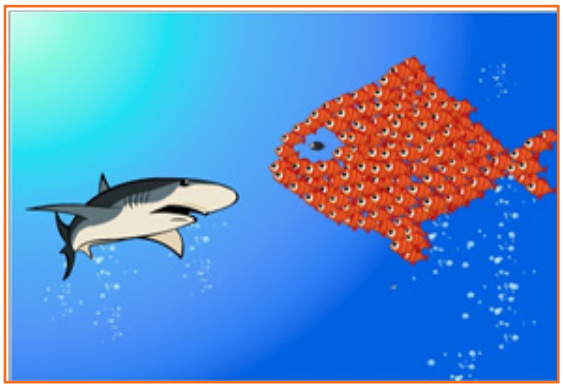

Fig.6.4.8(b): Small Fishes and Big Fish

When the big fish came closer he was shocked to see an even bigger fish swimming in his direction with its huge jaws wide open. Frightened that he would get eaten up, the big fish swam away. If he had looked carefully, he would have realized that the huge fish was actually all the tiny red fish swimming very closely together in such a way that they looked like one big fish. And little black Swimmy, being different, became the eye of the 'huge' fish!

What have you learnt from the story?

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6.4.5 Managing Relations

All of us have different desires, different personalities, likings, and different means of showing our feelings that affects people around us.

70% of the workplace learning is informal, once people discuss with each other at work they really are learning to do their job better. Friendlier staff are good communicators and more productive. They are also trusted more by employers and colleagues.

Tips for improving relations with people around us:

- Observe how you react to people such as do you reach to a conclusion before you know all the facts.

Fig.6.4.9: Managing Relations

- be true to yourself on how you interact with others
- Look at work environment. Do you seek attention for accomplishments or give chance to others.
- Accept your weaknesses courageously and work on them.
- Make sure you are responsible for your own actions.
- If you think you hurt someone, apologize.

6.4.6 Etiquette

Etiquette are nothing but rules operating behavior regarded as good and acceptable in personal and professional life. Etiquette includes:

Making Positive Impression

- Stand straight, make eye contact
- Turn towards the person who you are communicating with. Genuinely smile at people.
- Use ow the dress code prescribed by the organization.
- When meeting someone for the first time always shake hands with a gentle firmness.
- Always arrive early to work each day.

How you treat with people

- Think how you treat your supervisors and colleagues.
- Don't make value judgments on people's importance at workplace. Respect every individual equally.
- Respect people's personal space at workplace.

Communicating at Workspace

- Keep workspace professional and neat.
- Don't interrupt other people on the workplace.
- Limit personal calls especially when you are working in a manufacturing unit.
- Eat and smoke to the designated areas only otherwise it may disturb other people.

Work Ethics

Believes and morals at work constitutes Work ethics. Work ethics include:

- **Discipline:** Only with discipline one can stay fixed on goals and determined to complete his assignment.
- **Commitment to work:** A strong sense of commitment to work affects how an individual work. The quality and the amount of work he does depends on the commitment. Committed worker turns up on time, puts in his best efforts and completes the projects to the best of his ability.
- **Punctuality:** a committed and responsible working comes to work on time and finishes the given task on time. Being punctual gives a sense of professionalism.
- **Ownership and responsibility:** Ownership and responsibility stretches in all aspects of an employee's job. Supervisors rely on the high moral standards trusting him not create problems and being responsible.

- **Striving to excel:** Keep yourself updated with new developments and knowledge of your field. Learn new skills, techniques, methods required to uplift your career.

6.4.7 Stress and Anger Management

Anger is a normal and a healthy emotion. Anger management however is critical for people who cannot manage their anger. There are many health issues related to an unresolved anger like heart attack, high blood pressure, anxiety, depression, colds and flu/fever and digestive problems.

If your heart beats faster and you breathe quickly, tension in your shoulder or clinching your fists beware your body may be showing sign of anger, take steps to calm yourself down. Once you will be able to recognize the signs of anger you can calm yourself down.

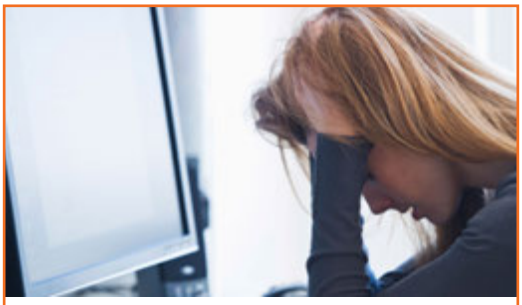

Fig.6.4.10: Stress Management

Always remember:

- Avoid unnecessary stress, learn to say no
- Keep expressing your feelings. Don't let it bottle up
- Accept the things you can't change.
- Learn to forgive.
- Anger can destroy lives, destroy relationships.
- Put yourself in other's shoes.
- Don't react immediately.
- Post pone for a few seconds whatever you wish to say or do.
- Take a deep breath.
- Speak when you have calmed down.

Fig.6.4.11: Anger Management

6.4.8 Conflict Resolution

What is a Conflict?

A difficult situation which is difficult to understand and deal with is a conflict.

Why do we need to resolve conflicts?

- The conflict may blow out of proportion if not addressed in time
- An unsolved problem can spread and translates itself into all other areas of life
- If problems are not resolved they will lead to further frustration
- It leads to bitterness between individuals
- If the conflict is not resolved it may lead to personal issues between two individuals.

How to work out Conflicts?

1. End it there . . .

   Try and stop the conflict the moment you realize there is one. Nip it at the bud.

2. Communicate

   Talk about the issue, why there is a disagreement and how you think it can be resolved.

3. Listen to others

   Get the point of view of other people involved in the conflict and try and rework on the resolution.

4. Think of solutions

   The solution should satisfy all parties involved or there should be a consensus.

If there is no resolution possible get a neutral person in for discussion and resolution.

6.4.9 Leadership Skills

Leadership skills are one of the key skills that most employers look for in an employee. A person should be able to lead his/her team and should guide the team towards the common objective of the team. Some of the qualities that every good leader should possess are:

- **Honesty:** If you are honest its most likely that the team members will also be honest
- **Effective delegation:** One person cannot do everything. It's important to understand the strength of every member in the team and delegate work prudently. Effective delegation help in increase of efficiency
- **Good communications skills:** Being able to communicate clearly is quite important.
- **Confidence:** Keeps morale of the team high even in the tough times.
- **Commitment:** If you want your team to deliver and be committed to the tasks. You have to be committed first.
- **Positive Attitude:** Keeping teams motivated towards continued success of the company.
- **Creativity:** During the critical situations it is important to think out of the box solutions than to prefer the set course of action.
- **Decisiveness:** Nothing is certain and things can go wrong anytime. Plan for the worst and most things will be under control. Taking a firm decision (which is correct) is a crucial to give confidence to your team.
- **Focus on the big picture:** always look at the big picture. Sometimes you might have to deliberately ignore a few things which do not impact anything at work as long as the team is working towards the bigger picture.

How to become a leader:

- Take initiatives to act on various opportunities that you get.
- Set you priorities right and work towards the bigger goal. Make it clear that you are working towards it
- Try and resolve issues. Do not pass it on
- Work beyond what is expected from you. Promise less deliver more.
- Bring in energy to the team
- Forecast potential issues in the future, take necessary steps and actions to resolve the issues.
- Suggest changes to increase efficiency, customer satisfaction etc.
- Keep enhancing your skills and be the best at what you are doing. Be the best hairdresser or a makeup artist in your store and set examples.

UNIT 6.5: Social Interaction

Unit Objectives

At the end of this unit, you will be able to:

1. Understand what social interaction is and what social interaction behaviour are.
2. Give a brief description about himself/herself in public.
3. Follow daily duties.
4. Cooperate with peers, family and other members in society.

6.5.1 Social Interaction

Social interaction is a process through which we respond to people talking with us. It includes acts where people perform toward each other and responses they give in return. Social interaction has a number of\ behaviours. Some of them are:

Fig.6.5.1: Social Interaction

- **Exchange:** Exchange is the most elementary kind of social interaction. It's a human process by that social behavior is exchanged for some kind of reward for equal or greater value.
- **Competition:** It's a process by which two or more individuals plan to accomplish a goal that just one can attain. It will lead to psychological stress, a lack of cooperation in social relationship, difference and even conflict.
- **Cooperation:** It's a process in which people work together to achieve shared goals. Task cannot be completed without their cooperation.
- **Conflict:** Social conflict is the struggle for agency or power among a society to achieve control of scarce resources. It happens when two or more individuals oppose each other in social interaction to achieve incompatible goals.
- **Coercion:** People or teams are forced to provide in to the desire of other people or teams.

6.5.2 Self-Introduction

We all, in our lifetime, have to introduce ourselves to the others. The introduction usually lasts for around 2 minutes to 3 minutes. It is very important that it gives the first impression to other about us. It has a great impact on your self-esteem and self-confidence. It's helpful in:

Fig.6.5.2: Self-Introduction

- Feeling better about yourself
- Boosting your confidence
- Building your self esteem
- Making friends
- Feeling in control

Points for Self Introduction

Following are some self-introduction points:

- **Wishes:** It is the first thing that we need to do before addressing a gathering. At this point we need to make effort to grab the attention of audience. You have to wish depending on the time either, Good Morning, Good Afternoon or Good Evening.
  - » Good Morning! My dear friends.
  - » Respected Sir! Good morning.
  - » Special or lovely or cool morning to you all.
- **Purpose:** We have to tell the purpose of coming in front of the audience. We can say I have come here to tell you about myself.
- **Name:** Here you tell about your name….. . To grab the eye of the audience, you have got to present your name differently. If you know you can tell the meaning of your name or nay famous celebrity along with your name.
- **Father's Name:** Here you have to say concerning your father's name. begin your father name as Mr. or Prof. or Dr.
- **Family:** It's a good chance to inform about your family, therefore tell the small print what you want to tell about them.
- **Profession:** Tell about your profession what you're doing at the moment.
- **Location:** Tell about your present location, wherever you're staying and if you would like you can also tell with whom you're living.

You can also tell about your native place. It is better to describe about or tell about your place which is famous for.

- **Hobbies/Habits:** Hobbies means what you like in your leisure and habit means your regular activities. This part tells about your nature and your life style, be careful while telling this.
- **Life Aim:** Tell about what is your aim in life, it will be good if your aim is high. You have to think high and reach high.
- **Achievements:** Tell about what you achieve up to now, minimum it is good to tell about three achievements and maximum five. Though achievements are small, tell them it shows your confidence but don't say I don't have any achievements.
- **Favorite Person's or Ideal:** It is good to say about your ideal persons.
- **Favorite movies, things, colour, places etc.:** if you want to tell your favorites, which tell about your tastes and preferences to others.
- **Your Strengths and Weakness:** You can tell about your strengths and weaknesses. Make sure your weakness should not be absurd or incorrigible.
- **People you like and dislike:** You have to tell what kind people you like or what kind of people you dislike.
- Any turning point in your life
- How are you different from others
- **Conclusion:** In conclusion offer a memorable answer on the question the listeners probably will have when they have listen to your public speaking speech. Tell how this aspect of your life makes you what you are and who you are. It will be perfect ending to your self –introduction

Finally say thank you.

You will have to maintain your speech according to the time, generally 3 minutes and you have to make the speech depending on the section of people you are giving the speech and what you want to reveal about yourself.

Improving self-introduction

There are a few things that you can do that helps in making your self-introduction better:

- **Listen to what you are saying to yourself:** Notice what your inner voice is saying. Take some time to listen and even write down what you are thinking.
- **Monitor your self-talk:** Analyze that your self-talk is more positive than negative.
- **Change your introduction:** counter your negative thoughts with positive ones. Avoid speaking negative and try to look for things that might add a better spin to a tough situation.

6.5.3 Our Duties and Responsibilities

There are certain duties which are laid by the Constitution of India. These duties are very to be fulfilled by every citizen of India. These are as follows:

- To bear by the Constitution and respect its ideals and establishments, the national flag and also the national anthem.
- To encourage and respect the noble ideals that galvanized our national struggle for freedom.
- To uphold and protect the sovereignty, unity and integrity of Republic of India.
- To defend the country and render national service once called upon to do so.
- To promote harmony and also the spirit of respect amongst all the people of the Republic of India transcending ligious, linguistic and regional diversities.
- To forbid practices derogative to the dignity of ladies.
- To preserve the rich and diversified heritage of our culture.
- To conserve the natural surroundings like forests, lakes, rivers and wild life, and to have compassion for living creatures.
- To develop the scientific temper, humanism and the spirit of inquiry and reform.
- To safeguard public property and to retract violence.
- To try towards excellence altogether spheres of individual and collective activity so that the nation perpetually rises to higher levels of endeavor and accomplishment.
- These need to be followed by every citizen of India for development of the country.

6.5.4 Cooperation

The process of groups of organisms working or acting together for their mutual benefit is called cooperation. Cooperation among family members, friends and peers is very common and healthy. It is the backbone of any society.

Family cooperation provides an avenue for a family to come closer. It increases coping skills and decision making. Some steps to promote family cooperation are:

Fig.6.5.3: Cooperation

- **Plan things together:** It calls for negotiation and compromise and teaches everyone to be more tolerant and considerable to other's viewpoint.
- **Share responsibilities:** Diving up necessary household responsibilities can be a good exercise in family cooperation.

Peer support occurs once individuals give knowledge, experience, and emotional, social or sensible help to each other. It's a distinct state of social support in this the source of support may be a peer an individual who is analogous in ways to the recipient of the support.

The effective peer support can be in form of:

- **Social Support:** In form of positive psychological interactions with others with whom there is mutual trust and concern.
- **Experiential Knowledge:** contributes to solve problems and improve quality of life.
- **Emotional support :** Esteem, attachment and reassurance
- **Instrumental Support:** Product and services.

How to be a cooperative person: For being a cooperative person following things needs to be done:

- Listen carefully to others and make sure you perceive what they're expressing.
- Share when you have something that others would really like to have.
- Take Turns once there's something that no-one desires to do, or when more than one person desires to do a similar factor.
- Compromise when you have a significant conflict.
- Do your part the very best that you just probably can. This can inspire others to do the same.
- Show appreciation to people for what they contribute.
- Encourage people to do their best.
- Make people needed. Working together may be a lot more fun that manner.
- Don't isolate or exclude anyone. Everyone has something valuable to offer, and nobody likes being omitted.

UNIT 6.6: Group Interaction

Unit Objectives

At the end of this unit, you will be able to:

1. Participate in group discussions in the class.
2. Give speech in the public.
3. Understand the importance of team building and team work.

6.6.1 Group Interaction

Every day we tend to meet with teams of individuals socially and professionally. However we interact to play a big role in the impressions we tend to produce. Interaction that happens whereas a group completes a cooperative task describes how the group works. For a successful and positive group interaction these steps needs to be followed:

Fig.6.6.1: Group Interaction

- Put your mobile phone away or place in silent mode.
- Greet everyone.
- Be friendly with everyone in the group.
- Show an interest in others by paying someone a compliment and listen carefully to what is being discussed.
- Be proactive and introduce yourself to others in the group.
- Sit up straight. Poor body posture is an indication of low self-esteem.
- Focus your attention on the person talking.
- Don't discount anyone's comment. Remember everyone is different and have different the ability to think.
- Think before you speak. Don't be too quick to jump into the conversation.
- Be a respect listener and observer.
- Include everyone when talking. Be sure to share eye contact with each person in the group.
- Unless there is a clear indication don't change the topic. Otherwise it will make people feel you are not interested in the topic.
- Don't start or participate in a side conversation. Don't allow their mistake to prevent you from being a good listener.
- Make sure to smile shake hands and embrace and use each person's name when conversation and the person's name when the discussion is over.

Everything you are doing in a group setting makes an effect on everybody in the group. Don't ever suppose something doesn't matter. Everything matters. Take every chance to take part in informal and formal group interactions. Begin by creating small contributions to discussion, prepare an issue to raise or accept as true with another person's remark. Ask for other persons opinion.

6.6.2 Importance of Group Interactions

As a participant group interactions is important as:

- It helps you to get a subject more deeply.
- It improves your strength to think positively.
- It helps in solving a serious issue.
- It helps the team to go on a final decision.
- It provides you the chance to listen to others' ideas.
- It improves your listening skills.
- It increases your confidence in communications.
- It can change your behavior.
- Understanding a member interpersonal skills.
- Identifying if a member is able to work in a team.
- Understanding ones behavior.
- Selecting a perspective member in a perspective methodology.

Dos and Don'ts of Group Interaction

Do's	Don't
• Speak pleasantly and in a well mannered way to the group. • Respect the contribution of each speaker. • Remember that a discussion isn't AN argument. Learn to disagree in a well mannered way. • Think about your contribution before you speak. How best can you answer the question/ contribute to the topic? • Try to follow the discussion topic. do not introduce tangential information. • Be aware of your visual communication when you are speaking. • Agree with and acknowledge what you find fascinating.	• Lose your temper. A discussion isn't an argument. • Shout. Use a moderate tone and medium pitch. • Use too several gestures when you speak. Gestures like finger pointing and table thumping will appear aggressive. • Dominate the discussion. Confident speakers ought to enable quieter students an opportunity to contribute. • Draw too much on personal experience or anecdote. Although some tutors encourage students to reflect on their own expertise, keep in mind to not generalize an excessive amount of. • Interrupt. Wait for a speaker to complete before you speak.

Fig.6.6.2: Dos and Don'ts of Group Interaction

6.6.3 Team Work

Team work is a critical part of professional life. They can have a big impact on:

- The profitability of an organisation.

- People enjoy their work.
- Staff retention rates.
- Team and individual performance.
- Company reputation.

Fig.6.6.3: Team work

Importance of Team Building

Team building activities not only boost morale of the team members, but it can also increase the success rate of the teams. Team building is an important activity as it:

- **Facilitates better communication:** Activities that create discussion results in open communication among the employees, and among employees and management. This improves office environment also the quality of work.
- **Motivates employees:** The more comfortable team members are to share their ideas and opinions, the more confident they will be. This motivates them to take on new projects or challenges.
- **Promotes creativity:** Working closely with other team members increase creativity and promotes new ideas.
- **Develops problem-solving skills:** Team building activities that require team members to work closely to solve problems improves the ability to think rationally and logically. Teams that determine when a problem arises and knows the solution can work better when a real problem occurs.
- **Breaks the barrier:** Team building increases trust among workers.

Do and Don'ts of working in a Team

- **Don't argue in public:** if you have a disagreement with someone in the team find a neutral place to discuss the situation.
- **Do encourage each other:** when things get tough the tough gets going. Contribute to the team in trying situation.
- **Don't talk behind the backs:** if you have trouble with some team member don't share with others. Go directly to the person in a kind and compassionate manner and share what is in your mind.
- **Do lend a hand:** if a team members is asking for help don't hesitate in helping him.
- **Don't be the weakest link:** Live up to your responsibilities, meet team expectations and communicate effectively in the team.
- **Give and receive feedback:** As a part of growing team give and receive feedback respectfully and graciously.

UNIT 6.7: Time Management

Unit Objectives

At the end of this unit, you will be able to:

1. Understand the importance of time management.
2. Develop time management skills.
3. Learn about effective time planning.

6.7.1 Time Management

Time management is the process of planning and practicing control over the time given to a specific task, especially to increase effectiveness, efficiency and productivity. It is an activity with the goal to increase the overall advantage of a set of activities within the limited condition of a limited time.

Fig.6.7.1: Time Management

Some effective time management

- Delegate tasks.
- Identify time wasters.
- Combine activities – Plan for them.
- Break down big tasks down to the smallest task possible.
- Accomplish them one by one.
- At the end of the day conduct a simple analysis to see which activity took time.

6.7.2 Time Robbers

Time robbers are those activities which create interruption at the workplace. These activities create a deviation from the objectives which needs to be achieved. Time Robbers could be:

- Poor personal planning and scheduling.
- Interruptions by people without appointments.
- Poor delegation.
- Poor use of the media: Telephone, Mobile, e-mail, and fax, etc.
- Reading junk mail.
- Lack of concern for god time management.
- Lack of clear priorities

The Time Robbers can be avoided by:

- Be active all the time.
- Develop and maintain an organized personal activity schedule.
- Set your priorities.
- Proper delegation.
- Utilize modern technical media.

6.7.3 Pareto Analysis

- According to this 80% of the tasks can be completed in 20% of the time. The remaining 20 % of the tasks take 80 % of your time. And the task which should fall in first category should be given a higher priority.
- Time also depends on the type of method adopted to process the task. Methods should always be simpler and easier to complete the task. If we use difficult ways, it shall be result the waste of time. One should always try to find out alternate ways to complete a task.

Urgent Important Matrix

1.The Urgent and Important Tasks	2. The Non Urgent but Important Tasks
DO NOW • Emergencies, complaints and crisis issues • Superiors desire • Planned tasks or project work now due • Meetings with superiors/colleagues	PLAN TO DO THEM • Planning, preparation • Scheduling • Designing, testing • Thinking, creating, modeling the data
3. The Non Important but Urgent Tasks	**4. The Non Important and non-Urgent Tasks**
REJECT AND EXPLAIN • Small requests from others • Ostensible emergencies • Misunderstandings rising in work • Pointless routines or activities	RESIST AND CEASE • Comfort' activities, computer • Games, net surfing, excessive • Cigarette breaks • Chat, gossip, social • Communications • Reading irrelevant and useless material

Fig.6.7.2: Urgent Important Matrix

This matrix helps you understand:

- What should be done
- What should be planned
- What should be resisted
- What should be rejected

The simplest method of managing time is to create a general to do list. Prioritize the task list:

- A daily list of things to do, numbered in the order of their priority
- Start with the most unpleasant and difficult task first latter will completed easily and quickly.
- Map out everything while making a task list
- Learn to say “No” to unimportant things
- Strikeout the things completed so that you are familiar what have been completed and what needs to be completed.

List down the routine activities that you perform in a day.

……

……

……

……

Prioritize the above mentioned activities in the following heads.

Important Tasks	Unimportant Tasks	Urgent Tasks	Not Urgent Tasks

UNIT 6.8: Resume Preparation

Unit Objectives

At the end of this unit, you will be able to:

1. Understand the importance of resume.
2. Learn how to prepare a resume.

6.8.1 Introduction

A resume is a self-declaration which once done properly shows how an individual's skills, experience and achievements matches the need of the work that they wish to get. The sole purpose of a resume is one to win an interview. It convinces the future employer what he wants from the prospective employee in new career or position.

Fig.6.8.1: A Resume

It also establishes an individual as a professional person with high standards and excellent writing skills based on the fact that his resume is written well. It also helps you clarify your direction, qualifications and strengths, boost your confidence or to start out the process of committing to a job or a career modification.

One must know about a resume that:

- Your resume is an instrument to get you an interview but not a job
- Employer will be screen your resume for just 15-20 seconds. That's the time your resume will make an impact on employer.

There are different sections on the resume in the same order as mentioned under:

Section	What is the employer looking for
Header	Your identity and to contact you
Objective	To check if their requirement and your objective match
Education	To check if you have the basic qualification for the job/ internship you are applying for
Practical Experience/Projects	To see if you have done anything that reflects your potential capability. Also to see how different you are from your peers.
Skills	How equipped you are in terms of your personality traits as well as occupational skills
Interests	Professional aspects apart, how meaningful is your life?
Other	Is there anything else significant and relevant you want to showcase, that will add value to your resume.

Fig.6.8.2: Different Sections on the Resume

Preparation work and important tips

Before you start preparing your resume make sure to follow the checklist:

- Educational documents from class ten onwards to calculate scores
- Make list of all things that you need to add to your resume. Like internships, projects, part time jobs, extracurricular activities, sports, training, skills, interests etc. the list doesn't need to be complete, you'll always add to the list as you go.

Before preparing resume always remember:

- Every point in your resume should be specific and must be supported be supported by a number of factual information.
- Use action verbs in all your points. They catch attention immediately and make your sentences clear.
- Use bullets not paragraphs.
- Do not mention your responsibilities mention what you have accomplished.
- A common mistake we make while constructing the resume is to copy the format from our friends resume and built it based on that.

6.8.1.1 Resume Header

Purpose: You have to provide some information about yourself, so that the employer can reach you.

Mandatory fields include: Name, current address, email id, phone number, date of birth. Your name should be written in bigger font.

Do Not:

- Include your photo.
- Write RESUME as heading to the file.
- Give details like family information, marital status, etc.
- Add these details to the bottom of your resume or occupy more space to fill up these details.

6.8.1.2 Framing the Objective

Purpose: To convey the employer what goals you have. The focus should be towards getting a particular position in a specific industry.

Always remember:

Your objective should include the following:

- Position wanted
- Functional area

- Industry wanted
- Be specific and restrict it to minimum words.
- You objective should be different to each role you apply to
- While writing the objective, keep the employers requirement in mind. The objective is not what you desire from the company, it's about company's need.

6.8.1.3 Education

The next session in your resume is to highlight your educational qualifications.

Purpose: For the employer to know whether you have basic qualification for the job for which you are applying or not.

Always Remember:

- To write all educational qualifications from class 10 to highest education.
- For class 10 and 12 – include school/college name, Board, Stream/Specialization (If any), year of study, Marks.
- For undergraduate – include College name, University name, Degree and Specialization, year of study.
- Write all your qualifications in reverse chronological order, i.e. the latest qualification on top.
- You may write the educational qualifications in a tabular format or in a simple one after the other order.

6.8.1.4 Projects and Internships

The next part of your resume includes the hands on work that you have done, like projects, internships, in-plant training, part time jobs, volunteering, starting up a company and other initiatives. The number and the nature of initiatives taken defines whether to keep one heading or detail them under different headings.

Purpose: This is a mandatory part of a resume, as your hands on work and the initiatives you have taken apart from your curriculum in what will reflect your real strength as well as separate your resume from your peers.

Remember:

- The heading should be – title / project name, role, company/organization name, -2 lines description about the specific time period.
- Time period is must.
- The entries under each heading must be in reverse chronological order.
- Be very specific on what you have accomplished. Add numbers and facts wherever possible.

Do Not:

- Do not write simple statements. It does not give employer a clear picture of the work you have done. Thus the employer can assume that you have done an internship for the certificate.

6.8.1.5 Skills

Heading: You can have multiple headings under skills. Common heading can include:

- **Soft Skills:** must include, they showcase your personality traits.
- **Core skills:** If you possess any core skills which differentiates you from others include them. These are skills you possess should be relevant to the employer.
- **IT Skills:** These days every job needs IT skills so mention all the skills that you have. Any software that you have worked on or even basic IT skills.

Remember:

- Pick only a few soft skills that best represents you
- Give relevant examples if possible for the skills that you have mentioned.

6.8.1.6 Interests

Provide relevant interests that you would like your employers to know.

This section will define you as an individual and informal discussions will be centered on this topic. These discussions will normally be used to understand your core values, communication skills and your interests.

Remember:

- Provide details of those interests that makes sense and which adds value to you
- Make points specific and add supporting fact to it.
- Do not just list random interests like: sleeping, eating, breathing etc.
- Do not include interests like Smoking, drinking, partying movies etc. they create wrong impression.

6.8.1.7 References

Give References

References are people whom you have worked with you before or who know you and are in senior positions in their organizations. The references may be called upon to ask about you. While providing the details of the references remember to

- Provide the name, email ID, Phone number (after taking the approval from the reference), and the relationship with you.
- Ensure that you have spoken to the reference and tell them that they should expect a call from your potential employers.

6.8.1.8 Points to Remember

- The resume should not be verbose and should be limited to 2 pages
- Resume should not have any errors on it. No spelling mistakes, no grammatical errors etc.
- Go through your resume multiple times to get the resume right. You might need to continuously edit it.
- Keep the font professional and at 11 or 12. Do not use more than 2 fonts. Ideally limit it to one.
- However the font of the header and the introduction can have a font that is bigger.
- The text should all be in black as most employers print in black and white.
- Keep enough margin on the sides and the top (1.5 to 2 line space)
- The body of the resume should be left aligned and the header should be center aligned.

UNIT 6.9: Interview Preparation

Unit Objectives

By the end of this unit, you will:

1. Understand the procedure of interview.
2. Go thorough mock interviews.
3. Understand how to present themselves during an interview.
4. Be motivated to work after the training period is over.

6.9.1 Interview

A conversation between two people (interviewer and interviewee) where the questions are asked by the interviewer to the interviewee with the intent of understanding the interviewee is an interview. Essentially in simple terms if you are looking for a job then you get interviewed by the employer who checks your knowledge, skills, interests etc.

Fig.6.9.1: Interview

Some Types of Interview

1. **HR Interview:** Traditionally interviews are face to face interviews. Normally it's a one-to-one conversation with the HR Executive. You are advised to maintain good eye contact, listen keenly and answer promptly.
2. **Panel Interview:** In this situation, there is more than one interviewer. A panel ranging from two to ten members discuss and interview. In this case you can display group management and group presentation skills.
3. **Technical interview:** Based on your skills and the requirements of the organization a technical interview is conducted. The focus is on the skill set based on what's on the resume or the organizations need.
4. **Telephonic Interview:** In cases where the candidate cannot reach the interview physically an interview on the telephone is conducted. This is normally the first screening interview.

Before going for an interview, it is important to have clarity of the role you are applying for. It's also important that for you to know where you are applying and whom will you be talking to. Your answers should tell the employer that you are the match they are looking for.

This requires you to do a small research on the following fields:

- Company & Field
- Job Description
- Yourself (Skills, Values & Interests)
- Resume (Experience)

If you were an employer, you would have chosen a person who is sure of himself, calm and confident. So it's important that you are:

- Confident
- Relaxed
- Sure of yourself
- Prepared
- Dress Professionally

It is important that you dress professionally. It is a proven fact that the way we dress makes a huge difference in the way we are perceived. 90% of the way you communicate with other people is through body language (gestures, expressions, etc.) and the first Impression we make. It is very simple to make a great first impression.

For a good first impression it is important those we:

- Smell good
- Have a professional appearance
- Pay attention to your grooming
- Make eye contact
- Know what and how you speak
- Our overall personality contributes to our complete perception.

How to dress for Interview?

Men	Women
Long-sleeved buttoned shirt (clean and pressed)	Conservative pump, no stilettos
Dark shoes (cleaned and polished) and dark socks	Jewellery -One set of earrings (preferably knobs)
Get a haircut (short hair is always best)	No bangles
No Jewellery (chains, earrings, piercing)	Minimal use of makeup
No beards or Tattoos	

Fig.6.9.2: Dress for Interview

6.9.2 The Do's and Don'ts in an Interview

Some of you might have faced an interview and some of you might not have. However, by now, you definitely have a better understanding what are the accepted standards of a professional behavior. Read the sentences given and mark them as do's or don'ts, in relation to an interview:

Sentence	Do's	Don'ts
Be yourself		
Burp while talking!!!		
Just out from a 'powder factory' (worn too much make-up)		
Reach just about the right time for the interview		
Just barge in the cabin/ office		
Forget to greet the receptionist/ don't respond		
Think before you speak		
Do your homework- Visit the company website		
Take time to think (TTTT)		
Wear bright colour clothes on the D-day		
Emphasis on your strengths		
Argue/ Debate with the interviewer		
Chew gum during the interview.		
Review your educational and work experiences		
See your documents flying out of the file (Being clumsy)		
Thank the interviewer		
Have the 'they need me' attitude		
Maintain eye contact and good body language		
Only give monosyllabic answers(depends on the kind of questions asked…in-between)		
Carry a copy of your resume		

Fig.6.9.3: Do's and Don'ts in an Interview

6.9.3 During the Interview

- Be confident, not arrogant
- Sell yourself - Keep your energy up
- Maintain your posture
- Be positive, don't complain
- Know your resume and accomplishments.

You need to express effectively in an interview. The parameters that the candidates are assessed on during the interview are very simple. These are the parameters that this training program has prepared you for.

Notes

Skill India
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सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

N·S·D·C
National
Skill Development
Corporation
Transforming the skill landscape

MESC
Media & Entertainment Skills Council

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Jasola, New Delhi-110025.
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Price: ₹