



DEPARTMENT OF COMPUTER ENGINEERING

CSDLO5011 Multimedia System

Fifth Semester, 2020-2021 (Odd Semester)

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Roll No. : 67

Division : TE-CMPN

Assignment No. : 1

**Outcome : CSDLO5011.1- To identify basics of multimedia and multimedia system architecture
CSDLO5011.2-To understand different multimedia component**

Date of Assignment :

Date of Submission :

Particulars	Max. Marks	Marks Obtained
Timely Submission (TS)	3	
Originality of material (OM)	3	
Neatness (NT)	3	
Innovative Solution (IS)	3	
Total	12	

Grades – Meet Expectations (3 Marks), Moderate Expectations (2 Marks), Below Expectations (1 Mark)

Checked and Verified by

Name of Faculty : Pravin Jangid

Signature :

Date:

ASSIGNMENT NO.1

1. Define MULTIMEDIA.

Ans: 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 also refers to the use of electronic media to store and experience multimedia content.

Multimedia means that computer information can be represented through audio, video, and animation in addition to traditional media (i.e., text, graphics drawings, images).

2. List four examples of Multimedia application.

Ans:

- **Electronic messaging:** sending audio and video as attachments via email. Downloading audio and video. Sending simple text data through mails. It also provides store and forward message facility.
- **Document Imaging:** storing, retrieving and manipulating large volumes of data i.e. documents. Complex documents can be send in electronics form rather than on paper. Document image systems uses workflow method.
- **Multimedia in Education field:** Multimedia is used to instruct as a master (guide) because nowadays, multimedia CD are used instead of text books. Knowledge can be easily obtained by using multimedia CD in computer because multimedia CD includes text, pictures, sound and film which helps the students to understand more easily and clearly than the text books. For the use of multimedia as an education help the PC contains a high quality display. This all has promoted the development of a wide range of computer based training.
- **Multimedia in software:** Software Engineers may use multimedia in computer from entertainment to designing digital games; it can be used as a learning process. This multimedia software's are created by professionals and software engineers.
- **Multimedia on the Web:** offering various online facilities like live TV, Pre-recorded videos, photos, animations. Plug-in and Media Players are software programmes that allow us to experience multimedia on the web. Plug-ins is software programmes that work with web browser to display multimedia. When web browser encounters a multimedia file it hands off the data to the plug-in to play (or) display the file. Multimedia players are also software programmes that can play audio and video files both ON and OFF the web.

3. Give four advantages and disadvantages of Multimedia.

Ans:

Advantages:

- Creativity:It brings more life to discussions.
- Variety:It caters all types of learners.
- Cost-effective:Multimedia mostly requires only a one-time purchase of devices and software, which can be used unlimited times thereafter.
- Evaluation:It offers ideal learning assessment tools which are also entertaining for the students.
- Realistic Approach:It provides approaches which make learning more realistic.
- Wide Variety of Support:Multiple media formats are available for use, with different models being able to create multimedia.
- Trendy:The current trend of culture leans toward technology, and a great number of resources are being made available for different media formats.

Disadvantages:

- Accessibility:Multimedia requires electricity to be operated, which may not be available in some rural areas or may not be consistently available due to shortages and blackouts.
- Distracting:Multiimedia may take away the focus from the lesson due to its attention-grabbing formats.
- Costly:Production of multimedia is more expensive than others because it is made up of more than one medium.Production of multimedia requires an electronic device, which may be relatively expensive.
- Time Consuming:Creating multimedia requires more time.
- Requires Mastery:Multimedia requires consistent and long practice to master, which may take a lot of time and energy from the user.
- Limited Support/Compatibility:There is a wide variety of gadget models which arouses incompatibilities of media formats

4. Explain the difference between Animation and Video.

Ans:

Animation:

- Animation is an art of drawing sketches of object and then showing them in a series of frames so that it looks like a moving and living thing to us while a video is a recording of either still or moving objects. Thus the two arts are poles apart though serving the same purpose of allowing a person to view them like motion pictures.
- An animation starts in the minds of a cartoonist who is either given a story with characters or makes a series of pictures involving a character depicting it.
- Once the animator or the artist has completed his series of drawings, these are fed into a computer where you can add back ground music or voice to illustrate the story.

- The main work involves creating illustrations that take a long, long time for an artist even if he uses computer software for the purpose. Once converted in the video format, there is virtually no difference between an animation and a video as one can upload or download them just like normal videos.

Videos:

- Video is an electronic medium for the recording, copying, playback, broadcasting, and display of moving visual media. Videos are made with video camera. One need not have a person as he can shoot nature and whatever he likes. He can shoot the actions of a pet dog and then see it on the LCD of the video camera.
- He can replay the video on television. An animation, On the other hand, is the creation of the mind of a cartoonist who makes a series of pictures of a character displaying it or he is given a story with characters. Once the animator or the artist has completed his drawings, these are put into a computer where some manipulations are done so as to illustrate the story.
- Video is a medium. It originally referred to analog video-tape technology and has been extended to digital video capture technology.

5. List the use of Animation in Multimedia?

Ans:

1. Education

As we all know that people used to remember pictures or images more than text, So Animation is the only and the best way to understand the main motive of any education and it helps everyone to growth in their practical life.

Animation is used in education because it makes children watch the animation and not get bored with it allowing them to intake information.

2. Entertainment

The biggest use for animation is for entertainment. Animation is used on the TV, on your phones, and all over the internet. In television, animation is mostly used to occupy children, as is gives them something to laugh about and keep them entertained for long periods of time.

Programs such as Tom and Jerry are created to make the children laugh, and tell the audience that just because you are bigger than someone else, doesn't make you better.

Many movies these days are created using animation. Films like Shrek and Finding Nemo gained a massive profit from people watching the film and buying the merchandise.

3. Advertisement

Animation plays a big part in advertisement. Many big companies use animation in some kind of way to attract the audience. An example of animation in advertising is the Dancing Pony Advert

by the phone company 'Three'. This advert attracted millions of people all over the world to their website and in return they gained a massive profit.

Animation is also used for advertisement on the web. Many games companies create cool looking animations to attract the audience to play the game or visit the website.

Without animation in adverts, advertisement would be incredibly boring.

4. Scientific visualization

Animation is used to create models that are essential for research and study. Animation allows you to create 3D, realistic models that allow diagrams etc. to show accurate representations of an object.

An example of this is an X-ray. Doctors use this to get an accurate look at bones etc. so that problems can be fixed quicker and more efficiently.

5. Creative Arts

Animation is also used in creative arts to show and produce the skills needed to achieve a grade for example an IT course is creative arts, which is a specified skill in creativity. They would use animation in their work and much of it for presenting to the class they would use various diagrams and animations to get a topic across the class in presentations

6. Gaming

In gaming Industries most of the things depends on animation. Without model a programmer can't programmer a game and everything in the scene starting from modeling, Texturing, Rigging, lighting etc. all are done by the Animation students or professionals.

7. Simulations

Simulations are mostly used in the military for weapons training and to train for certain events. Pilots also use simulations to practice their flight training without having to spend money on fuel and equipment. Simulations are also used for practicing events and to get a predicted outcome for something. For example, when NASA are planning on putting a rocket in space, they will use simulations to get a predicted outcome of what might happen. This is essential because it can potentially save lives and resources

6. Give two advantages of Digital Video.

Ans:

- Digital video requires less network bandwidth for transmission and less storage space for recording data .Random Access allowed by the digital format enables us to quickly jump to any point in a movie. In analog format, we have to wind the tape backward and forward to reach a point in the movie.
- It is easy to duplicate digital video without loss of quality. A real-life video can be shot into digital format and edit it without losing the original quality of the film.digital video makes more efficient use of storage and transmission space than analog video because it is composed of discrete pulses rather than continuous waves.