BA IST YEAR Subject-DTP & MULTIMEDIA

UNIT-IV

What is multimedia-

Multimedia is a combination of pictures,text,animation,audio and videos and graphics. 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).

Components of Multimedia:-

Following are the common 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 profession presentation of the multimedia software.

- **Graphics**- Graphics make the multimedia application attractive. In many cases people do not like reading large amount of textual matter on the screen. Therefore, graphics are used more often than text to explain a concept, present background information etc. 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. These are called audio or sound element of multimedia.Speech is also a perfect way

for teaching. Audio are of analog and digital types. Analog audio or sound refers to the original sound signal. Computer stores the sound in digital form. Therefore, the sound used in multimedia application is digital audio.

- **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. Digital video is useful in multimedia application for showing real life objects. Video have highest performance demand on the computer memory and on the bandwidth if placed on the internet. Digital video files can be stored like any other files in the computer and the quality of the video can still be maintained. The digital video files can be transferred within a computer network. The digital video clips can be edited easily.

- **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. Animation is very popular in multimedia application

Applications of Multimedia:-

1. Multimedia in Business**.**

2. Multimedia in Marketing and Advertising.

3. Multimedia in Education.

4. Multimedia in Bank.

5 Multimedia in Hospital.

6 Communication Technology and Multimedia Services.

7. Multimedia in entertainment.

8. Multimedia in medical and engineering.

Concept of plaintext and formatted text:-

Plaintext:- Plain text, Plain-text, or Plaintext is any text, text file, or document that contains only text. Unlike a rich-text document, a plain text file cannot have bold text, fonts, larger font sizes, or any other special text formatting.

Formatted text:- Formatted text is text that is displayed in a special, specified style. In computer applications, formatting data may be associated with text data to create formatted text. How formatted text is created and displayed is dependent on the operating system and application software used on the computer.

RTF & HTML TEXT:-

RTF (Rich Text Format) and HTML (Hypertext Markup Language) are two similar formats because of their use of tags in order to format the documents properly. Despite being similar to each other, there are a number of distinct differences between the two formats. The primary difference between RTF and HTML is their use. While HTML is used for transmitting content across the Internet, RTF was primarily used as a format for storing typed documents. RTF was developed in the early days of Microsoft Word but has since been replaced by the DOC and DOCX formats.

1.RTF is used for storing documents while HTML is used for transmitting content across the Internet.
2.RTF embeds the images into the files while HTML just links to them.
3.HTML supports a lot more image types than RTF.
4.HTML can embed videos and audio while RTF cannot.

importance of Graphics in Multimedia:-

Graphics may be used in many forms such as photos,charts,logos, environment simulation etc.

There are many kinds of graphics that are integrated into multimedia application .These are as follows:

1. Pictures,photographs and 3D pictures.
2. Background.
3. Button
4. Charts
5. Flow charts
6. Organization charts.

Image capturing methods:-

There are various way to capture image using different image capturing device such as digital camera and scanner.

Image capturing through scanner

To get image from a WIA(Windows image acquition)

(i)   After installing software that come with your wia scanner connect your scanner to your coputer
(ii)   In corel paint shop pro photo or any other image editing software choosefile -> import ->Scanner for camera .
(iii)   Then scanner is interface appears.
(iv)   Put your image on the glass of the sanner .
(v)   Press copy button to start Scanning operation.
(vi)   Follow the instruction on your screen.

Various image file formats:-

1. JPEG (or JPG) - Joint Photographic Experts Group

2. PNG - Portable Network Graphics

3. GIF - Graphics Interchange Format

4. TIFF - Tagged Image File

5. PSD - Photoshop Document

6. PDF - Portable Document Format

7. EPS - Encapsulated Postscript

8. AI - Adobe Illustrator Document

9. INDD - Adobe Indesign Document

10. RAW - Raw Image Formats

Sound and its effect in multimedia:-

There are five sound /audio effects available in all most audio editing software.

1. Amplitude effects.

2. Delay effects.

3. Time/pitch effects.

4. Reverse effects.

5. Invert effects.

Anolog and digital sound:-

Analog sound:-

Sound itself is a continuous wave; it is an [analog signal](#). This means that one cannot detect the precise moment the pitch changes. Capturing this continuous wave in its entirety requires an analog recording system; what the microphone receives is exactly what's written onto the vinyl disk or cassette.

Digital sound:-

Digital sound is not a recording of the actual sound, but rather a combination of binary code, the utmost simplest machine language of zeros and ones, representing the sound's intensity and pitch at precise intervals with relative accuracy.

What is Animation:-

Animation is the process of designing, drawing, making layouts and preparation of photographic sequences which are integrated in the multimedia and gaming products.

Types of Animation

1.Traditional animation (cel animation or hand-drawn animation)

2.Stop motion animation (Claymation, Cut-outs)

3.Motion Graphics (Typography, Animated logo)

4.Computer animation

5. 2D animation

6.3D animation