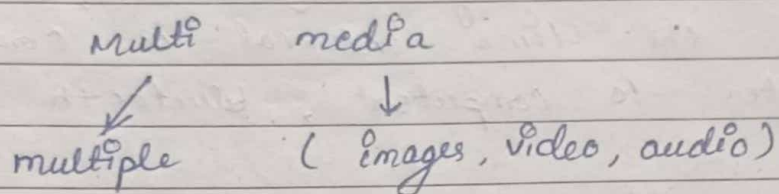


18/05/24

SE - 2 (IT)

Multimedia

* Multimedia refers to the usage of multiple media of communication, including video, images, text, audio etc.



* what is data stream. Explain the characteristics of it..

Data stream is a set of digital signal used for different kind of content transmission.

Data stream work in many ways with modern technology like streaming data from sensor, web browser and other system.

Data stream characteristics of multimedia system are categorised into 2 types :-

① Traditional data stream characteristics.

→ Asynchronous Data stream

Asynchronous transmission works on start and stop bit. In this transmission each character contain start and stop bit and irregular time interval (there is no fixed time in data packet transmission)

Uses :-

- Computer to printer
- Keyboard to printer
- Computer to card reader.

→ Synchronous Data Stream

It is a data transfer method in which continuous stream of data signal added by timing signal which help to ensure synchronization of receiver and sender's the time interval is constant.

Ex:- Computer to Computer, bluetooth to Computer

→ Iso synchronous

It is similar to synchronous transmission but time interval between block is almost zero.

② Continuous Media

→ Time Interval between consecutive ~~faces~~ packet.

* Time interval b/w two consecutive packet is constant then this is called strongly periodic data stream.

* Time interval b/w two consecutive packet is not constant then this is called weakly periodic data stream.

→ Variation of amount b/w consecutive packet.

* If amount of data stays constant during the life time of amount of data

* If the amount of data stream changes periodically and not shows strongly regular than it is called weekly regular.

Application of Multimedia.

Evolution of Multimedia.

Ques Define multimedia system. Explain its main properties?

The word multi signifies many which means multimedia that allows information to be easily transformed it is the presentation of text, pictures, audio, video, link tools etc that allow user to navigate create and communicate using a computer.

* Properties of multimedia.

- Combination of media.
- Independence of media.
- Computer supported integration. (Reels)
- Communication System.

Application of Multimedia

Electronic Messaging

Sending audio and video as attachment via email.

Downloading audio and video

→ Education field

Learning through the use of pictures and words.

Ex:- Watching a Powerspoint presentation.

→ Entertainment

Used in movies, for entertainment, Gaming.

→ Advertisement

Used to promote business and products.

→ Business

Application of Business multimedia includes, product demos, instant messaging, training employees using Projectors.

② Evolution of Multimedia

- The first interactive installation called 'The Ultimate display'. This installation allowed users to experience virtual reality and was starting point for Multimedia technology.
- In 1970's first Multimedia computer system were developed. This system could display images and text on the same screen.
- In 1990's, the world wide web was introduced to the public and internet became more accessible. This led to creation of multimedia website, which combine text, images and video.
- In 2000s, Social media platform such as Facebook, Youtube were created which allowed users to share multimedia content with each other.
- Present, virtual reality and AI is becoming more advanced which allows users to experience multimedia in immersive way.

② Hardware And Software Requirement

→ Hardware Requirement

- CPU - Where processing and synchronization of all activities take place.
- Input Device
 - Keyboard
 - Mouse
 - Scanner
 - Touch screen
- Output Device
 - Monitor
 - Printer
- Storage device
 - HDD
 - Pen-drive
 - CD-ROM

→ Software Requirement

- Painting and drawing tools
- 3-D Modeling and animation tools
- Image editing tools
- Sound editing tools
- Animation video