



Odisha State Open University



Commonwealth of Learning

INTRODUCTION TO MULTIMEDIA

Programme Production Techniques

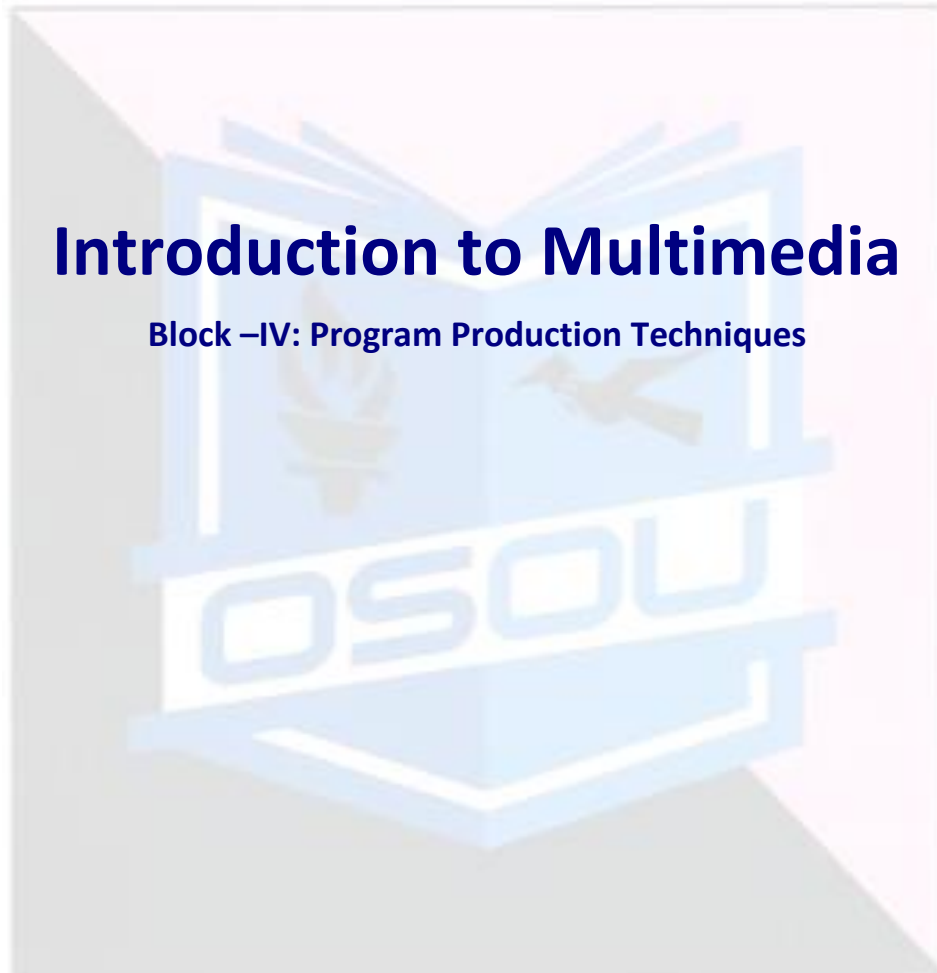


Diploma in
Multimedia and Animation (DMA)

DMA-01
BLOCK-4

Introduction to Multimedia

Block –IV: Program Production Techniques



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର
ODISHA STATE OPEN UNIVERSITY, SAMBALPUR

Introduction to Multimedia

This course has been developed with the support of the Commonwealth of Learning (COL). COL is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources and technologies.

Odisha State Open University, Sambalpur (OSOU) is the first Open and Distance learning institution in the State of Odisha, where students can pursue their studies through Open and Distance Learning (ODL) methodologies. Degrees, Diplomas, or Certificates awarded by OSOU are treated as equivalent to the degrees, diplomas, or certificates awarded by other national universities in India by the University Grants Commission.



© 2018 by the Commonwealth of Learning and Odisha State Open University. Except where otherwise noted, *Introduction to Multimedia* is made available under Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) License: <https://creativecommons.org/licenses/by-sa/4.0/legalcode>

For the avoidance of doubt, by applying this license the Commonwealth of Learning does not waive any privileges or immunities from claims that it may be entitled to assert, nor does the Commonwealth of Learning submit itself to the jurisdiction, courts, legal processes or laws of any jurisdiction. The ideas and opinions expressed in this publication are those of the author/s; they are not necessarily those of Commonwealth of Learning and do not commit the organisation



ଶ୍ରୀ ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର



ODISHA STATE OPEN UNIVERSITY, SAMBALPUR

Odisha State Open University
G.M. University Campus
Sambalpur
Odisha
India
Fax: +91-0663-252 17 00
E-mail: info@osou.ac.in
Website: www.osou.ac.in

Commonwealth of Learning
4710 Kingsway, Suite 2500,
Burnaby, V5H 4M2, British,
Columbia
Canada
Fax: +1 604 775 8210
Email: info@col.org
Website: www.col.org

Acknowledgements

The Odisha State Open University and COL, Canada wishes to thank those Resource Persons below for their contribution to this DMA-01:

Concept / Advisor

Dr. Srikant Mohapatra
Vice- Chancellor
Odisha State Open University, Sambalpur

Course Writer

Shreesthi S. Mishra Writer, Editor and Content Developer	Unit-1
Bhagabat Kar Animation Director, News 7, Bhubaneswar	Unit-2
Sourav Sengupta Visual Editor, News World Odisha	Unit-3
Dhruba Charan Pradhan Teaches Computer Science at Model School, Kalahandi	Unit-4

Course Editor

Chirasrota Jena Working on her Doctoral Thesis on “Women in Media in Odisha” Teaches Journalism students as a guest faculty in various institution/universities	Unit-1
Dr. Ajay Yadav State University of performing & Visual Arts, Rohtak	Units 2 & 3
Dr.Subhang Kishore Das Heads Technical Training Institute, Takatpur, Odisha	Unit-4

Video Production

Sanjay Kumar Sahoo (Manager, Corporate Communication, JSW Steel Ltd)
Simple Sujata Mishra (Lecture, Deptt. Journalism and Mass Communication, NISWAS)
Dharitri Priyadarshini (Researcher at IMRB International)

Published by :

Dr. Jayanta Kar Sharma,
Registrar on behalf of Odisha State Open University, Sambalpur

Contribution of following staff members of Odisha State Open University is acknowledged:

- | | |
|--------------------|-----------------------|
| ➤ Sambit Mishra | ➤ Radhakanta Suna |
| ➤ Debidatta Behera | ➤ Abhinandan Tripathy |
| ➤ Prashansa Das | |

OSOU and COL acknowledge the support extended by **Prof. Madhu Parhar**, STRIDE, IGNOU, New Delhi in conducting several workshops in the process of preparation of course material for DMA.

Contents

Course overview	5
Welcome to Program Production Techniques	5
The Media Industry: Structure and Strategies	5
Audio Video Program Production	5
Compositing & Audio Video Editing	5
Web Design and Publishing.....	6
Course outcomes.....	6
Timeframe.....	7
Study skills.....	7
Need help?	7
Assignments.....	8
Assessments	8
Video Resources.....	8
Getting around this Course material	9
Margin icons	9
Unit- 1	11
Media Industry: Structure and Strategies.....	11
Introduction	11
Outcomes.....	11
Terminology	11
Organisational Structure of Media	12
Basic Editorial setup of Print Media	12
Magazines and its organisational structure	17
Basic Editorial set up of Magazine.....	18
Difference in Operation in Magazines and Newspapers	19
Features of a News agency	19
Editorial desk of News Agencies	20
Growth of the News Agencies in India	20
Basic Editorial setup of a Radio Station.....	22
Television News room and it's Editorial setup	24
Unit summary	26
Assessment	26
Resources.....	26

Unit 2 **27**

Audio Video Program Production	27
Introduction	27
Outcomes.....	27
Terminology	27
Terminology	27
Video Production.....	28
Audio Production	29
What is the Production Process?	29
Basics of Audio-Video Production.....	30
The pre-production phase:.....	32
Production Methods	33
The video's concept	34
The Production Phase	35
Required for the project.....	35
Tips for Recording Audio:	36
Tips for Recording Video:.....	37
While recording the video	37
The Post-Production	38
Unit summary	47
Assessment	47

Unit 3 **50**

Compositing and Audio-Video Editing	50
Introduction	50
Outcomes.....	50
Terminology	51
Audio Visual Editing.....	51
Process of editing	51
Ingest	54
First Assembly.....	54
Rough Cut.....	54
Fine Cut	54
Final Cut	55
Compositing	55
Unit summary	58
Assessment	58
Assignment.....	58

Unit 4 **59**

Web Design and Publishing.....	59
Introduction	59
Outcomes.....	59
Terminology	60
Web Design Programming	61
Introduction to HTML.....	61

Web Site Development & Publishing	74
Website Designing	75
Web Designing Tools	76
Web Page Anatomy	77
Web development tools	79
Website Publishing.....	80
Prerequisites for Website Publishing	81
Website URL Registration	81
Registering Domain Name	82
Website Hosting	83
Unit summary	85
Assignment	86
Assessment	87
Resources.....	87



Course overview

Welcome to Program Production Techniques

In this block, you are going to study about the Program production Techniques. You will study about the structure and Strategy of media industry. Besides that you will learn about the basics of audio video program production. With addition to that you will acquire the tricks of compositing and video editing. Now-days, web is a part of our life, so web design and publishing will be taught in this block.

The Media Industry: Structure and Strategies

This course is intended for people who want to make their career in the diversified sector of Media. In this unit a learner will learn the structure and strategies of the media industry. After studying this course learner will able to know different staffing structure of a media organisation.

Audio Video Program Production

This course is intended for people who want to make a career in Multimedia and Animation industry. This course brings up the necessary skills for making AV program Production. This course will teach you the basic production techniques like-operating Camera, Lighting, direction, editing etc.

Compositing & Audio Video Editing

This course is meant for those, who want to make a career in Video Editing. This course brings up the technicality of the





compositing. One has to be technically very strong combined with creative skills to make a mark in the industry.

Web Design and Publishing

This course is intended for people who want to make their presence felt in the society. Everyone endeavour to increase the range of people they know. Web publishing, or "online publishing," is the process of broadcasting content on the Internet. This course enables you to making and uploading websites, updating WebPages, and posting blogs online.

This video will provide a brief overview of this course.

Topic	YouTube link	QR Code
Video 1 –Audio Visual Production	https://youtu.be/ZePASTCd6tw	
Video 2 –Web publishing	https://youtu.be/TMb7rCagcXQ	

Course outcomes



Outcomes

Upon completion of Content Development and Distribution you will be able to:

- *Differentiate* between the media organisations.
- *Acquire* the basics of audio and video production techniques.
- *Explain* the compositing of video.
- *Insert* audio and video in a web page to make it more interactive.
- *Create* Websites and host it.



Timeframe



How long?

This course will be completed within “2” classes.

This course is of “1” credits.

1 Hour of study time is required for this unit.

Study skills



This is a totally practical oriented course.

Hence, you should have access to personal computer or personal laptop for better understanding of this unit.

Each and every options are explained step by step in the course material.

Apart from this course material, the learner has to adopt the tendency of learning from multiple sources i.e.,

Internet tutorials

Video tutorials on YouTube

Collaboration with people working in the industry etc.

Only classroom study will not make you a professional. You have to be active to grab the opportunity of learning wherever you get a chance.

Need help?



Help

In case of any help needed you can browse the internet sites like youtube.com for video tutorials about the subject.



Assignments



Assignments

There will be some assignments at the end of each unit.

These assignments are mostly practical based and should be submitted in CD or DVD. Theoretical assignments are to be submitted neatly written on A4 size sheet.

All assignments will be submitted to Regional centre of Odisha State Open University or as directed by Co-ordinator.

All assignment should be unit wise on separate CD/DVDs clearly mentioning course title and unit on Top. Theoretical Assignment will be neatly filed or spiral bind with cover clearly mentioning necessary information of course, student detail on top.

Assessments



Assessments

There will be few assessment questions for each unit.

All practical assessment will be submitted to OSOU.

Assessment will take place once at the end of each unit.

Learner will be allowed to complete the assessment within stipulated time frame given by the university.

Video Resources



Reading

This study material comes with additional online resources in the form of videos. As videos puts in human element to e-learning at the same time demonstrating the concepts visually also improves the overall learning experience.

You can download any QR code reader from Google Play to view the videos embedded in the course or type the URL on a web browser.



















Getting around this Course material

Margin icons

While working through this Course material you will notice the frequent use of margin icons. These icons serve to “signpost” a particular piece of text, a new task or change in activity; they have been included to help you to find your way around this Course material.

A complete icon set is shown below. We suggest that you familiarize yourself with the icons and their meaning before starting your study.

 Activity	 Assessment	 Assignment	 Case study
 Discussion	 Group activity	 Help	 Note it!
 Outcomes	 Reading	 Reflection	 Study skills
 Summary	 Terminology	 Time	 Tip



Unit- 1

Media Industry: Structure and Strategies

Introduction

Media houses commission and plan broadcasting programmes, publish newspapers or magazines to earn profit. Mass media such as television and newspapers have different level of operations, audiences and staffing. There is a difference between the operations and general staffing structure of news desks of different media organizations.

Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Differences between the media organizations;
- Difference between operations of news desk; and
- The general staffing structure of media organizations

Terminology



Terminology

News Desk:	News comes to this desk and editing is done here.
Assignment Desk:	A desk where assignments are given to reporters.
Executive Editor:	S/he contributes information for the major stories. Sometimes
API:	Associated Press of India.
PTI:	Press trust of India



Organisational Structure of Media

Newspapers provide information at a relatively lower cost as compared to other forms of media. Until the recent developments and expansion in the field of Internet, newspapers are the primary source for in-depth news. Even after the advent of 24/7 news channels, most television news lacks in-depth coverage as is carried in the print media. For sustenance the print media has to gasp some important functions, as pointed out by Professor Herbert Lee Williams,

- Decision-making
- Organizing
- Staffing
- Planning
- Controlling
- Communicating and coordinating
- Directing
- Innovating

In a moderately equipped daily newspaper, the structure of the organisation can be divided into five distinct wings, such as

- Editorial department for news and views
- Printing and production department
- Business section, for advertisements, classifieds, circulation, billing and collection
- IT department for technological support, maintaining digital equipments
- Public relation managers and sales promotion personnel.

Basic Editorial setup of Print Media

Editorial department is the nerve centre of the newspaper organisation. Editor-in-Chief or Editor or Chief Editor is in charge of the whole content that goes in the newspaper. In some newspapers the CEO hold the position.

a. Assignment Desk

The assignment desk is busy in allotting tasks in the newsroom. This desk directs the newsroom and often takes rapid decisions on



ground leads. It also decides on the deadline of a story. Assignment desk keeps track of the beat reporters and their stories. Reporters and photojournalists get their assignment from this desk. Other responsibilities of this desk are deciding on the importance of a story and its positioning in the final draft, changes in the layout of the newspaper, dropping a story or saving it for another day, managing other subordinate desks and copy editors. Another critical functions of this desk is to assure the release of all the pages for publication in due time.

b. Editorial Desk

The editorial team takes the decisions about the stories that has to be covered and also about the contents direction in the newspaper. It likewise leads everyday task of reality checking, editing for lucidity, composing headlines, developing page design and coordinating reporting activities with its mentioned due dates. The letters to the editors by the readers are addressed to this desk. Editorial desk also decides on giving bylines to reporters and writers and giving photo credits to photographers.

c. Information Graphics

Stories and articles often carry informational graphics to help the readers to understand the deep aspects of a story. These graphics appear in print and online medium of the media house. The graphical presentation may be in the form of charts and data visualizations, maps, photographs or even audio and video files. There may be some graphic designers in a newspaper set up or the sub editors do the designing work.

d. News Gathering and Reporting

Reporting is primary to any news organization. Reporting involves building rapport with the sources along with collecting news. This sometimes involves developing story ideas for the editorial staffs as well. Reporters, correspondents and bureau chiefs are the people who report on various news items for the newspapers.

e. Online Community Development

Web technologies help a newspaper to widen its base and cater to larger audiences. It provides a platform for the newspaper to actively interact with its readers and online followers. Instant



comment facilities under each stories carried in the website facilitate feedback to the journalists. It provides a platform to interact with the journalists as well as among the readers. This discourages any kind of harsh comments or attacks on any section of the community. It also attracts online traffic.

f. Photography

Technological advancements in the photojournalism segment have been a mainstay of newspapers. Photo editing software is now easily available. The graphic or page designers are editing the photo as per the requirement of the story with these software.

g. Content Editing

Content editing is done by the copy editors or sub editors. These days, newspapers barely employ proof-readers. Often this task is performed by sub-editors or chief editors. They edit stories, reports and articles sent by reporters. They even keep a vigil on content of other newspapers so that an important piece of news should not be missed.

Table 1.1

	Desks	Common job titles
1	Assignment Desk	Editor, Producer, Assignment Editor
2	Editorial	Editor-in-Chief, Editor, Deputy Editor, Editorial Director, Editorial Project Manager, Associate Editor
3	Information Graphics	Visual Information Specialist, Graphic Designer, Graphic Editor
4	News Gathering and Reporting	Journalist, Correspondent, Feature writer, Reporter
5	Online Community Development	Multimedia Specialist, Media Assistant, Digital Journalist
6	Photography	Photographer, Image Specialist, Print Production Manager, Image Specialist, Photojournalist
7	Content Editing	Copy Writer, Copy Editor, Sub Editor Editorial Writer, Technical Writer, Technical Editor, Assistant Editor



Functionaries

Each department has a specific set of responsibilities. The editorial department has to mobilize all resources to produce a complete and satisfying newspaper issue. The functionaries are as follows:

- Editor/Chief Editor/Managing Editor
- Associate Editor/s
- Deputy Editor/s
- Senior Assistant Editor/s
- Assistant Editor/s
- Chief/ News Editor/s
- Deputy/ Chief/ News Editor/s
- Chief Sub-Editor/s
- Chief of Political News Bureau
- Deputy Chief, Political News Bureau
- Diplomatic/Political Correspondent
- Special Representative/s
- Special Correspondent/s
- State Bureau Chief/s
- City Editor/Chief Reporter/s
- Staff Reporters
- Stringers

Life on a Copy Desk

Stories come to the copy desk from various sources after preliminary editing. For any news daily, the copy is first edited by a city editor or one of the assistants. Even national and international copy also follows this process at larger organizations. But at smaller papers most of the copies are taken from the agency copies.

Some major desk functions can be categorised as:

- **Tasting/Slot Editing** - A "taster" or "slot editor" performs the function of traffic control. He or she assesses an incoming copy, prioritizing on urgency of a news item, assigning stories to copy



editors according to the news plan or copy editor's specialization and ensuring consistency in the handling of the story. The slot editor decides which stories can be published quickly with less editing and which needs more attention from a copy editor. A slot editor needs to be good at receiving stories from news agencies. As required she/he should check slugs, coding and story formats before assigning the story to a copy editor. Alerts and newsbreaks are checked for accuracy, fairness, typos, grammar and format. In India, this task is basically performed by the copy editors themselves.

- **Sub-editing or Copy Editing** - Copy editing process is also known as subbing. Basically there are three stages found in the subbing process. The sub editor reads the story at first. He ensures that the basic journalistic standards (i.e. the inverted pyramid or others) are met or not. The sub editor should keep certain factors in mind such as cross checking major facts and numbers, the representation of relevant comparisons to maintain a balance, sorting out any kind of contradictions etc. Sometimes the copy editor has to rewrite the headlines if the situation requires so.

Then at the second stage, the copy editor should make sure that the story is well sourced. He also has to check whether the story is supported by data, quotes and reasonable statements.

In the last stage, the sub editor checks the story for any kind of error in typography and grammar. In the age of online updates, every minute is a deadline for the sub editor. Therefore the copy editor has to check the online page every minute and to update it regularly. If there is any fault or error from the reporter side, the copy editor has to inform him then and there only.

- **Publishing** - In most of the cases the copy editor is the publisher. Therefore he should ensure that the story reaches all readers in their required format. Sometimes the copy editor has to rewrite a story if it is not suitable for publication. Before publishing a story, it is always advisable that a second person from the copy desk should recheck the copy and provide his or her comments. The desk editor ensures at the end that the story actually lands on the relevant platforms or not.



- **Bureau support** – In general, copy editors play a major role in the news planning process. They contact the reporters before deadline if the situation demands for stories. They also offer ideas or suggestions to the reporters to improve their stories.

Pressures of the Desk

Desk job varies from one media house to another depending on the size of the newspapers. Copy editors in small newspapers might be asked to edit local copies and write headlines as well as design pages and handle wire services. The number of tasks performed by the copy editor and sometimes reporter is directly related to the circulation of the newspaper. Reporters working for a large set-up might write two or three stories a week, whereas small-town reporters could lose their jobs if they do not provide that many in one single day.

Deadline is the most crucial factor that keeps the desk on toes. If quality copies are not produced in stipulated time period, the paper will be late getting into production and thus will have a cascading effect by running late for loading-unloading into delivery trucks and will reach the readers late.

Magazines and its organisational structure

Magazines have a long and distinguished history. They also continue to make significant contributions to mass communication. Their contribution to journalism, includes

- Investigative reporting
- Photojournalism
- Personality profiles
- Narrative journalistic writing (in newsmagazine style)

Magazine contains articles, features, columns that are long and in-depth. The articles also carry more photos and graphics. The writing style of the magazine is more creative. Creating content for magazines is difficult than that of the newspapers. Most of the magazines depend upon freelance writers. Freelance writers are the writers who are paid on the basis of the single article. They are not the employee of the magazine.



Basic Editorial set up of Magazine

a. Editor-in-Chief

An Editor-in-Chief looks after the entire content of the magazine and ensures smooth operation in the magazine. They are the people who along with executive directors, managing editors and creative directors take the final decision on the content and design of the magazine.

b. Managing Editors

Managing editors are generally works under the Editor-in Chief. They are the people who look into the day to day editorial operations. Managing editor also ensures that the deadlines are met or not. The functions of a managing editor may change from publication to publication.

c. Creative Director

The creative director looks after the visual aspects of the magazine. A creative director is responsible for various photo shoots required for the cover pages and inside stories of the magazine. He or she works along with the art director.

d. Executive Editor

S/He is the person responsible for selecting the writers on various issues for the magazine. If situation demands, then an executive editor contributes information for the major stories. Sometimes he edits and gives headlines for the stories. In some of the larger publishing houses, a team of editors work under an executive editor.

e. Copy Editor

The job of the copy editor is to read a copy thoroughly and ensure that there are no errors and grammatical mistakes.

f. Fact Checker

After researching on a topic, the fact checker confirms that the facts covered in the magazines are correct.

g. Contributors

Contributors or freelancers are hired by the magazine publishing houses for articles and photographs.

h. Assistants

The job of editorial assistants is to answer calls on behalf of the editors and write small sections.



Difference in Operation in Magazines and Newspapers

- The major difference between magazines and newspapers is frequency of publication. Magazines cover news with more analysis.
- Both the newspaper and magazine writing need accuracy and good writing. But magazine writing does not meet all the requirements needed for newspapers writing like inverted pyramid.
- In case of newspapers, stringers contribute news items and get payment on the basis of news. Freelancers or contributors are working for magazines on the basis of assignments and get payments. Both these categories of writers are not permanent employees.
- There are special categories of audiences for magazines. They are interested in the opinion based features. The advertisers who are interested to sell their product to these categories of audience sell their advertisements through these magazines.
- Magazines are specially designed to cater to audiences that might be widely scattered but may have a common interest.

Features of a News agency

A news agency is different than that of a newspaper in its organizational and financial pattern and its way of operation. But first let us understand what a news agency is. A news agency is an organisation which collects or gathers news and supplies them to different newspapers, magazines, radio stations and television stations subscribing to its service. The media houses in turn, pay a monthly subscription for the news services they receive. The agency office is always in a hustle, since it has to cater to the print media houses, radio stations and television channels both inside and outside the country. It works round the clock as there may be a newspaper somewhere in the world going to meet its deadline for the press or some radio or TV bulletin about to go on air.



Editorial desk of News Agencies

The news desk is under the charge of a News Editor, while the reporting section is under the charge of a Chief of Bureau. The reporting staffs are divided into two groups: the Reporters who deal with day-to-day reporting are under a Chief Reporter. The Correspondents who deal with Ministerial or Legislative reporting are under the Chief of Bureau.

The agencies have offices in all the state capitals where reporters and correspondents are working there. They have also full time reporters in other countries and stringers in all the districts.

Growth of the News Agencies in India

In this section, we will learn about the history and growth and present status of the news agencies in India. United News of India and Press Trust of India are the two major news agencies operating in India. They have also established their language wings.

State of Agencies during Independence

News agencies were remnants of British rule in India. The news agencies working at that time in India were either foreign agencies with offices in India or British-owned Indian agencies. Some of these agencies which still operate in India are Reuters, United Press International and Agence France Presse among others. The Associated Press came sometime later. In addition there were India-based news agencies like the United Press of India and the Associated Press of India, whose owners were keen to return to their country during India's struggle for independence. They soon began winding up operations.

Formation of various Indian News Agencies

The government of independent India has encouraged news agencies. Some newspapers formed a trust to set-up independent India's first news agency, the Press Trust of India (PTI) in 1949. At that time, the Associated Press of India (API) which is a subsidiary wing of Reuters was winding up operations. PTI took over the business of API.



PTI remained the only player in India. Although PTI and UNI are professional rivals, the UNI owns it inception to PTI. PTI had no competition during that time and the standard of PTI was not considered good enough to be a news agency. The Board of Directors of PTI felt the immediate solution to pump it up by setting up a competing news agency. Thus, UNI was formed in 1961 and registered under the Societies Act. Like PTI, UNI took over the United Press of India, which was also in the process of winding up. PTI had its head office in Bombay and UNI's in Delhi.

Earlier in 1948, a Hindi news agency called Hindustan Samachar had come into being. Later, in 1966, another Hindi news agency, the Samachar Bharti came into being. The Hindi news agencies had limited subscribers during the time. They were confined to certain regions in the country and they functioned more or less like PTI and UNI. Asia News International (ANI) came up in the late eighties.

Growth of Language wings

With the existing two English agencies unable to meet the demands of the newspapers, the UNI in 1982 launched UNIVARTA, its Hindi wing. Being a wing of UNI, it only translated stories from English to Hindi. However it gradually built its own staff for reporting and editing. A couple of years later, the PTI started its Hindi wing, PTI Bhasha. These HINDI wings are serving majority of the language newspapers in India. The Hindustan Samachar and Samachar Bharti were virtually shut down because of increase in competition, financial shortcomings and most of its staffs taken away by UNIVARTA and PTI Bhasha. In May 1992, UNI introduced the world's first Urdu News Service. For the first time Urdu news were being transmitted by teleprinters and computers using Arabic script.

Foreign News Agencies in India

The foreign news agencies still operating in India are:

- Reuters- Founded in 1859, it is a private British news agency named after its founder Paul Julius Von Reuter.
- Associated Press (AP) - It was founded in 1848 in New York.
- Agence France Presse (AFP)-it was established in Paris in 1944.
- United Press International (UPI) - It was founded in United States in 1907. It has been facing financial problems and so has restricted its operations.
- TASS- It is a Russian news agency.



- DPA- It is a German news agency.
- ANSA- It is an Italian news agency.

Basic Editorial setup of a Radio Station

Running a radio station is a difficult task. The structure and nomenclature of radio station departments may vary for each station but a typical radio station will have some basic departments in common like the production department. It consists of production staff, operations staff and on-air personalities like hosts, co-host, anchors, disc jockeys or radio jockeys.

While the department of production guarantees that all program substance and ads are produced and delivered timely and arranged for timely broadcast. The operation office administers the smooth operations of the radio station.

The creative department provides content to the production department. This department consists of a host of copy writers whose aim is to write well designed quality scripts for the commercials and for the programs.

Functionaries:

While allocating the duties in a radio station you must have a back-up plan. If one fails there should be more than one name connected with any essential daily function. The functionaries are as follows:

- **Radio News Editor**

A news editor oversees the work of the reporters and others to prepare news content. He prepares the news agenda other than exercising editorial control over news output. He is the man who looks after news output and stories selection. He should make sure that the news script should match with the approach and style of the station. The news editor also ensures that the content conforms to the law, regulation of broadcast and in accord to the organizational policy. They are the principle source of contact for editorial or legal queries. There are number of news editors seen in a typical radio station.

- **Copy Writers**

They make every attempt to generate original ideas and approaches for stories and narratives. News editor assigns work to



the copy writers. They may write suggestive narratives for reporters. They also write commercial copy for the advertisers.

- **Announcers**

They are the voice of the radio station and are the representatives, someone the listener identifies with. The announcer is the person who brings liveliness to the radio programmes. They provide an introduction of programs, announcement of commercial copy and also do announcements that belongs to public service. They are additionally engaged with the overall presentation of the station.

- **Music Director**

He or she manages and administers the music library of the station and work with the program director. He selects new songs that is to be played. Various songs are submitted and provided by the record companies to the radio stations.

- **News Director**

The news director is the head of the news department. News director monitors the wire service and makes sure that the important news item should not be missed.

- **Promotions Director**

The promotion director basically looks into the promotional part of the station. He makes sure that how the image of the station should be improved. He works with the programming team to broadcast on-air promotions. He functions with the coordination of the sales and marketing team.

- **Program Director**

He is the man behind every successful program broadcast. He is also responsible for the entire on-air product. Production, talent, work schedules and program schedules are to be looked by the program director.

- **Sports Director**

Sports director looks after the coverage of every kind of sports. He makes sure that important sports event should not be missed. He also takes care about the running commentary programmes for live matches and recorded one.



Television News room and it's Editorial setup

News broadcasting is a fast-paced and dynamic industry that is continuously changing. Television stations are operating in a digital platform. Every television channels has its own unique style of structure and functioning. The size of a station and the audience it serves is often dictated by its identity as a regional or national medium.

Functionaries:

The functionaries are an overview of certain editorial positions and positions which coordinate with the editorial team and add up to the editorial content. Let's have a look at different functionaries.

- **Assignment Editor**

Though news programmes are a team effort, but assignment editors set news coverage priorities, organise the logistics of camera crews and reporters. They are also in charge of satellite feeds and live on-scene coverage.

- **Community Relations Director**

It is very important to keep track of the requirement of the community to which a radio station is serving. This person looks after that.

- **Continuity Writer**

The continuity writer basically writes the commercial and promotional copy catering to the local audiences. Their job demands then to be detail-orientated and with excellent computer skills.

- **Director**

His responsibility lies in the execution of a program in online. They are the producers for entire programs.

- **Electronic News Gathering (ENG)**

It is a type of news gathering technique used by the television crew members. The ENG crew includes reporters, producers and editors who use electronic audio and video technologies to gather information and present it to the viewers.

- **ENG Editor**



ENG Editor is in charge of editing the content captured by the ENG crew. He also prepares the news packages with the help of the crew members for broadcasting.

- **Executive Producer**

Executive producer is the one who coordinates with managing editor and news director regarding broadcasting of programmes and news.

- **Graphic Artist**

A graphic artist is the one who designs and prepares all the graphs going on in the television programmes. He should have knowledge on computer and multimedia.

- **Master Control/Videotape Engineer**

In the broadcasting, master control room is the repository of video tapes. The concerned person does the recording and playback of television programs as and when required.

- **News Anchor**

News anchor is the face of any television channel. Present day news anchors are equipped with journalistic skills. They can interview guests, moderate live discussions and can produce packages.

- **News Director**

A news director must be a multi talented person. He should have sound knowledge on the technical aspects of television broadcasting. Along with this he should know how to handle a team, deep news sense and understand the requirements of the viewers.

- **News Reporters**

Reporters are the eyes and ears of a news organisation. They are the people who collect information and maintain contact with the sources. They should have nose for news and news writing skill.

- **News Writer**

These are the men behind the scene. They write the anchor script, give voice over, do research on stories, invite studio guests and monitor news feed also.



Unit summary



Summary

In this unit you learned about the basic organizational hierarchy of different media, i.e. newspaper, magazines, news agencies, radio and television. You also learned about the nature of news agencies, difference in their way of operation from that of the newspapers. This unit covered the structure which defines the flow of media content and the treatment of the content at different organizational levels. It gives a basic understanding of organizational structure of media organizations and how one is different from the other.

Assessment



Assessment

1. What are the functionaries of editorial department of a newspaper?
2. List the differences between a newspaper and a news agency.
3. Name three foreign news agencies operating in India.
4. Enlist editorial functionaries in a radio station.
5. Write a brief note on Television broadcasting and its editorial.

Resources



Reading

- McQuail, Denis., 'McQuail's Mass Communication Theory', SAGE Publications Ltd., London, 2005.
- Aggarwal, VirBala. Gupta, V.S. (2001). *Handbook of Journalism and Mass Communication*. New Delhi, New Delhi : Concept Publishing Company.
- Kumar, Keval J. (2011). *Mass Communication in India*. Mumbai, Maharashtra :Jaico Publishing House.
- Narula, U. (2006). *Dynamics Of Mass Communication Theory And Practice*. New Delhi: Atlantic.
- Shoemaker, Pamela J., 'Mediating the Message: Theories of Influences on Mass Media Content', Longman, University of Michigan, 1996.
- https://www.col.org/resources/crsMaterials/osoer/Documents/Matematics11_UnitsMissing-5-11-12-14.pdf
- www.col.org
- http://handbook.reuters.com/index.php?action=edit&title=The_Desk
- <http://egyankosh.ac.in/bitstream/123456789/34811/1/Unit-4.pdf>
- <https://www.scribd.com/doc/23738905/6-Print-Media-Photo-Journalism>
- <https://en.wikipedia.org/wiki?curid=1553972>
- <http://communionmarketing.com/index.php/web-applications-other/introduction-to-web-applications>



Unit 2

Audio Video Program Production

Introduction

In this unit you will learn the basics of audio-video production techniques. It is a preface to the skills that are essential to know the operations of audio and video equipment in studio settings and a foundation an establishment to enhance the development of visual and aural education. You will learn how to operate camera, audio control, basic directing, lighting, and editing, and more and will get opportunity for hands-on experience.

Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Get acquainted with the basics of audio and video production.
- Exhibit knowledge of audio video production process.
- Utilize the steps of production process in creating audio-visual files.

Terminology



Terminology

Ambient Sound:	A kind of sound recorded on location while shooting.
POV:	Meant to show the character's perspective.
Panning:	Camera movement from left to right or vice versa.
Key light:	Main source of Light



Video Production

Video production is the process of creating video by capturing moving images (videography), and creating combinations and reductions of parts of this video in live production and post-production (video editing). In most cases the captured video is recorded on the most current electronic media such as SD cards. Earlier the footage was captured on *video tape, hard disk, or solid state storage*. Video tape capture is now obsolete and solid state storage is reserved for just storage. It is now distributed in digital formats such as the **Moving Picture Experts Group format (.mpeg, .mpg, .m4p), QuickTime (.mov), Audio Video Interleave (.avi), Windows Media Video (.wmv), and DivX (.avi, .divx)**. It is the equivalent of filmmaking, but the images recorded digitally instead of on film stock.

Practically, video production is the art and service of creating content and delivering a finished video product. This can include production of television programs, television commercials, corporate videos, event videos, wedding videos and special-interest home videos. A video production can range in size. Examples include:

- A family making home movies with a prosumer camcorder,
- A solo camera operator with a professional video camera in a single-camera setup (aka a "one-man band"),
- A videographer with a sound person,
- A multiple-camera setup shoot in a television studio
- A production truck requiring a television crew for an electronic field production (EFP) with a production company using set construction on the backlot of a movie studio.



Audio Production

Audio production is the general term used for all stages of production happening between the actual recording in a studio and the completion of a master recording. It involves, sound design, sound editing, audio mixing, and the addition of effects.



Title- Fig 3.1 The Audio Visual Production Process

Attribution- U. S. Fish and Wildlife Service - Northeast Region

Source- <https://www.flickr.com/photos/usfwnortheast/9444972202/>

Link- [https://commons.wikimedia.org/wiki/File:Working_in_audio-](https://commons.wikimedia.org/wiki/File:Working_in_audio-visual_and_broadcast_production_for_the_U.S._Fish_and_Wildlife_Service_(9444972202).jpg)

[visual_and_broadcast_production_for_the_U.S._Fish_and_Wildlife_Service_\(9444972202\).jpg](https://commons.wikimedia.org/wiki/File:Working_in_audio-visual_and_broadcast_production_for_the_U.S._Fish_and_Wildlife_Service_(9444972202).jpg)

What is the Production Process?

1. The *process of production is basically concerned with the stages (phases) needed to finish the production of a media product, beginning from the idea till the finalization of the master copy.*
2. This process can be applied to any kind of the media production incorporating movie, featured film, video, television and audio recording.

3. The phases in every medium change; for instance, there is clearly no storyboard in an audio recording. However a similar general ideas work for any medium.

The phases of production

1. **Pre-production** – Planning, Scripting & Storyboarding, etc.
2. **Production** – The actual shooting/recording.
3. **Post-Production** – Every aspect amongst production and making the final master copy.

Basics of Audio-Video Production

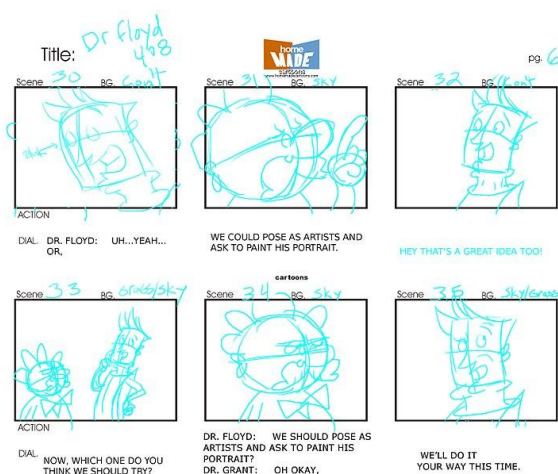
Shots

- The simplest element in video and film
- Is an image resulting from a single continuous running of a camera.
- A continuous piece of video or film footage.
- It’s everything you get between pressing “record” and “stop”

Scene

Scene comprises of all the *action/shots* which takes place at a certain time and location and consist of a segment of a program.

Storyboard



Title- Fig 3.2 A Storyboard

Attribution- <http://www.flickr.com/photos/tmray02/>



Source- <http://www.flickr.com/photos/tmray02/1440415101/>

Link-

https://commons.wikimedia.org/wiki/File:Storyboard_for_The_Radio_Adventures_of_Dr._Floyd.jpg

- A movie maker draws simple schematics of frames.
- They use the frames to plan how they want to tell a story.
- The frames show the correct order of significant objects or actors and the camera's position.

Camera



Title- Fig 3.3 Video Camera

Attribution- [Jeremy C. Schultz](#)

Source- [wikimedia.org](#)

Link- https://commons.wikimedia.org/wiki/File:JVC_KYD291.JPG

The production stage requires producing a video utilizing a video camera. The Video may vary from video to video. It will depend on the style and content of the video being made and the amount of time, effort and money that is being put into production but... However large or small your video may be... This is the proven production process that successful video producers use...It works out into three main phases.

Camera Shots

Different types of shots are captured according to the requirement of the storyboard/demand of the director. These are

- Close-ups
- Wide shots



- High angle
- Low angle
- Point-of-view

The pre-production phase:

The first step of the video production process is planning. Before starting a new project you first conduct research, identify the problems & also the solutions and perform other organizational duties.

By this stage the team has been formulated including *Producer, Director, Production Designer, Director of Photography (DOP), Sound and Editor* (in this production the roles of sound and editor were taken on by the same person).

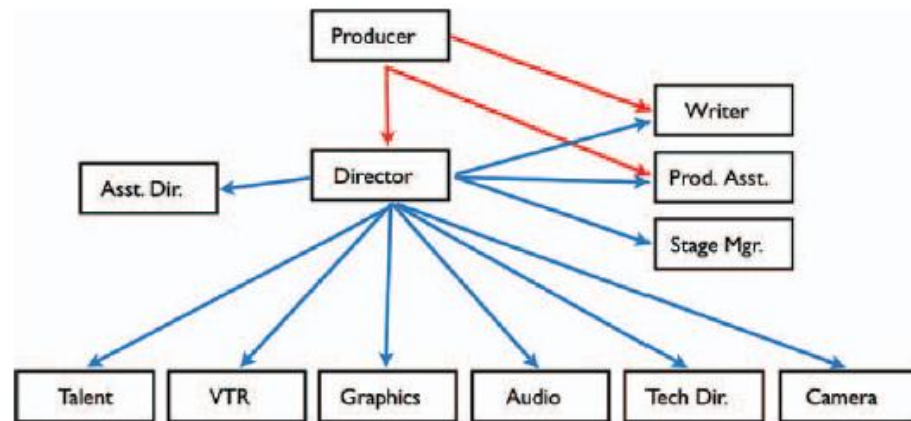
The **Producer** is responsible for the overall organisation of the production including working with the Director and Production Designer to come up with locations and co-ordinating with the actors which would enact in the film and convey the story as written down in the script.

The **Director** is responsible for the creative visualisation of the script or event. He would take on overall 'creative' responsibility of the production, the style of shooting, types of shots, selection of location and final editing. He directs the actors how to act to convey the emotions to its best. He brings out the essence of the characters and adds life to the story. The DOP in conjunction with the Director is responsible for the look of the film, the style of the filming; again achieving what would have been suggested by the writer in the script.

It's the job of the **Camera operator** to set up their cameras and after that using the camera for capturing the video as desired or directed by the director.



Audio mixer/sound mixer will be in charge of provision of quality sound and they manage the sound balance and also responsible for the technical and artistic quality of the sound.



Title- Fig 3.4 The Structure of a Video Production Crew

Attribution- Gerald Millerson

Source- *Video Production Handbook-4th edition*

Link-

<http://home.fa.utl.pt/~cfg/Anima%E7%E3o%20e%20Cinema/Realiza%E7%E3o%20Cinematogr%E1fica/Video%20Production%20Handbook,%20Fourth%20Edition.pdf>

Production Methods

Having brilliant ideas are not sufficient. Ideas generated have to be turned into action to convert it in to out in realistic, practical terms. They can be viewed or heard as images and sounds. At the last it will be the decision of the director about the camera that is to be used to shoot and what will be the liking of the audience to view and hear.

There are two very unique techniques for moving toward video production:

1. The *empirical* technique is the place where intuition and opportunity are guides.
2. The *planned* technique, which composes and assembles a program in preciously, arranged steps.

The directed has to opt for one method before getting started.



The video's concept

In the planning stage director should map out what exactly he wants. This helps him in accomplishing his aim while recording, editing, sound mixing, captioning, etc.

Script

The script forms the basis for the planning of any film project. For certain types of production, such as drama, the script generally begins the production process. The director reads the draft script, which contains general information on characters, location, stage directions, and dialog. He/she then visualizes the script or envisions the scenes and assesses possible treatment. The director must anticipate the script's possibilities and potential problems. At this stage, changes may be made to improve the script or make it more practical. The next director prepares the camera treatment. Scripts do the following:

- Help the director to classify ideas and to develop a project that works.
- Help to coordinate the production team.
- Help the director to assess the resources needed for the production.

Storyboard

Directors need to think through each scene in their minds so that they can capture the images and turn them into a storyboard. The storyboard is simply a series of rough sketches; these sketches help the director to visualise and organise the camera treatment. It is the visual map of how to arrange the key shots for each scene or action sequence.

Talent Contract

At this stage director secures a signed Talent Release form from anyone involved in his audio, video, or slideshow projects. Customize the form for your own project(s).

Copyright

It is illegal to reuse copyrighted content that you do not have explicit, written permission to reuse. This means that you cannot reuse music, television clips, voiceovers, photos or other multimedia that you have not produced and do not have permission to use. Fair use does not typically allow the reuse of original or derivatives of creative, copyrighted works for public distribution.



The Production Phase

The *production phase* is the actual production (making) of the video. It's at this stage of the video production process that you are actually shooting the video.

Production techniques are the features used to make the text(s) interesting and unique. Techniques may include: music, dialogue, lighting, graphics, colour, special effects, soundtrack, camera work, layout, use of space, oral and visual production techniques, or use of links. By looking at the production techniques closely you will gain a better understanding of how the text has been produced in order to present the themes, characters, settings, and plot. The attitude of the director towards the character helps to set the mood or feeling of the text. Think about how the techniques and the mood of text work together to make the production convincing.

Key points to study

- **Structure** – how the text and the ideas have been put together. Look at the overall structure of the text(s), the order of scenes, sequencing, and transitions.
- **Narrative point of view** – who is telling the story and how this influence what the audience experiences and feels towards the text, does. The director will choose and/or change the point of view to control the relationship between the audience and the character to support their purpose. Changes in perspective can be shown by techniques such as voice-over and camera shots, like the point of view shot.
- **Narrative style** refers to how the subject matter is presented to the audience.
- **Dialogue** – identify repeated language patterns in a character's speech. Look at the types of words used and how they speak. What does this show you about their personality and background? Think about how the voice is used to show subtle changes in emotion, accent used to show social status and background, and gesture to show response to other characters.

Required for the project

Equipment

- Camera (video/film camera, Smartphone, tablet, digital camera).
- Tripod (to steady your shots and minimize camera movement).
- High quality microphone (for audio-only).



- Lapel microphone (better quality than a camera's built-in microphone).
- Lights.

You can also record audio directly at your desk via your computer. Audacity is a free program that you can download to record and edit sound.

Location

The locations of the video/films are selected according to the script keeping in mind the budget of the producer.

Audio

Audio is recorded in a quiet environment, free from any interruptions or ambient background noise (including: cell phones, pagers, co-workers, etc.).

Video

Videos are recorded in a well-lit environment. Be careful of reflections and glare from eyeglasses, windows, computer screens, etc.

Tips for Recording Audio:



Tips

- Read from a prepared script.
- Speak slowly and clearly; carefully pronounce words.
- Pause frequently for the benefit of your listening audience — before starting your recording and between long sentences and paragraphs.
- Practice and review a short test recording.
- Preview your final recording before delivering.



Tips for Recording Video:



Tips

- Plan your recording session carefully; recordings often take longer than expected.
- Prepare your audio script ahead of time.
- Record with a specific purpose in mind to avoid recording excess footage.
- Record the shots that you've outlined on your storyboard.
- Ask subjects to wear solid, neutral colours.
- Practice and review a short test recording.
- Keep subjects within frame of view — record more of the subject matter and less of the surroundings.
- Preview your final recording before delivering to your intended audience.

While recording the video

- Set up your equipment before the shoot.
- Use a lapel microphone to cut down on background noise.
- Ask the person speaking to.
- Pronounce words carefully and to speak slowly and clearly. Practice saying any technical or scientific terms before recording.
- Be careful about using 'umm,' 'uhuh,' and other similar "filler words."
- Explain/describe what they are doing and why. This verbal description of activity will better clarify what is happening in the video. Intentional narrative helps people reading a transcript or listening to the audio to understand what is happening.
- Do not interrupt the person(s) you are interviewing; wait until they finish speaking to ask for clarification.
- Do retake if.
- The person coughs unless it is part of the video.



- Too much background noise makes it hard to hear the person clearly.
- Use the zoom function only as a last resort. Your feet are your best zoom lens.



Just remember... You can't do a great job in post-production if you don't have great material to work with!

The Post-Production



Title- Fig 3.5 The Post Production Studio

Attribution- Autobahn Two

Source- pixabay.com

Link-

https://commons.wikimedia.org/wiki/File:STEP_studio_pict2.JPG

Post-production literally is where the director bring together all of the different elements and material created in the production phase to form a finished product as envisioned in the pre-production stage.



Post Production includes editing, but it is much more than that. Post begins with the script and continues in the Pre-Production phase with the planning, scheduling and budgeting of finishing processes.

During Post-production the *Editor* is syncing dailies and assembling a rough cut for the Director to view as the shooting progresses. Finally, there are the **sound design, scoring, titles, visual effects, mix, colour correction** and **delivery** that comprise the finishing process.

Students usually experience little difficulty with the Pre-Production and Production phase of filmmaking, but once principle photography is complete their projects tend to lose momentum and unravel. The primary reason for this is a failure to think holistically about all of the work involved in making a film. A movie is like a cake – you add the flour, the eggs, the sugar, but until it's baked it's not a cake. Efficient Post Production requires serious multi-tasking.

Most importantly, Post Production has to be seen as an integrated part of the whole and approached with the same attention to planning and scheduling that is given to Production. No one plans to fail, but failure to plan can lead to disaster. Goals and deadlines have to be set and progress must be monitored continually if the film is to be finished – and after having spent crores of rupees in Production – what a waste not to have a finished film to show for all that effort.

The areas include in post production are:

- Film Processing
- EditinRoom
Equipment
- Telecine Transfer
- Titling And Optical
- Sound Editorial And
Design
- Adr And Foley
- Sound Mixing
- Playback
- Visual Effects
- Negative Cutting
- Delivery Elements



The Lab

In addition to processing a film, printing film dailies and prepping your dailies for transfer to videotape, the lab is also where you go to procure bags, cans and cores which go to the production set. When picking up these items, the lab needs to know the film's gauge and what size "loads" you'll be using. The production manager can answer these and other questions. Be sure to meet with the laboratory contact prior to the start of production. This will help in avoiding expensive mistakes down the road. It will also insure that the lab is prepared to process your dailies when you need them.

The lab contact will need to know the details of your shoot. This will include the amount of film you expect shot on a daily basis, if you have any night shoots or weekend shoots scheduled, and if you are cutting on film or videotape (or both). Arrange a film lab tour for prior to starting the postproduction process. This will give a leg up on how film is processed and what information the lab needs to do the job correct and on time.

Have someone to show what to look for on a camera report. There is vital information the lab needs from those reports to even begin your job. Understanding this information will allow you to properly communicate should information be missing. Most film laboratories offer a variety of services. They develop film and prepare it for transfer to videotape, create prints, and repair damaged film. Some have optical departments where they create film effects and titles, blow-ups and repositions. To fully understand and appreciate the work that goes on at the film lab, take a tour.



Dailies and Telecine

In a film shoot, *dailies*, as the name implies, is the footage that is shot each day and rushed to the lab for processing. It then moves on to *telecine* or printing so that one can view them, usually the next morning. The dailies from a tape shoot are still the footage that is shot each day; it just does not require processing.

If you are having your film dailies transferred to videotape (telecine), you will need to speak with the transfer facility prior to the beginning of your job. As with the film lab, they will have a list of questions for you to answer before they can schedule your job. The information they will need includes details about what type of film and sound you are shooting, how you plan to complete your project once shooting is finished, and what your time schedule is for your project. How much film is budgeted for each day, and how many days you will be shooting will also be important.

Some information must be taken directly from film during the transfer process. Whether you plan to do a film and/or videotape finish will tell the facility what information they need to gather at the time of telecine. Not planning ahead and having to go back to get this information is extremely costly and time consuming.

Off-line editing

Off-line editing indicates an electronic cut. This means that processed negative shot each day will be transferred to videotape or to a hard drive. This videotape is then provided to the off-line editor to be recorded into electronic editing equipment for (non-linear) editing. It can also mean you have taken your digital raw files and compressed them to create smaller, more manageable file sizes for your editing workflow.



On-line editing

The *on-line* is where the final assembly of the project or the conforming of project by linking to highest definition or raw digital files after the edit is complete.

You may have to change your sequence settings and relink to highest resolution footage (2K or 4K for example) to conform the locked cut to the highest resolution files before you send them to colour correction.

Just like each earlier process (film processing and telecine dailies transfer), the on-line facility will have a list of details they will need from you before they can book your on-line session and complete this process. This will include questions about what videotape format your dailies are on, where the tapes will be coming from, what off-line system was used to create the *editing list* (called the edit decision list-EDL), and any instructions involving special effects. Sometimes the same facility that did your film processing and telecine will also be doing your on-line, sometimes not. Other steps that will take place as part of this process may be creation of special effects, titling and colour correcting your picture.

Sound

Sound for a project actually starts in dailies with the “*production sound*.” This is sound recorded right on the set at the same time when the picture dailies are recorded. Whether shooting on film or videotape, you will probably have some production sound. The exception will be a project that relies solely on voiceovers or sound and effects that are recorded later.

Production sound elements are delivered to sound editors to be used to help “*sweeten*” the sound that was combined to the picture either in the film editing room or the off-line editing room. Once all of the sound



edits have been agreed upon, production sound, along with any ancillary sound effects and music are mixed together. This is called *mixing* or *“dubbing”* (it is also called “audio sweetening in commercials and television). Mixing takes your production audio and finalizes it with enhancements, ADR, music, sound effects, and various clean-up procedures.

Completion

Once you have the picture and sound elements nailed down, your delivery requirements will determine how you complete your project.

A film finish means that all of your work toward delivery has been done on film. This does not preclude making a file-based or videotape master from your film elements, but the file-based or videotape master will only be struck once the film’s picture and sound elements are completed. A completely finished film element must be created to satisfy your delivery requirements. The negative is cut once the show has been locked (final edits are approved) and optical (fades, dissolves and titles) are ordered. The film lab creates the colour-corrected print. The movie is colour-corrected prior to striking release prints and can also be colour-corrected for use as a telecine print master.

For a feature or movie-of-the-week, allow at least 10 days for a negative to be cut and spliced into a finished piece. Allow another week (or more) to arrive at the right colour-corrected film element.

If the file or videotape is to be the only delivery format, and then it will not require cutting negative prior to delivery, you have chosen what is referred to as a tape finish. A file or tape finish can also take place on a project that will ultimately be finished on film if materials for preview or advertising are required prior to the film finish being completed. A two-hour show can take at least one day to several days to complete. One-hour TV shows usually spend one to two days in colour correction.



The master is electronically colour-corrected scene-by-scene. Depending on the complexity of the look of the project and the evenness of the negative exposures, it can take from hours to days to colour correct a master. If finishing on videotape, formatting will either be incorporated into the EDL or done “tape-to-tape” near the end of the process. Formatting can include adding logos, bars and tone (videotape) and commercial blacks (videotape), and closed captioning (again, videotape).

When finishing on **film, titles, credits, locales, legends**, etc. are created optically. They are shot on film using the plain “*textless*” backgrounds. These backgrounds are matted together with titles creating a new piece of “texted” film which is then cut into the final-cut film negative. On videotape, these are done after the entire picture alterations are accomplished (such as special effects and colour correcting). As with film, the “textless” pictures are mixed with text, making a new “texted” picture.

Delivery

Delivery is completed successfully only when the film has fulfilled all of the delivery requirements and the distributor has accepted the elements. The only way to safeguard against missing delivery materials is to get, read and understand the delivery requirements. Delivery elements are best made along the way, at the steps where they are the easiest and most cost-effective to create. They often require paperwork and contracts drawn and signed. Collect delivery requirements at the start of your project. Make a checklist and keep it updated so you are not caught short and costing the producer unnecessary expenses.



And just a tip... There is only so much that you can correct in the editing room if you shoot bad footage..!

Tips

Project Workflow

Workflow refers to the management of steps required to produce a program.

1. The First Step: Gather

Gathering: This may take place with one or more tools, and the primary tool is the video camera.

2. The Second Step: Capture

You must capture or transfer your video (or audio) from its source to a computer work.

3. The Third Step: Edit

Editing your video with a nonlinear editing program

4. The Fourth Step: Compress and Code

You must determine what target platform your video is to perform, and you must optimize or compress that video to play efficiently on that platform. It may CDROM or DVD. In any event, your computer's software and hardware have the tools to accomplish this task. You may save as a QuickTime file or a Real Media file.

5. The Fifth Step: Encode to CD-ROM

If you intend to archive or distribute your project to CD-ROM, you must learn the optimal compression strategy for the piece you have produced. This strategy's objective is to produce the highest quality and best performing video yet it must fit on a CD-ROM disk and play



properly (without hesitation or distracting breaks in performance) on your computer platform.

6. The Sixth Step: Archive

It's important that you save an uncompressed version of your work for full-broadcast play at full screen resolution. This archive can reside on DV tape (least expensive) or it can be archived to a hard drive or disk array for easy retrieval. This is most expensive, but time is money, and many production houses are archiving entire projects this way so that they are handy. In certain cable operations, videos are archived in a disk array data base for retrieval for broadcast.

Unit summary



Summary

The focus of this Unit lies in the three central areas of video production: pre production, production, and post production. Students will develop a comprehensive idea about, shoot video, and edit both audio and video to produce a finished project.

Assessment



Assessment

1. Identify video production equipment/components.
2. Explain the components of video production.
3. Identify and explain the operation, components and function of all major video equipment.
4. Define terminology related to video production.



5. Explain basic trouble shooting and safety procedures for video production.
6. List the various positions in a video production.
7. Use video camera functions such as zoom, pan and fade.
8. Describe in detail the process of editing.
9. Identify the basic requirement in video production i.e. equipment and software.
10. Evaluate the effectiveness and the process of a video production.
11. What are the three elements of a story?
12. What is the visual diary of your video?
13. When should all or most of your production decisions be made?
14. What should always be considered while framing a shot?
15. Define editing and describe the types of editing?
16. What does AVI stands for?
17. What does MPEG stands for?
18. Primary light that shines directly on subject is called?
19. Moving the camera side to side is called?
20. The narrator talking off screen is called?

Resources



Reading

1. *Wikipedia.com*
2. *Video Production Handbook-4th edition*
3. <https://en.wikipedia.org/wiki?curid=1553972>
4. <http://communionmarketing.com/index.php/web-applications-other/introduction-to-web-applications>
5. www.medialit.org



6. <http://www.medialit.org/reading-room/video-basics-and-production-projects-classroom>
7. www.mediastudentbook.com
8. www.docplayer.net
9. <http://www.moviemaker.com/archives/moviemaking/directing/articles-directing/post-perfect-in-10-easy-steps-3341/>
10. <http://docplayer.net/23069879-Post-production-handbook.html>
11. <http://caes2.caes.uga.edu/unit/occs/resources/multimedia/record.html>
12. <http://www.garyolsen.com/GoClarke/Videoaudio/>



Unit 3

Compositing and Audio-Video Editing

Introduction

Once the production process i.e. the shooting is over the material comes for *post-production*. The post-production is the most important and delicate part of the whole production process, it demands much time and patience. The post production process is mainly about the audio visual editing. On the editing table, the editor gives a structure to the output according to the script. Whatever the director shoots is totally raw which needs proper continuity, smoothness within story flow, laying proper music according to the mood of the story or script as well as colour correction etc. to attract the audience. *Compositing* also plays an important role in the post-production process. Compositing can add magic to the output. It not only adds up some practically impossible audio and visual elements other than shooting, but it also adds a grace to the output.

This unit introduces the section of audio & video editing and compositing of different mediums to bring out a finished audio visual output. In this unit we will come across the process of audio & video editing and various compositing mediums required to create an audio visual file. We will know what the necessity of editing and compositing is. We will learn about the role of an editor and compositor.

Outcomes

Upon completion of this unit you will be able to:



Outcomes

- Edit audio visual files.
- Utilize the equipments required for audio and visual editing.
- Compose images and video files.
- Use compositing software.



Terminology



Terminology

Ingest:	Ingest is the process of capturing and marking the raw footages for editing.
Rough Cut:	The process of combining all the audio visual files and selecting the best part and keep them in a chronological manner.
Compositing:	The process of combining different visual layers or files to make a single visual layer so that they don't look different from each other.

Audio Visual Editing

Audio visual editing is the basic as well as the final stage of the post production stage of any video or film production process. Once the visual is shot on camera and audio is recorded it needs to come to the editing table for proper and systematic story flow without any jerk. On the editing table the unwanted shots and audio portions are edited and only those portions are kept which are necessary. Sometimes the mood of the story is decided on the editing table. The editing needs much time and patience. Many a time's experiments are carried out on the editing table. Sometimes what the director has conceived in the script may differ in the actual output depending on the flow according to the edit.

Process of editing

The process of editing is categorized as *linear* and *non-linear* editing depending upon the technology used. Mostly the film or celluloid based editing process is known as non-linear process as it is not restricted to the arrangement of shots. Whereas the tape based video editing is regarded as linear editing as the shots has to be arranged one after another.

The linear process of editing is simple shot to shot joining. The editor has to place one shot after another shot. But this does not give the freedom of experimenting with the placement of shots. If the editor places shot A after shot B then one cannot place shot C in between them. The shot B has to be deleted.



In earlier days when visuals were captured on *film* or *celluloid*, the positive prints of the rushes were played on heavy machines which were called *editing tables* specially designed to edit those. Visual and audio tracks were rolled through different rollers. The shots were recorded as series of single frames so the editor can mark the particular frame which has to be edited. Here the editor has the freedom to take any part of the rush and insert it between any other consecutive visuals or shots. There was no fixed rule hence it was called non-linear editing as nothing is in a proper line. Shot A can be used in between shot U and V.

Nowadays in the digital era everything is done through computers. So whatever be the medium we are shooting whether film or tape it has to be converted to the digital format. It is done so that the computer can recognize everything in its own language. This process is called *capturing/ingesting* of the rushes. Sometimes this process of capturing the audio visuals take much time as it is done in real time speed. To cut that time we are now using digital recording formats such as *hard drives* and *memory chips* through which the transfer of data takes less time. Also there is no loss of quality.

With the development of technology visual and audio were started recording on magnetic tapes. Hence various kinds of magnetic tapes evolved over the span of time depending upon their quality. These recorded images and audio can be transferred or re-recorded on another magnetic tape to make various copies. This led to the process of linear video editing process. Basically the editing of tapes is just marking the starting and ending point of a shot from the source tape and recording it on the edit tape. With every development in the tapes their process of editing also developed. Every tape editing system used a tape player and a tape recorder. As well as there was a remote to control both.

Firstly *VHS tapes* were used. The VHS tapes were analogue tapes. These were meant just for home viewing purpose, so the recording and editing was also very basic.



Title- Fig 1.1 VHS editing setup with player, recorder and remote

Attribution-

Source- pixabay.com

Link- <http://www.mediacollege.com/video/illustrations/edit/home-suite.html>

After the VHS tapes, came the *u-matic tapes* or $\frac{3}{4}$ inch tapes. **U-matic** is an analogue recording video cassette format was introduced to the market in September 1971. Unlike most other cassette-based tape formats, the supply and take-up reels in the cassette turn in opposite directions during playback, fast-forward, and rewind: one reel would run clockwise while the other would run counter-clockwise. A locking mechanism was started using which secures the tape hubs during transportation to keep the tape wound tightly on the hubs. Once the cassette is taken off the case, the hubs are free to spin. A red button is also provided which acts as a switch that allows recording of visual and audio. If this red button is removed it does not record anything.

The u-matic editing system also comprises of a player, recorder and a remote too. It also comes with *character generator* which also helped add texts and visual effects and transitions.

The *betacam tapes* were the next advanced series in analogue tapes. These recording formats were better in quality than u-matic. The editing systems were also more advanced than u-matic systems as they carried video signals in form of component signal.

After introduction of digital technology *dvcam* and *digital betacam tapes* came in the market. These tape systems allowed to work in non-linear process as the visuals could directly be captured onto hard drives through computers. The specially designed editing softwares helped editors to edit the tape footages in the same manner as they were able to edit film footages.

Now, if we discuss the process of modern day non-linear editing which is done through computer softwares, then we have to come across the various steps carried throughout.



Ingest

Once the tape or hard disk comes to editing table from shooting, the first thing done is *capturing* or *ingesting*. In this process the tape material is converted into digital format through graphics card. This process is also called as *digitisation* of tapes. These visual are stored as various visual and audio files. While digitisation the editor can capture in a single go from starting to end or by choosing the portion depending on the time code marked. While capturing the editor can provide description to the shots, which will be helpful in editing process.

First Assembly

Once the ingesting is done and all the necessary visual and audio are imported into the editing workspace. Then it is assembled according to the clapboard marking. Once the assembling is done, the editor sorts out the negative footages and unwanted audio and visuals for proper editing.

Rough Cut

In this phase the editors take the assembled blocks and make some choices. They cut the project into a rough form, often with some variations to consider. This is the first draft of the video or film. The shots are placed such that one can see how the program is taking shape. *Rough Cuts* may also contain fades and dissolves or other transitions to give the idea of how the scenes flow from one shot to the next. This is usually the stage where the client gets to review the program and get a pretty good idea of where the video is heading.

Fine Cut

The *fine cut* is the next version of the program that has taken into account all the changes, modifications and instructions by all parties, including the Editor, Director and Producers, and the end client. The fine cut focuses on the details of each and every scene in the First Cut. This is the second and near finished version of the video. At this point, the editors and producers need to receive "*Picture Lock*" approval which means that there are no more substantial changes that can be made to the video. Picture Lock means that the timing of the show from start to finish will not change.



The only changes at this point possible cannot change the length in either direction - shorter or longer - without incurring additional editing and mastering expenses. Upon approval of the Fine Cut, additional sound mixing, closed captioning, and disc authoring can take place to make the program complete.

Final Cut

Once the fine cut has been approved by all parties and finalized, the project is handed over to the sound department for sound effects and final audio mix. The final colour correction is also done. Closed *captioning* and *formatting* of the final video happens in conjunction with the sound mix. Then the project is final and ready for telecast.

The professional editing software used for editing nowadays is **Filmora**, **Showbox**, **Lightworks** and **Blender**.

There are many other types of software like **Audacity**, **Ardour** and **Traverso** etc. which are also used to professionally edit only audio files. Editors can precisely edit and modify audio files through these platforms. Various audio effects can also be added.

Mostly editing is classified as *online* and *offline editing*. The editing which is carried out on editing table after the shoot is over is called offline edit whereas when the edit is carried out simultaneously while shooting is called as online editing. In T.V channels mostly online edit is done.

The equipments for online editing are also different from offline edit. It includes **switcher**, **fader**, **mixer**, etc.

Compositing

Compositing is the process of compiling various visual sources to make a single visual file. Compositing is the term used for *post- production field*. It can be considered as another process which is similar to editing. Compositing is as similar to editing process as it is different from it. In compositing process different visual elements from different sources are taken and compiled in such a manner that the final image is seen as a single frame. One cannot differentiate between the layers of the images. Compositing is used in both *moving* and *still images*.

The most commonly used softwares used for compositing is **Natron**.

Compositing creates a visual magic on the screen. The compositor can either add or delete or mix up various visual elements in a single frame.

What is the need of compositing? Sometimes when the script revolves around fiction specially science fiction or the director creates a story in his own imaginal space it is impossible to create such fictional character or realm for shooting. In earlier days, such fictional characters were created mechanically or through costumes, but that was not so effective. The *special visual effects* such as lightning or explosion etc. were also to be shot which took much of the footage which was costly. Hence in such cases art of compositing comes at rescue. With the development in computer technology in animation sector, the scope of compositing also spread widely and rapidly.

With the help of computer animation we could easily create characters and surroundings as one desire or imagines. Now, one can also create a visual output without even shooting anything with help of compositing. One can add all the computer generated files to create one composite output.





Title-Fig 1.2 An image created by composing more than two different images.

Attribution- [Martin St-Amant](#). & [Canoe1967](#)

Source- pixabay.com

Link-

https://upload.wikimedia.org/wikipedia/commons/0/08/Altmer_High_Elves_trapped_and_outnumbered_but_we_won%27t_die_today.jpg

In the above picture we can see that the compositor has used two different visual sources to build up a new picture which contains both the pictures.

Most of the time during shooting, a *green background* is used and the subject is placed in front of it. This is called *chroma background*. After shooting, this green background can be removed digitally to get a clean transparent background with only the subject. This is called the *alpha layer*. Now this subject can be placed on any background.

During compositing process, one can also add various visual effects such as **fire, explosion and lightning, smoke**, etc. which is known as *VFX*. The compositing softwares are also used for *colour correction* and *text layer* generation too.



Unit summary



Summary

In this unit we learnt about the post production processes like audio visual editing and compositing. Proper post production methods can bring out the best of the production. Tight edit, appropriate music and proper audio mixing create a better impact on audience. Likewise imaginative compositing can add magic to the output.

Assessment



Assessment

Create a video mash up that includes at least one video resource and a different or additional audio track than what is in the original video. You're free to tell a story, create a music video, add a voice-over track, record your own video, create some gimmick, or even try something experimental as long as you adhere to the following requirements:

- Include a **title** for your video at or near the beginning
- Include **credits** at the end of your video for image, audio, and video resources you use in creating this project. Be sure to adhere to any stipulations of the resource licenses.
- Add an **audio track** other than the original audio in the video.
- The total length of the video should be **2-5 minutes**.

Assignment



Assignment

Create a video mash up that includes at least one video resource and a different or additional audio track than what is in the original video. You're free to tell a story, create a music video, add a voice-over track, record your own video, create some gimmick, or even try something experimental as long as you adhere to the following requirements:

- Include a **title** for your video at or near the beginning
- Include **credits** at the end of your video for image, audio, and video resources you use in creating this project. Be sure to adhere to any stipulations of the resource licenses.
- Add an **audio track** other than the original audio in the video.
- The total length of the video should be **2-5 minutes**.



Unit 4

Web Design and Publishing

Introduction

This unit is designed to train students in website building. Students will learn HTML, CSS, jQuery, web design development programs like Adobe Photoshop, flash, as well as the multimedia program iMovie. This chapter will cover the usage of graphics, sound and video and discuss the appropriateness of multimedia on websites for journalism, advertising, public relations and e-commerce. Students will work on numerous small web projects that will lead to one final multimedia project. The goal is to highlight more than just the skills related with individual programs, but the addition of several programs into designing effective and good-looking websites.

Outcomes

Upon completion of this unit you will be able to:



Outcomes

- Understanding of basic structure of HTML
- Learning of various container and empty tags
- Learn various html tags and their syntax.
- Differentiate the different types of lists created in HTML.
- Link web pages using <A> tag.
- Insert audio & Video in a web page to make it more interactive.
- Insert images in a web page.
- Use images and Email addresses as hyperlinks.
- Creating websites & hosting it



Terminology



Terminology

HTML:	HTML stands for Hyper Text Markup Language. It is a markup language utilized for creating HTML documents.
Tag:	It is a type of command that guides the person who is browsing the web, to how can be text, audio, graphics or video can be displayed on a web page.
Web Browser:	It is application software that allows us to view and explore information on the web
Container Elements:	A container element is specified by a pair of tags - Start tag and End tag.
Empty Elements:	Empty elements have only a start tag and no end tag.
Web Server:	It is a computer where the web content is stored. Basically web server is used to host the web sites.

Web publishing, or "online publishing," is the process of broadcasting content on the Internet. It includes making and uploading websites, updating webpages, and posting blogs online. The published content may include text, images, videos, and other types of media. In order to publish content on the web, you need three things:

1. Web development software.
2. An Internet connection.
3. A web server.

The software may be a professional web design program like Dreamweaver or a simple web-based interface like Word Press. The Internet connection serves as the medium for uploading the content to the web server. Large sites may use a dedicated web host, but many smaller sites often reside on shared servers, which host multiple websites. Most blogs are published on public web servers through a free service like Blogger.



Since web publishing doesn't require physical materials such as paper and ink, it costs almost nothing to publish content on the web. So, anyone with the above three requirements can be a web publisher.

Web Design Programming

- 1. HTML** is a language for creating Web pages. HTML stands for *HyperTextMarkupLanguage*. It is not a programming language, it is a markup language. A markup language is a collection of markup tags or elements.
- 2. PHP** stands for Hypertext**Preprocessor (PHP)** are a type of programming language whose main job is to allow the web developers to make a dynamic and vibrant content that reacts with the available databases. Generally PHP is utilized for generating applications that are web based.
- 3. CSS** stands for **Cascading Style Sheets**. These sheets refer to the presentation of HTML elements as a distinct file known as CSS file with an **.css** extension. CSS helps to change formatting of any HTML element by simply rolling out improvements at one place. All progressions made would be reflected naturally to the greater part of the pages of the website in which that component showed up.
- 4. Bootstrap** – It is a “powerful mobile first front-end framework for faster and easier web development.” It is a collection of tools to help you rapidly deploy websites and Web application on internet.
- 5. JavaScript**- JavaScript is a lightweight, deciphered programming dialect with object-oriented capacities that enables you to incorporate intelligence with generally static HTML pages.

Introduction to HTML

HTML is a unique language. It is a simple and text - based language. It is used for creating web page. HTML document is created in a simple Text Editor (as a notepad) A Website is a collection of webpages. Websites are unique sources of online information. These can be available on internet. Hypertext is the basic of all information available on the website. The expanded name of HTML is Hyper Text Markup Language. It is a simple web language. It is text based and is used for creating web



page, Website is the combination of many web - documents. Web page has many elements as page style, Paragraph, list, table and picture etc. Each Section is written in the form of tag. The tags indicate that the element viz. heading, list, paragraph etc. to which the section of web page relates. Picture, Sound and movie can be included in addition to the text in a web page.

TYPES OF HTML TAGS

Tags are a special type of instructions. They are used in HTML documents. Tags provide instruction to browser for specific action. Tags start with open angle bracket (<) and end with closed angle bracket (>). The starting and closing tags of a HTML document are <HTML> and </HTML> respectively. They instruct the web browser to start and close a document. Tags are of two types described as follows

- 1. Container Tag** : It is used twice in a document. Text is written in between the two tags. These are also called pair tag or companion tag.

Example :

```
<Body>
.....
.....
</Body>
```

Here two tags are used <Body> is the initial tag while </Body> is final tag. The symbol slash (/)separates the opening and closing tags. Some more examples of container tags are

1. <HTML></HTML>
2. <TITLE></TITLE>
3.
4. <I></I>
5. <U></U>

- 2. Empty Tag**: Empty tag is a single tag. It is also named as singular tag. It does not have any companion tag. Closing or finishing tag is never used in it.

Example :

```
.....
.....<BR>
```

The tag
 is used in above example. The tag
 represents "Break". The closing tag is not used in it. Some more examples are :

- (Listitem)
- <DD>(Definition data)
- <DT>(Definition Term)

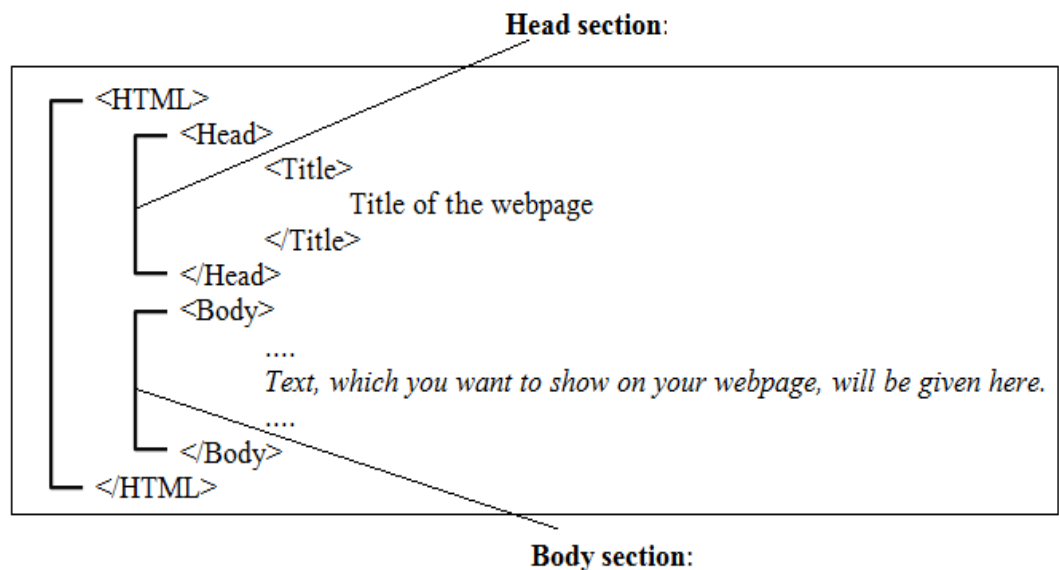


Note: : HTML tags can be expressed by small or capital letters of English Alphabet.

STRUCTURE OF HTML TAGS

The general structure of HTML document has two sections: **Head** section and **Body** section.

1. **Head:** The Head section contains the Title that identifies the first part of your HTML coded document.
2. **Body:** The body section is where you do most of the works that includes text, graphics, and other HTML elements that provide control and formatting of a page like: fonts, paragraph, list and other elements. The general syntax of HTML document



STEPS OF CREATE WEBPAGE

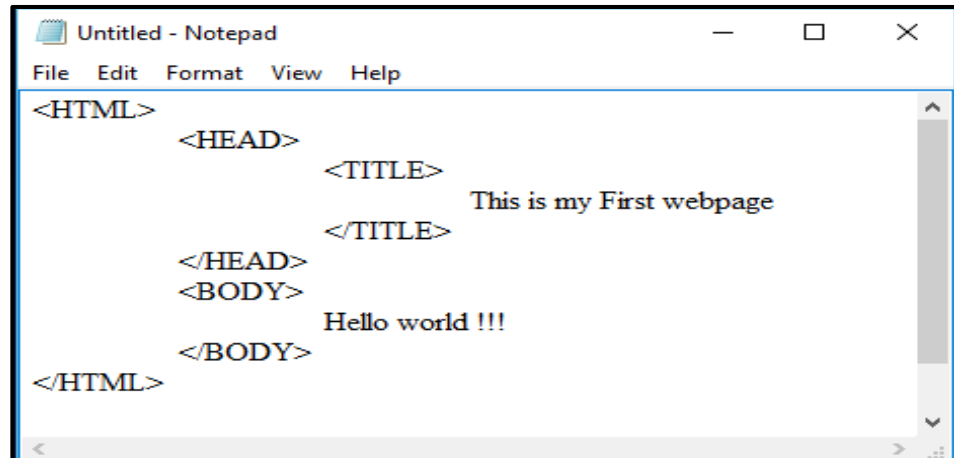
In this section, we will be working with the notepad as editor. Now we are writing a HTML program to display a message “This is my First webpage” on the Browser.

Let us begin:

1. In windows, click START Button.
2. Navigate to PROGRAMS and then click on ACCESSORIES.
3. Click on NOTEPAD
4. A NOTEPAD window will appear. Now, you are ready to type the HTML code.



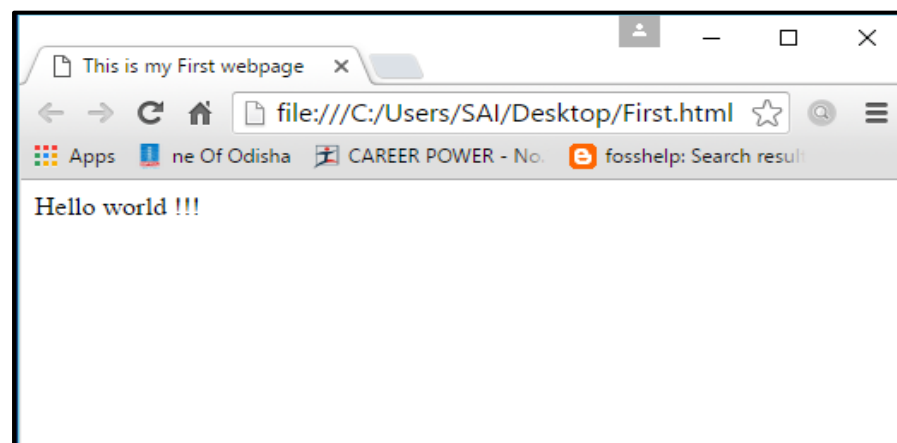
5. Type the HTML code in your Notepad window as shown in the figure below.
6. Save the File
7. After you have typed the HTML code, you have to save it as a HTML file. Click on the File menu (in Notepad). Select Save



```
<HTML>
  <HEAD>
    <TITLE>      This is my First webpage
  </TITLE>
  </HEAD>
  <BODY>
    Hello world !!!
  </BODY>
</HTML>
```

As. Notepad will show a dialog box asking for a file name.

8. In the File name textbox, type "First.html or First.htm". Click on save button.
9. Then you opened the browser Internet explorer. (Start→ All programs→Internet Explorer ↵) or Double clicked on Internet explorer Icon on the Desktop or taskbar.
10. Once the browser window is opened, then you opened the file from the particular location that you will recall it "First.html". (File→open→browse→Select the file (First.html)→open→ok)
11. The output is shown as per the following figure.



Screenshot



BASIC TAGS OF HTML

Let us know about different tags to be used in HTML

1. Head Tag

Head tag provides Header information. The document title is written in Head Tag. It always occurs in pair. Head Tag is considered very important for a web page. This is a container tag. e.g. <head>.....</head>

2. Title Tag

The title of the web page is written with the help of title tag. Title starts with <TITLE> tag and ends with </TITLE> tag. It is used between Head tag.

e.g. <title>.....</title>

3. Body Tag

It is a container tag. It is used to represent the body of document. The whole text matter of the page is written between <BODY> and </BODY> tags.

e.g. <body>.....<body>

Each Body tag has different characteristics. These characteristics (properties) are termed as attributes. We can select Background colour, text colour, font size etc. with these attributes.

e.g. <BODYBGCOLOR = "Red">

.....

</BODY>

BG color is an attribute in the above example, which depicts that colour of the background is fixed as red.

4. Heading Tag

The heading tag is used to fix the heading. These are 6 levels of heading in all. The levels are numbered as heading 1 to heading 6. All the letters of the heading in a given level have same font. The font size goes on decreasing as we move from heading 1 to heading 6. The heading in level 1 is expressed by tags <H1> and </H1>. Similarly in the heading in level 2 we use the tags <H2> and </H2>. <H6> is lowest level. The font size in it is the smallest.

e.g. <H1> Computer Education </H1>

5. Paragraph Tag

Paragraph is the basic composition of HTML, Paragraph is started with <P> tag and closes with </P> tag. The tags <P> leave a space equivalent to one line between previous line and the following line.

e.g. <p>This is a paragraph </p>



6. Line Break

The line Break tag is used to start the text from the new line. This tag does not leave a blank line space as the paragraph tag does. The text jumps to new line on using line break tag. The tag
 is a symbol for line break.

FONT TAGS OF HTML

Font is pre-defined style and size of the text. Font has three main properties. First style second - size and third colour. Font style can be changed in three ways - Bold, Italic and Underline. Font size changes size of text matter. Font colour gives different colors to the text. Font is a container tag. The and tags are used for changing fonts.

1. **Attributes** : Font has many attributes :-

- (a) Face : To set the name of font
- (b) Size: To set Font size. Font Size 3 1s commonly used we can change it from 1 to 7.
- (c) Color: To change the colour of the font

e.g.

```
<body>
    <fontface = "Arial" Size=6 Color =
    Red>OSOU
    </font>
</Body>
```

2. **Font Style** :

1. **BOLD**: The Bold tag specifies that the text should be displayed in bold face. *Syntax*:
2. **ITALIC**: The Italic tag specifies that the text should be displayed using the italic font. *Syntax*: <I></I>
3. **UNDERLINE**: The Underline tag states that the enclosed text should be underlined. *Syntax*: <U></U>
4. **BIG**: The Big tag specifies that the enclosed text should be displayed using a bigger font (compared with the current font). *Syntax*: <BIG> </BIG>
5. **SMALL**: The Small tag specifies that the enclosed text should be displayed using a smaller font (compared with the current font).



Syntax: <SMALL></SMALL>

- 6. **BLINK:** Surrounding any text with this element will cause the selected text to blink on the viewing page.

Syntax: <BLINK></BLINK>

The <BLINK></BLINK> element is currently only supported by the Netscape Navigator browser. In the internet explorer <marquee> is used to get the same effect.

- 7. **STRIKE:** The Strike tag states that the enclosed text should be displayed with a horizontal line striking through the text.

Syntax: <STRIKE> . . . </STRIKE>

- 8. **SUBSCRIPT:** The Subscript tag specifies that the enclosed text should be displayed as a subscript using a smaller font (compared to the rest of the text).

Syntax: _{...}

- 9. **SUPERSCRIPT:** The Superscript tag specifies that the enclosed text should be display as a superscript using a smaller font (compared to the rest of the text).*Syntax: ^{...}*

- 10. **TYPEWRITER:** This tag specifies that the text should be rendered in fixed-width typewriter font.

Syntax: <TT> ... </TT>

MARQUEES TAGS

Marquee is a container tag. It is used to make the text dynamic.

Syntax : A simple syntax to use HTML <marquee> tag is as follows:-

<marquee attribute_name="attribute_value"....more attributes> lines or text message or image </marquee>

The <marquee> Tag Attributes

Following is the list of important attributes which can be used with <marquee> tag.

Type	Description
Width	This specifies the width of the marquee. This can be a value like 10 or 20% etc.
Height	This specifies the height of the marquee. This can be a value like 10 or 20% etc.



Direction	This specifies the direction in which marquee should scroll. This can be a value like up, down, left or right.
Behaviour	This specifies the type of scrolling of the marquee. This can have a value like scroll, slide and alternate.
Scroll delay	This specifies how long to delay between each jump. This will have a value like 10 etc.
Scroll amount	This specifies the speed of marquee text. This can have a value like 10 etc.
Loop	This specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
Bg color	This specifies background color in terms of color name or color hex value.
H space	This specifies horizontal space around the marquee. This can be a value like 10 or 20% etc.
V space	This specifies vertical space around the marquee. This can be a value like 10 or 20% etc.

IMAGE TAGS

In HTML, images tags are defined with the tag. The img tag is empty, which means that it contains attributes only and it has no closing tag. To display an image on a page, you need to use the src attribute. **src** stands for “**source**”. The value of the src attribute is the URL of the image you want to display on your page. The syntax of defining an image:

```
<imgsrc="url" />
```

The URL points to the location or address where the image is stored. An image file named "Shreyash.gif" located in the directory "images" on "C:/Dhruba" has the URL:

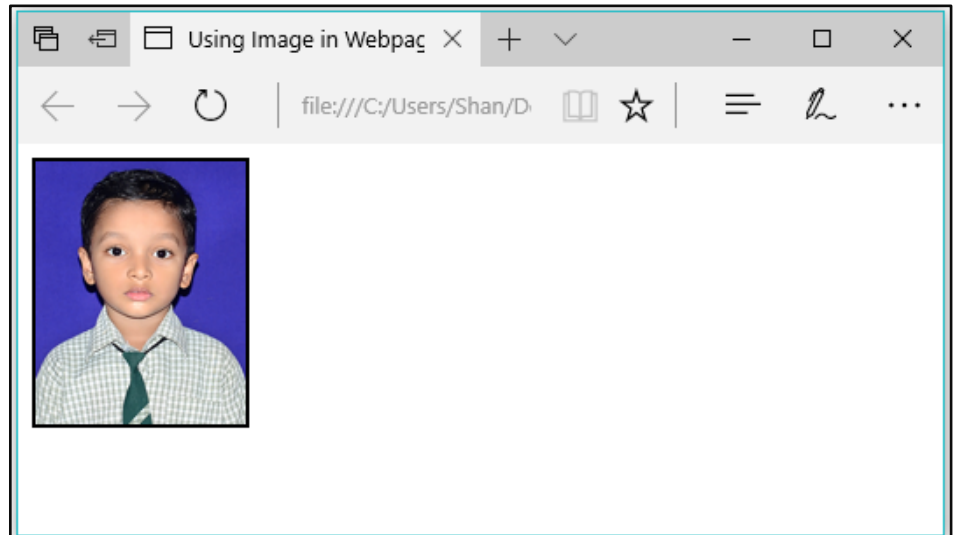
```
C:/Dhruba/Image/Shreyash.JPG
```

Example:

```
<!DOCTYPE html>
<html>
```



```
<head>
<title>Using Image in Webpage</title></head>
<body>
<imgsrc=" C:/Dhruba/Image/Shreyash.jpg " alt ="This a
Test Image"
height="150"width="120" Border=2 >
</body>
</html>
```



Screenshot

LIST & TABLE TAGS

HTML supports ordered, unordered, and definition lists.

1. `` - An unordered list. This will list items using plain bullets.
2. `` - An ordered list. This will use different schemes of numbers to list your items.
3. `<dl>` - A definition list. This arranges your items in the same way as they are arranged in a dictionary.

HTML Unordered Lists

An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML `` tag. Each item in the list is marked with a bullet. An unordered list starts with the `` tag. Each list item starts with the `` tag. You can use type attribute for `` tag to specify the type



of bullet you like. By default it is a disc. Following are the possible options:

```
<ul type="square"> [■]
<ul type="disc"> [●]
<ul type="circle"> [○]
```

HTML Ordered Lists

If you are required to put your items in a numbered list instead of bulleted list then HTML ordered list will be used. This list is created by using `` tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with ``. You can display different kinds of ordered lists by using the type attribute. By default it is a number. Following are the possible options:

```
<ol type="1"> - Default-Case Numerals.
<ol type="I"> - Upper-Case Roman Numerals.
<ol type="i"> - Lower-Case Roman Numerals.
<ol type="a"> - Lower-Case Letters.
<ol type="A"> - Upper-Case Letters.
```

You can use start attribute for `` tag to specify the starting point of numbering you need. Following are the possible options:

```
<ol type="1" start="5"> → Numerals starts with
5.
<ol type="I" start="5"> → Numerals starts with
V.
<ol type="i" start="5"> → Numerals starts
withv.
<ol type="a" start="5"> → Numerals starts with
E.
<ol type="A" start="5"> → Numerals starts with
e.
```

HTML Definition Lists

HTML and XHTML support a list style which is called definition lists where entries are listed like in a dictionary or encyclopedia. The definition list is the ideal way to present a glossary, list of terms, or other name/value list.

Definition List makes use of following three tags.

- `<dl>` - Defines the start of the list
- `<dt>` - A term
- `<dd>` - Term definition
- `</dl>` - Defines the end of the list

Tables Tags



Tables are an excellent way to organize and display information on a page. **Tables** are defined using the **<table>tag**. A table is divided into **rows** with the **<tr> tag**, and each row is divided into data cells using the **<td> tag**. The letters td stand for “**table data**,” which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, and so on. Table **headings** are defined with the **<th> tag**.

Table Tags

Tags	Description
<table>	Defines a table
<th>	Defines a table header
<tr>	Defines a table row
<td>	Defines a table cell data(or table data)
<caption>	Defines a table caption
<thead>	Defines a table head
<tbody>	Defines a table body
<tfoot>	Defines a table footer

LINK TAGS

A webpage can contain many links that take you directly to other pages and even specific parts of a given page. These links are known as **hyperlinks**. Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

Linking Documents

A link is specified using HTML tag <a>. This tag is called anchor tag and anything between the opening <a> tag and the closing tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use <a> tag.

Link Text

Linking to a Page Section



You can create a link to a particular section of a given webpage by using name attribute. This is a two-step process. First create a link to the place where you want to reach within a webpage and name it using <a...> tag as follows:

```
<h1>HTML Text Links <a name="top"></a></h1>
```

Second step is to create a hyperlink to link the document and place where you want to reach:

```
<a href="/html/html_text_links.htm#top">Go to the Top</a>.This will produce following link, where you can click on the link generated Go to the Top to reach to the top of the HTML Text Link.
```

Linking to email address

You can link with an e-mail address by using an Anchor Tag with this a user can send e-mail to you by clicking on the link.

The code used for linking to an e-mail address is as follows:

```
<A HREF = mail to: abc@rediffmail.com> mail me </A>.
```

Here abc@rediffmail.com is mail address and **mail me** is the hyperlink.

Linking to Image

With this you can link the other document through an image (diagram). In this case image file name and its proper format is written. Let us try to understand the code given below:

```
<A HREF=link.html><img src = "pc.jpg"></ A>.
```

Here link.html is the name of the document to be linked.

Similarly in imgsre="pc.jpg" ,pc.img is the name of image which is used as a hyperlink.

MULTIMEDIA TAGS

You can open any external image in your webpage. Similarly external sound and movie (film) etc. can also be viewed. Anchor tag is used for viewing image or movie. HREF attribute can be used in Anchor tag let us understand the method of opening an external image in a different document:

```
<A HREF = "D:/GuruNanak.gif" > "Link anchor</ A>
```



Here <A> and are anchor tags, HREF is attribute, Guru Nanak .gif is the image name and Link anchor is the name of Link. Similarly the method to open any external movie in a different document is as:

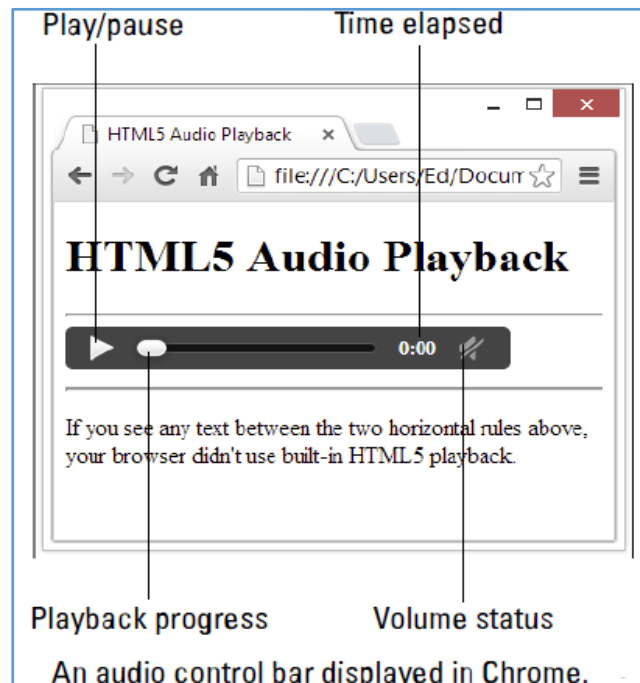
```
<AHREF = "D:/ harry potter.mov"> view the movie Harry Potter</ A>
```

With this command the movie of Harry Potter will start playing. But it is to be kept in mind that file of movie must be in the same folder in which your HTML document has been saved. We have to remember following file extensions for text, movie or sound:-

- 1. For wave sound file .wav
- 2. for quick time movie file .mov
- 3. for plain text .txt
- 4. for HTML document .html

Moving media with video

Unlike audio, which doesn't actually require much (or any) space on the screen, video requires an onscreen frame, as well as more sophisticated and more numerous controls. That's why although the two markup elements are similar, video comes with considerably more baggage, even though the basic structure of the element remains the same as before:



```
<video src="video.ogg" controls>Alternatives</video>      Screenshot
```

Here the src attribute points to the video file you'd like to have played back. It specifies the name of the video object file for playback and must be a valid URI. Example: src="video.ogg".



Supported Video Types

We can use various media types like Flash movies (.swf), AVI's (.avi), and MOV's (.mov) file types inside embed tag.

- **.swf** files - the file types created by Macromedia's Flash program.
- **.wmv** files - Microsoft's Window's Media Video file types.
- **.mov** files - Apple's Quick Time Movie format.
- **.mpeg** files - movie files created by the Moving Pictures Expert Group

Web Site Development & Publishing

Website is a place on web and is hosted on a web server. It is a set of related web pages. It is accessed using Internet address known as Uniform Resource Locator (URL).

WEBSITE TYPES

There are two type of web site:

1. Static Websites

Static websites are also known as flat or stationary websites. They are loaded on the client's browser as exactly they are stored on the web server. Such websites contain only static information. User can only read the information but can't do any modification or interact with the information.

Static websites are created using only HTML. Static websites are only used when the information is no more required to be modified.

2. Dynamic Websites

Dynamic websites shows different information at different point of time. It is possible to change a portion of a web page without loading the entire web page. It has been made possible using **Ajax** technology.

Server-side dynamic web page

It is created by using server-side scripting. There are server-side scripting parameters that determine how to assemble a new



web page which also includes setting up of more client-side processing.

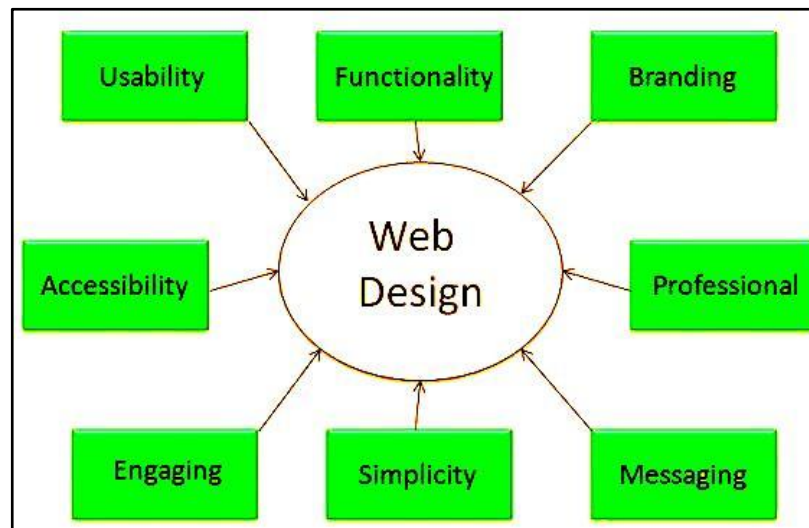
Client-side dynamic web page

It is processed using client side scripting such as JavaScript. And then passed in to **Document Object Model (DOM)**.

Website Designing

Web designing is linked directly to the visual part of a web site. Active web design is essential to convey thoughts adequately. Web designing is subset of web development. Anyway, these terms are utilized reciprocally. Web Design Plan ought to incorporate the accompanying:

- A site map of pages.
- Details about information architecture.
- Planned structure of site.



Screenshot

Wireframe

Wireframe refers to a visual guide to entrance of web pages. It helps to define structure of web site, linking between web pages and layout of visual elements.

The things that are included in a wireframe are as follows:

- Placement of headlines and sub headings.



- Calls to action.
- Boxes of primary graphical elements.
- Text blocks.
- Simple layout structure.

Wireframe can be made utilizing program like Visio however you can likewise utilize a pen and paper.

Web Designing Tools

Here is the rundown of toolsthat can be utilized to make efficient website design:

S.N.	Tool Description
1.	<p>Photoshop CC</p> <p>This is a great web designing tool provided by Adobe. The latest Photoshop CC 2014 supports many new features such as smart objects, layer comps, smart guides, Type kit integration, font search, and workflow enhancements.</p>
2.	<p>Illustrator CC</p> <p>Illustrator CC is also a web designing tool comes with powerful features like AutoCad libraries, white overprint, fill and stroke proxy swap for text, automatic corner generation, unembed images and touch type tools etc.</p>
3.	<p>Sublime Text</p> <p>Sublime Text is a source code editor with Python application programming interface. It can be extended using plugins.</p>
4.	<p>Imageoptim</p> <p>It is basically used for optimizing images on a website in order to load them faster by finding best compression parameters and by removing unnecessary comments.</p>
5.	<p>Sketch 3</p> <p>Sketch 3 is a web designing tool developed specifically for designing interfaces, websites, icons etc.</p>
6.	<p>Heroku</p> <p>It is also a great web development tool which supports Ruby, Node.js, Python, java and PHP.</p>
7.	<p>Axure</p> <p>It supports prototyping, documentation, and wire framing tools for making interactive website design.</p>



8.	Hype 2 The Hype 2 offers: Easiest way to Animate & add interactivity, Harness the power of HTML5, Mobile responsiveness, and WYSIWYG features.
9.	Image Alpha This tool helps to reduce file sizes of 24-bit PNG files. It does so by applying lossy compression and converts it to PNG8+alpha format which more efficient.
10.	Hammer This tool is suitable for non-programmers and good only for small projects.
11.	JPEG mini Lite It is an image optimizing tool and supports photos in any resolution up to 28 Megapixels.
12.	Bug Herd This tool helps to see how the projects is going and what everyone is working on. It also helps to identify issues in development.

Web Page Anatomy

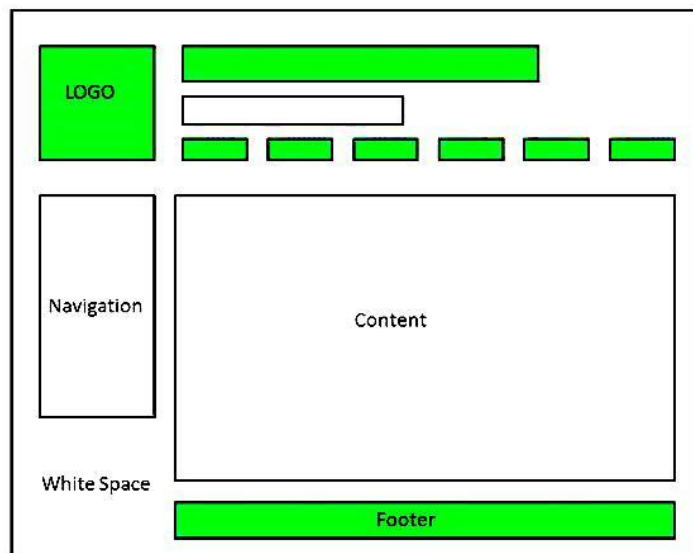
A website consists of the accompanying segments:

1. Containing Block

Container can be as page's body tag, an all containing div tag. In the absence of container there wont be any place to put the contents of a page.

2. Logo

Logo alludes to identity of a website and is utilized over an organization's different types of advertising, for example, business cards, letterhead, brochures et cetera.



Screenshot

3. Navigation

The important criteria of the site’s navigation system should be such that it should be convenient to find and use. On an often the navigation is just placed at the top of the page on the extreme right.

4. Content

The content on a web site ought to be significant to the goal of the web site.

5. Footer

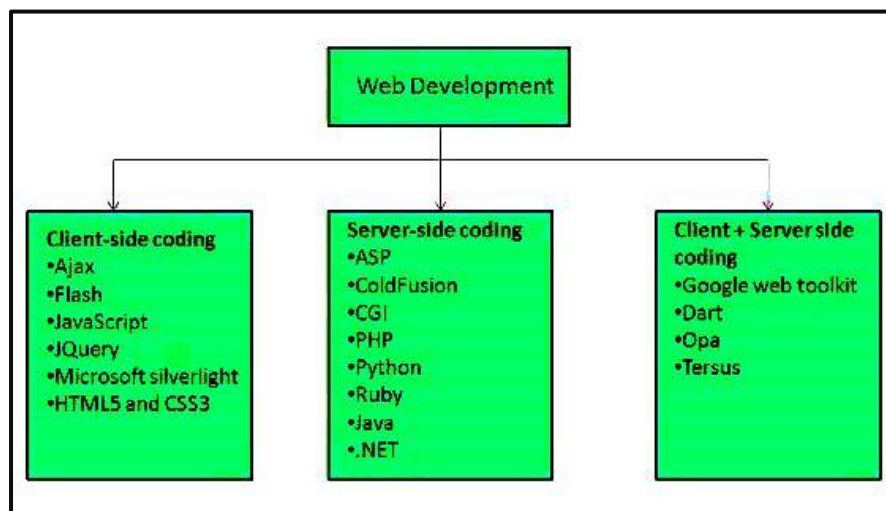
Footer is situated at the base of the page. It for the most part contains copyright, contract and legal information and in addition few links to the primary sections of the site.

6. Whitespace

It is also known as **negative space** and refers to any area of page that where there is no coverage of any type or illustrations.

WEBSITE DEVELOPMENT

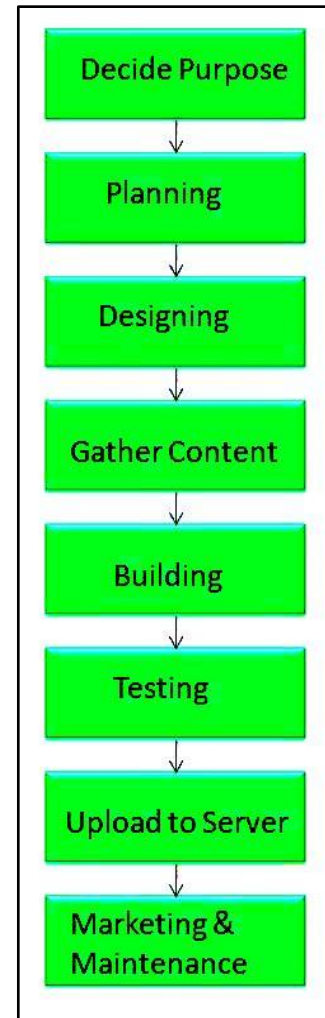
Web development alludes to construction website and sending on the web or internet. Web development needs the utilization of scripting languages not only at the server end and but also at customer end.





Before building up a website once should remember a few perspectives like:

- What are the things to put on the web site?
- How to make it interactive?
- Who is going to host it?
- How to create a website that should be search engine friendly?
- How to do its coding?
- How to secure the source code frequently?
- Whether the navigation menus be convenient to use?
- Whether the web site will be loaded quickly?
- Whether the web site design in various browsers can be displayed perfectly?
- How effortlessly will the site pages print?
- How effortlessly will guests discover vital subtle elements particular to the site?
- How successfully the style sheets be utilized on your web sites?



Screenshot

Web Development Process

Web development process incorporates all the phases that are fair to take to create an attractive, compelling and responsive website. These phases are appeared in the accompanying diagram:

Web development tools

A web development tool helps the developer to test and debug the web sites. Now a day the web development tool comes with the web browsers as add-ons. All web browsers have built in tools for this purpose.

These tools allow the web developer to use HTML, CSS and JavaScript etc.. These are accessed by hovering over an item on a web page and selecting the "Inspect Element" from the context menu.



Features

Given below are the regular characteristics that every web development tool displays:

1. WEB PAGE ASSETS, RESOURCES, AND NETWORK INFORMATION

Web development tools likewise help to review the resources that are stacked and accessible on the web page.

2. HTML AND DOM

HTML and DOM viewer enables you to comprehend the DOM as it was rendered. It additionally enables rolling out improvements to HTML and DOM and seeing the progressions reflected in the page after the change is made.

3. PROFILING AND AUDITING

Profiling alludes to get data about the execution of a web page or web application and **Auditing** gives developers proposals, subsequent to investigating a page, for enhancements to diminish page load time and enhancing responsiveness.

Skill Required

For being a fruitful web developer, one ought to hold the accompanying abilities:

- Understanding of client and server side scripting.
- Testing cross browser inconsistencies.
- Creating, editing and modifying patterns for a CMS or web development background.
- Testing for consistence to determined measures, for example, availability standards in the client region.
- Programming coordinated effort with java Script, PHP, and Jquery and so on.
- Conducting observational user testing.

Website Publishing

Website publishing is the process of uploading files or content on the internet. It includes:

- Uploading files.
- Updating web pages.
- Posting blogs.

Website is published by uploading files on the remote server which is provided by the hosting company.



Prerequisites for Website Publishing

In order to publish your site, you need the following things:

- Web development software
- Internet Connection
- Web Server

1. Web development software

It is used for building web pages for your web site. Dreamweaver and WordPress are example of web development software.

2. Internet Connection

Internet connection is required to connect to a remotely located web server.

3. Web Server

Web server is the actual location where your website resides on. A web server may host single or multiple sites depending on what hosting service you have paid for.

Website URL Registration

A domain name is the part of your Internet address that comes after "**www**". For example, in **www.google.com** the domain name is **google.com**. A domain name becomes your Business Address so care should be taken to select a domain name. Your domain name should be easy to remember and easy to type.

Domain Extensions

The final letter at end of internet address is known as top level domain names. They are called top level because they are read from right to left, and the part after the dot is the highest in a hierarchy. The table shows the **Generic** Top-Level Domain names:

Domain	Meaning
.com	Commercial Business
.edu	Education
.gov	Government agency
.int	International Entity
.mil	Military
.net	Networking organization
.org	Non-profit organization



Registering Domain Name

Registering a Domain Name is very simple. You can take following step to get your desired domain name registered:

- Think of a name that justifies your business need. To find out the available names you can enter a name at commercial domain name registrar such as GoDaddy.
- If the domain name entered by you is available, then select that particular domain name.
- Now it will ask you for other additional services such as Email inbox, hosting etc. that host also provides. You may choose what's best for you.
- Now they will ask you for your personal information which is stored in WHOIS database.
- It will then ask for payment information. Pay for the purchase you have made. Make sure you enter the correct payment information.
- Once you are done with all above steps, you are ready to use their tools to upload your stuff to your site.

S.N.	Domain Name Registrar
1	Address Creation, LLC
2	Addressonthe web, LLC
3	101domains, INC
4	Atomicdomainnames, LLC
5	BigRock Solutions Ltd
6	Black Ice Domain, Inc
7	Block Host LLC
8	Domain Monkeys, LLC
9	Domain Mantra, Inc.
10	Domain Name, Inc.
11	Dot Holding Inc.
12	Dot Media Ltd
13	Extend Names, Inc.
14	Extremely Wild
15	Fast Domain Inc.
16	Google Inc

Domain Name Registrar

There are a number of domain name registrars available in the market. The above table contains some of popular domain name registrars:



Website Hosting

Web hosting refers to a service that provides space for the storage of web pages that too online. Through World Wide Web these web pages are made accessible to the user. The organizations that offer the service of web hosting are called as Web Hosts. These servers of the web hosting website 24*7 remain switched on. The organizations or the web hosting companies run these servers. Each and every server is demarcated with a specific IP Address. As the IP addresses are not easy to memorize thus, so the domain name of the server is pointed to the IP address of the server by the webmaster.

Why do we need a web hosting company?

We need a web hosting company because to provide web hosting on your local computer is very difficult, if we want to do web hosting in the local computer the PC have to be leave upon for 24 hours. Practically this is not possible and will be very expensive as well.

Types of Hosting

The accompanying table portrays distinctive sorts of web hosting that can be benefited according to the need:

S.N.	Hosting Description
1	Shared Hosting Shared hosting, means many number of websites are put on the same server by the hosting company. Every client is allocated with their own web space and a specified limit of bandwidth. A same kind of physical memory is shared by nearly each and all websites, e.g.: MySQL server and Apache server. If on the server one website experiences high traffic load it may affect the performance of all websites present on the server.
2	Virtual Private Server VPS Virtual Dedicated Server is the other name of VPS. This server is further fractioned into smaller servers. Here the client is provided with an own space of partition, which is installed with its own operating system. Dissimilar to shared hosting, VPS doesn't share memory or processor time apart from this it assigns certain amount of memory and CPU to utilize which implies that any issue on a VPS partition n a similar drive won't influence different VPS clients.
3	Dedicated Server



	In this sort of hosting, single dedicated server is setup for only one client. It is normally utilized by the organizations who require the power, control and security that is offered by a dedicated server.
4	Reseller Hosting A reseller goes about as a centre man and offers hosting space of another person's server.
5	Grid Hosting Rather than using one server, Grid Hosting spreads assets over countless servers. It is very steady and adaptable. The servers can be included or detracted from the network without smashing the framework.

Web Hosting Companies

Following are the several companies offering web hosting service

S.N.	Hosting Company
1	Go Daddy
2	Host Gator
3	Laughing Squid
4	just Host
5	liquid Web
6	Hivelocity
7	Wired Tree
8	Media TempleServInt
9	Big Rock
10	Wild West Domains
11	WIPL
12	Blue Host
13	Wix



Unit summary



Summary

- The full name of HTML is Hyper Text Markup Language. It instructs web browser how to display web page on screen
- The basic structure of the HTML document is divided into two sections namely, the head and the body.
- A container tag has both the start and the end tag.
- Empty tag is a solo tag. No different tag is used for closing.
- These are two main parts of a HTML document - Head and Body.
- The Head Section is written between <HEAD> and </HEAD> tags.
- The Body section is written between <BODY> and </BODY> tags.
- Heading tag is used to display the heading or the main topic on the web page. This tag varies from H1 to H6.
- A paragraph can be written on the web document using the <p> tag.
- Bold, Italic and Underline are those tags that help in changing the style of the font.
- Lists provide the information in a structured and easy to read format. There are three types of lists : OL,UL & DL.
- UL tag classifies the data items that have equal importance i.e. none of the data items are ranked. They are identified by a symbol. It may be a square, a circle or a disc.
- OL tag classifies the data items that do not have equal importance. The data items in a list are represented using numbers, the roman letter or alphabets. The default symbol is number.
- An <a> (anchor) tag is used to create a hyperlink in a webpage. An anchor element consists of three parts : (1) href (mandatory),
- The SRC attribute is used in IMG tag to insert an Image in a webpage.
- An e-mail link can be created in a web page using mailto: attribute.



- Before deciding about the server we should register the domain name.
- The needs of viewers should be kept in mind while designing a website.
- You can establish your own server or can hire a space for it from any company or organization.
- After designing all pages they are tested off line.
- Site is uploaded with the help of FTP (File Transfer Protocol).
- After successful uploading, site is tested online.
- First page of a site is the home page; all other pages of site are linked with home page.

Assignment



Assignment

1.
 - a. Create four web pages at under.
 - b) Save these pages as home.html, page 1 .html, page2.html, page3 .html
 - c) Show three links on homepage
 - d) Connect the link of remaining 3 pages with homepage
2.
 - (a). Create two different images on a webpage.
 - (b). Right Align the first image and Top Align the second image.
 - (c). Set the width and height of the images with the help of width & Height attributes.
 - (d). Save the document as "img.html" and view the output.
3.

Create a website for Travel & Tourism Company, which should include 3 to 4 web pages.



Assessment



Assessment

1. Fill in the blanks

- (a). _____ types of tag are used in HTML.
- (b). Opening and closing tags are used in _____ .
- (c). There is no closing tag is _____ tag.
- (d). The text editor named _____ .is used for creating HTML document.
- (e). _____ list represents numbers.
- (f). Tables store the information and are made of rows and _____.
- (g). _____ is used to write the heading of a table.
- (h). _____ extension is used to save HTML document.

2. Answer the followings

- (a). What are Head tags?
- (b). Write types of tags used is HTML
- (c). Write names of various attributes of Font.
- (d). For what purpose marquee tag is used?
- (e). Distinguish between container and Empty tag.
- (f). Write structure of a HTML document. Explain meaning of <HEAD> and <BODY> tags used in it.
- (g). Distinguish between ordered list and unordered list.
- (h). What is SRC attribute?

Resources



Reading

1. www.google.com
2. www.wpdvd.com
3. www.wdvl.com
4. www.w3.org
5. www.webstandards.org/
6. <http://caes2.caes.uga.edu/unit/occs/resources/multimedia/recorrd.html>



7. <http://www.garyolsen.com/GoClarke/Videoaudio/>
8. <https://citsf221.community.uaf.edu/category/assignments/>
9. http://www.tutorialspoint.com/html/html_tutorial.pdf
10. <https://en.wikipedia.org/wiki/U-matic>
11. <http://thevideosolution.com/blog/109-the-5-stages-of->
12. <https://citsf221.community.uaf.edu/category/assignments/>
13. http://www.tutorialspoint.com/internet_technologies/internet_quick_guide.htm
14. <https://www.scribd.com/document/318441078/It-sivapadidapu-PDF>
15. <http://www.daniellee.biz/define.php?E=Web-Publishing>
16. http://www.tutorialspoint.com/html/html_tutorial.pdf
17. <https://archive.org/about/>
18. <https://webdesigntutorialz.blogspot.in/2017/12/javascript-html.html>
19. <https://smallbusiness.yahoo.com/>