

## Multimedia

If a system presents some information through more than two media, it is known as multimedia. For example, TV presents audio and video; book presents text, image, and graphs, computer, etc.

The advanced computer system is a great example of modern multimedia.

### *Multimedia Computer System*

Multimedia computer system has high capacity to integrate different media including text, image, graphics, audio, and video.

### *Significant Features of Multimedia Computer System*

Following are the major features multimedia computer system –

- Its Central Processing Unit (CPU) is very fast, as it needs to process large amount of data.
- It has huge secondary storage capacity.
- It has huge primary memory.
- It has high capacity graphic card that helps in displaying graphics, animation, video, etc.
- The sound system makes it easy to listen to audio.

With all these features (discussed above), a computer system is known as high end multimedia computer system.

### *Multimedia Components*

Following are the major components of a multimedia computer system –

- Text:
  - Alphanumeric and some other special characters. Keyboard is usually used for input of text.
- Graphics
  - It is technology to generate, represent, process, manipulate, and display pictures.
- Animation
  - Computer animation is a modern technology, which helps in creating, developing, sequencing, and displaying a set of images (technically known as 'frames').
- Audio
  - This technology records, synthesizes, and plays audio (sound).
- Video
  - This technology records, synthesizes, and displays images (known as frames) in such sequences (at a fixed speed) that makes the creation appear as moving; this is how we see a completely developed video. In

order to watch a video without any interruption, video device must display 25 to 30 frames/second.

### *Some fields of application*



Presentation software



E-book



E-learning



Accessibility in disability



Entertainment



Videoconferencing



E-shopping



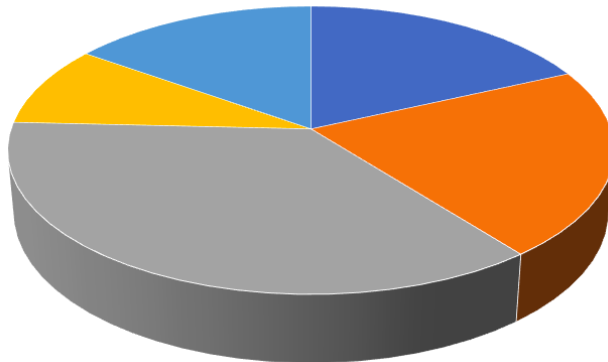
E-government



Online banking



High quality sound



Pictorial representation



Digital Library



Virtual reality

### *The first multimedia computer*

Early home computers lacked the technology for true multimedia. The games for these systems were very rudimentary. The Amiga 1000 from Commodore International has been called the first multimedia computer.



The Amiga 1000 from Commodore International

### *Examples of multimedia hardware*



Graphics drawing tablet €65



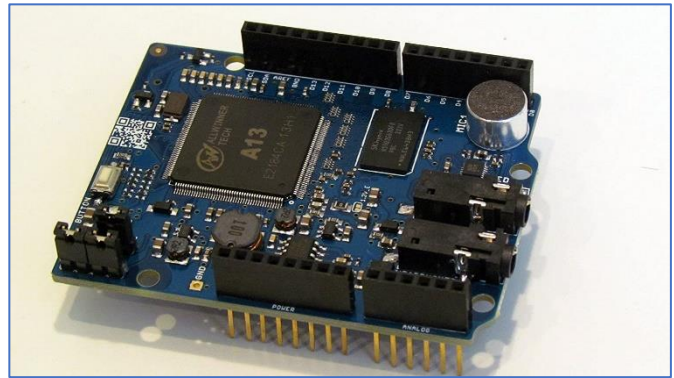
Speakers €80



Projector €60



Headset €85



Speak synthesizer for Arduino €60

*Examples of multimedia software*



Nero - €105

Some features:

- One central clean storage space.
- Creates automatically stunning movies and slideshows.
- Backups to your cloud.



PaintShop Pro - €43

Some features:

- Photo-editing and design software: Edit, enhance, retouch, and add text or paint to images.
- Drawing and painting tools.
- Customizable workspace.
- Import/export a variety of file formats.



Music editor – free download

Some features:

- Easily choose the songs from the list.
- Convert from one format to another. Supports a large number of formats like - MP3, AAC, WAV, M4A,...
- Supports large number of formats in all the features - Music Cutter, Converter,...
- Share your creations with the world! Share on Facebook, Whatsapp, email and more, share more songs
- Super fast processing & rendering!

### *Multimedia PC*

These are the specifications for a PC designed for multimedia games today (2020).

Processor 3.5 GHz, quad-core Memory: 8 GB RAM GPU with 8 or 16GB Hard Drive: 1TB (SSD or HDD)
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Reference:

[https://www.tutorialspoint.com/basics\\_of\\_computer\\_science/basics\\_of\\_computer\\_science\\_multimedia.htm](https://www.tutorialspoint.com/basics_of_computer_science/basics_of_computer_science_multimedia.htm)