





Multimedia

Further reading: Glossary Pg. 85, 126





Multimedia refers to using computers to integrate **text**, graphics, animation, audio, and video into one application.



-  Most multimedia applications are **interactive**, so that users may choose the material to view, define the order in which it is presented, and obtain feedback on their actions.
-  Interactivity also makes multimedia very suitable for video games, electronic newspapers and magazines, electronic books and references, simulations, virtual reality, and computer-based training.
-  Multimedia applications can be created by using a multimedia authoring software.
-  Many multimedia applications are also deliverable via the World Wide Web.



Graphics

A **graphic** is a digital representation of information such as a drawing, a chart, or a photograph.

-  Graphics were the first media used to enhance the originally text-based Internet.
-  Two of the more common graphical formats on the Web are JPEG and GIF.
-  Other graphical formats such as **BMP** and **TIFF** have larger file sizes, and may require special viewer software to display on the Web.
-  To reduce download times for graphics, some Web sites use **thumbnails**, which is a smaller version of a larger graphical image that a user may click to display the full-sized image.


Audio


Audio can be music, speech, or any other sound.


-  Common audio formats include **WAV**, MID, and MP3.
-  Some Web sites use streaming audio, which allows a user to listen to the sound as it downloads to the computer.
Two accepted standards for streaming audio on the Web are **Windows Media Player** and **RealAudio**.

Video

Video consists of full-motion images that are played back at various speed.

 Most video is also accompanied with audio.


 **MPEG** is a popular video compression standard defined by the **Moving Picture Experts Group (MPEG)**.

 Streaming video allows a user to view longer or live video images as they download to the computer from the Web.

Two popular streaming video formats are **Windows Media Player** and **RealVideo**.


What is Animation?

Animation is the appearance of motion that is created by displaying a series of still images in rapid sequence.

 **Animated GIF** is a popular type of animation format, which combines several images into a single GIF file.

Multimedia Authoring Software

Multimedia authoring software combines text, graphics, animation, audio, and video into an application.

 Multimedia is widely used in video games, electronic newspapers and magazines, electronic books and references, simulations, virtual reality, and computer-based training.

 Popular multimedia authoring software includes **Macromedia AuthorWare**, **Macromedia Director**, and **Macromedia Flash**.

Multimedia computers have facilities for handling sound and video as well as text and graphics. Most computers are now sold with a multimedia capacity.

Usefulness of Multimedia

- Video conferencing
- Disabled persons
- Encyclopedias
- Games

Exercise:

1. Explain why a multimedia application requires a large amount of storage space?
2. What do you understand by the term multimedia?
3. Name one software application type that uses multimedia.
4. Name two typical devices of a multimedia equipped PC.

5. *'Businesses may highly benefit from the application of multimedia'*
Discuss.