FACULTY OF ENGINEERING & TECHNOLOGY

BCS -504 Computer Graphics & Multimedia

Lecture-25

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➢ **INTRODUCTION TO MULTIMEDIA**

What is Multimedia?

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

Multimedia is the field concerned with the computer controlled integration of text, graphics, drawings, still and moving images (Video), animation, audio, and any other media where every type of information can be represented, stored, transmitted and processed digitally

Multimedia is a media that uses multiple form of information content and information processing
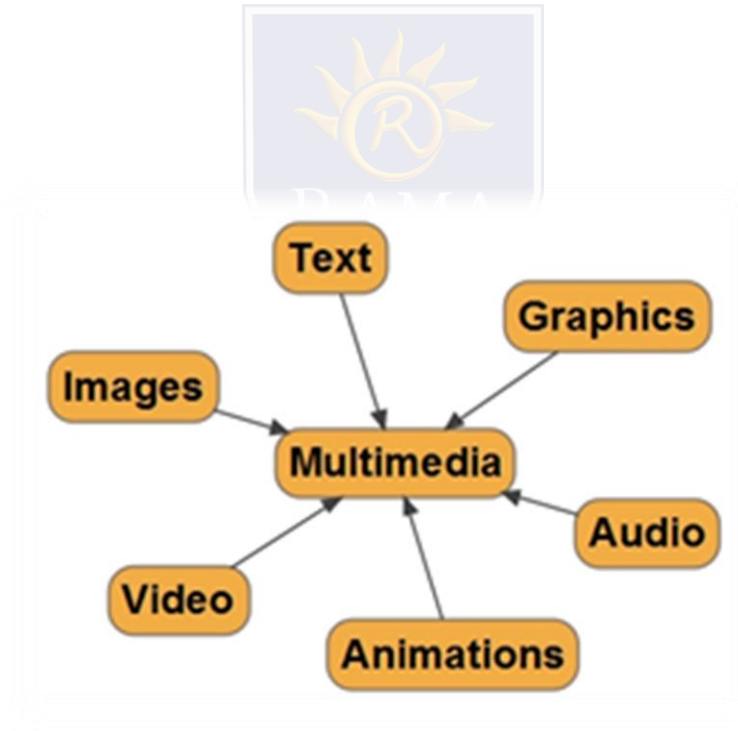
Multimedia

Multimedia – using more than one media:
- Text
- Graphics
- Audio
- Animation
- Video
- Images

DIGITIZED MULTIMEDIA

Digitization is the process of converting information into a digital format . In this format, information is organized into discrete units of data (called bit s) that can be separately addressed (usually in multiple-bit groups called byte s).

Text and images can be digitized similarly: a scanner captures an image (which may be an image of text) and converts it to an image file, such as a bitmap . An optical character recognition (OCR) program analyzes a text image for light and dark areas in order to identify each alphabetic letter or numeric digit, and converts each character into an ASCII code.

Today, this integration is accomplished by digitizing different media elements and then manipulating them with computer software

Digitized – Media elements have been captured in a code that the computer can understand

Importance of multimedia

"Tell me and I will forget; show me and I may remember; involve me and I will understand" (Chinese proverb)
Each person learns differently and each person is inspired by something different. The use of multimedia allows developers to tap into these differences

In fact, research shows that people remember only 20% of what they see, 30% of what they hear. When they see and hear it, they remember 50%, if we include some interaction; they will remember 80% of it
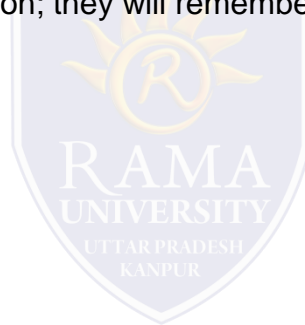
BENEFITS OF MULTIMEDIA

- Addresses multiple learning styles
- Provides an excellent way to convey content
- Uses a variety of media elements to reinforce one idea
- Activates multiple senses creating rich experiences
- Gives life to flat information
- Enhances user enjoyment
- Improves retention
- Enables users to control Web experience

Introduction To Multimedia

Where Do We Use Mulimedia

- Multimedia in Business:

    Business application that are multimedia based include presentations, training, marketing, advertising, product demos, databases, catalogues, and networked communications. Multimedia is getting much utilization in training programs.

- Multimedia in School:

    Schools are perhaps the most ideal target for multimedia. Its rich set of media is potential for delivering effective teaching. Multimedia equipped education lets the students. Learn at their own pace and at their own time. It is ideal in distance education and open learning systems wherein students need not to be physically present in class. Students can learn while having fun

- Multimedia at Home:

    From cooking to gardening, home design to repair, indeed multimedia has made itself useful at home. It enables you to convert your video to digital format, store your pictures in a compact disc, and many more. Today, multimedia is also being applied in our TV and soon, multimedia projects will reach out homes via interactive TV (iTV).

- Multimedia in Public Places:

    Multimedia is present in standalone terminals, or kiosks, in airport terminals, hotels, mall, train stations, museums, grocery stores, and more. It provides us information and help about a particular place. Interactive kiosks enables you to make a transaction without talking to a sales agent.

- Multimedia in the Internet:

    Multimedia was introduced in the Internet with the advent of the WWW. In fact, the Web is the multimedia part of the internet. In the early stages of the internet, you can view information in plain text. The Web enables multimedia to be delivered online. Playing live Internet games with multiple players around the world has caught much attention. Some e-learning systems use multimedia on the internet as a method to deliver learning materials to students anywhere.

WEB-BASED MULTIMEDIA CATEGORIES

- Electronic Commerce (E-Commerce)
  Involves using web to serve clients and customers and is one way to provide solutions for companies that wish to sell products or services online. Multimedia is used extensively in advertising and marketing.

- Web-Based Training and Distance Learning
  The Web offers many options for delivering and receiving education over the distance. Web-based training is an instruction delivered over the Internet using a web browser

- Research and References
  Today, newspaper, newsletters, magazines, books, encyclopedias and other reference materials are being offered online via Web. In many cases, they represent "Electronic" versions of existing research and reference materials. An increasing number of self-help and how-toguides are being offered as interactive multimedia applications on the Web. Some advantages: Cross-referencing, Expanded search capabilities, multisensory experiences.

- Entertainment and Games
  They are the examples of some of the most popular and most varied interactive multimedia sites available

MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	Lines are defined by ………	coordinate end points	coordinate front points	both a & b	none of these
2	Graphics commands in the application program are translated by the ……. into a display file stored in the system memory.	sOftware package	graphics package	both a & b	none of these
3	A joy stick consists of………. vertical lever mounted on a base that is used to steer the screen cursor around	small	huge	both a & b	large
4	joy sticks selects …….. positioning according to actual movement of stick	Image	screen	destop	pivot
5	Digitizer is common device for ……………………. position on an object.	drawing painting	interactively selecting coordinates	All of these	none of these

REFERENCES

- http://www.engppt.com/search/label/Computer%20Graphics