

UNIT: 10 Multimedia

Contains:

- ❑ Definition,
- ❑ Characteristics,
- ❑ Elements,
- ❑ Applications, Benefits,
- ❑ Tools,

Introduction to Multimedia

- **Multimedia is an interactive media and provides multiple ways to represent information to the user in a powerful manner.**
- **It provides an interaction between users and digital information.**
- **It is a medium of communication.**
- **Some of the sectors where multimedia is used extensively are education, training, reference material, business presentations, advertising and documentaries.**

What is Multimedia?

- **Multimedia is a representation of information in an attractive and interactive manner with the use of a combination of text, audio, video, graphics and animation.**
- **In other words we can say that Multimedia is a computerized method of presenting information combining textual data, audio, visuals (video), graphics and animations.**
- **For examples: E-Mail, Yahoo Messenger, Video Conferencing, and Multimedia Message Service (MMS).**
- **Multimedia as name suggests is the combination of Multi and Media that is many types of media (hardware/software) used for communication of information.**

What is Multimedia? Cont..

- Multimedia is a form of communication that combines different content forms such as text, audio, images, animations, or video into a single presentation, in contrast to traditional mass media, such as printed material or audio recordings.
- **Multimedia** is a broad term for combining multiple media formats.
- Whenever text, audio, still images, animation, video and interactivity are combined together, the result is **multimedia**.
- Slides, for **example**, are **multimedia** as they combine text and images, and sometimes video and other types.

Multimedia System

- It is not a single technology, but rather a collection of technologies for manipulating
 - Text(characters, digits, symbols)
 - Graphics(images and animation)
 - Audio
 - Video
- It is a medium that includes the four factors:
 - Digitization
 - Networking
 - Interactivity
 - Inclusion of human interfaces

Elements of Multimedia

Five Elements

- Text,
- image,
- audio,
- video, and
- animation

Components of Multimedia

- **Text-** All multimedia productions contain some amount of text. The text can have various types of fonts and sizes to suit the professional presentation of the multimedia software.
- **Graphics-** Graphics make the multimedia application attractive
- There are two types of Graphics:
 - **Bitmap images-** Bitmap images are real images that can be captured from devices such as digital cameras or scanners. Generally bitmap images are not editable. Bitmap images require a large amount of memory.
 - **Vector Graphics-** Vector graphics are drawn on the computer and only require a small amount of memory. These graphics are editable.
- **Audio-** A multimedia application may require the use of speech, music and sound effects.

Components of Multimedia Cont..

- **Video-** The term video refers to the moving picture, accompanied by sound such as a picture in television. Video element of multimedia application gives a lot of information in small duration of time.
- **Animation-** Animation is a process of making a static image look like it is moving. An animation is just a continuous series of still images that are displayed in a sequence.
- The animation can be used effectively for attracting attention. Animation also makes a presentation light and attractive.

Characteristics of Multimedia Systems

Four characteristics of multimedia systems

- **Multimedia systems must be computer controlled.**
- **They are integrated.**
- **The information they handle must be represented digitally.**
- **The interface to the final user may permit interactivity.**

Applications of Multimedia

- **Multimedia in Business-** Multimedia can be used in many applications in a business.
- The multimedia technology along with communication technology has opened the door for information of global work groups. Thus the work place will become global.
- The multimedia network should support the following facilities:
 - Voice Mail
 - Electronic Mail
 - Multimedia based FAX
 - Office Needs
 - Employee Training
 - Sales and Other types of Group Presentation
 - Records Management

Applications of Multimedia Cont..

- **Multimedia in Marketing and Advertising-**
- **Multimedia in Entertainment-**
- **Multimedia in Education-**
- **Multimedia in Bank-**
- **Multimedia in Hospital-**
- **Communication Technology and Multimedia Services-** The advancement of high computing abilities, communication ways and relevant standards has started the beginning of an era where you will be provided with multimedia facilities at home.
- These services may include:
 - Basic Television Services
 - Interactive entertainment
 - Digital Audio
 - Video on demand
 - Home shopping
 - Financial Transactions
 - Interactive multiplayer or single player games
 - Digital multimedia libraries
 - E-Newspapers, e-magazines

Benefits of Multimedia

- Easy to understand and use
- Integrated and interactive
- Conducive to co-operative work environment
- Flexible
- Supportive of large audience

Multimedia Tools

- **Photo Editing : Photoshop, Splashup**
- **Web Design : Dreamweaver, KompoZer**
- **Video : Final Cut, Adobe Premiere**
- **Audio : ProTools, Adobe Audition**
- **Slideshows : Soundslides, PhotoPeach**
- **Interactive media : Flash, Effect Generator**
- **Word processing : Microsoft Office, Google Docs**



Thank you!