

CHAPTER 1

INTRODUCTION TO MULTIMEDIA



What is Multimedia?

- Derived from the word “Multi” and “Media”
 - **Multi**
 - Many, Multiple,
 - **Media**
 - Distribution tool & information presentation – text, graphic, voice, images, music and etc.



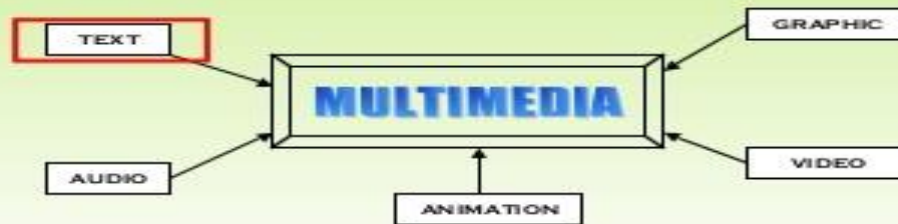
Definition of Multimedia

- Multimedia is a combination of text, graphic, sound, animation, and video that is delivered interactively to the user by electronic or digitally manipulated means.



5 Elements of Multimedia

TEXT

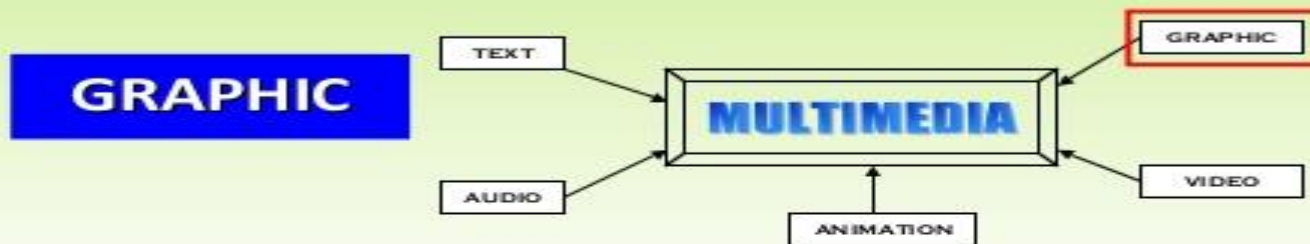


- A broad term for something that contains words to express something.
- Text is the most basic element of multimedia.
- A good choice of words could help convey the intended message to the users (keywords).
- Used in contents, menus, navigational buttons

- Example

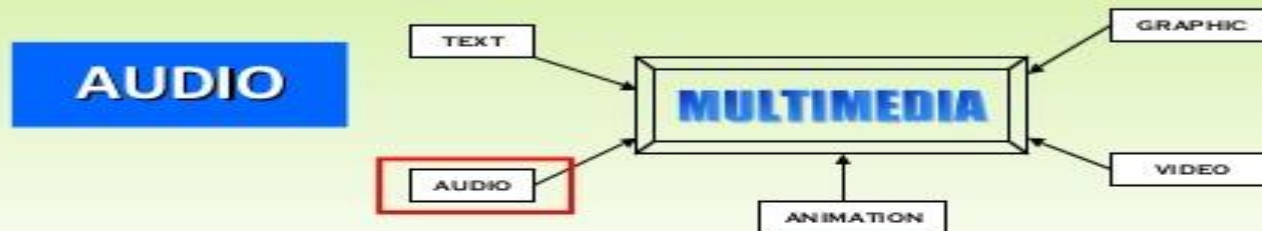
ROAD SAFETY	Basic	Intermediate	Advanced
First, before crossing the road, make sure you look to your left, to your right and then left again.			
Then, walk carefully to cross the road.			

5 Elements of Multimedia



- Two-dimensional figure or illustration
- Could be produced manually (*by drawing, painting, carving, etc.*) or by computer graphics technology.
- Used in multimedia to show more clearly what a particular information is all about (*diagrams, picture*).
- A Picture means a thousand words

5 Elements of Multimedia

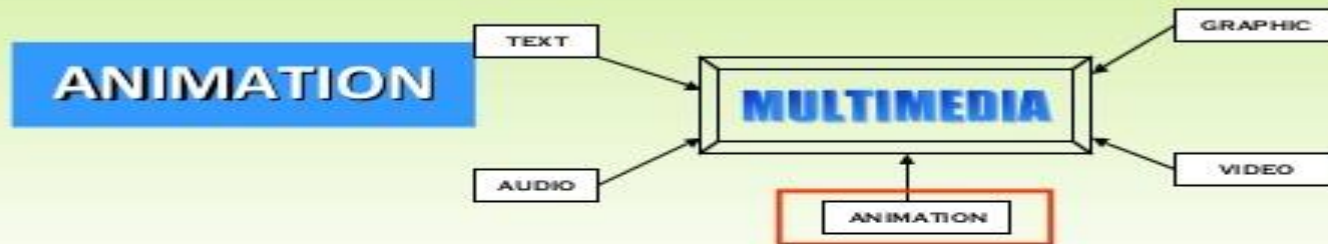


- Produced by vibration, as perceived by the sense of hearing.
- In multimedia, audio could come in the form of speech, sound effects and also music score.

• Example

The screenshot displays a multimedia software interface. At the top, there are tabs for "ROAD SAFETY", "Basic", "Intermediate", and "Advanced". Below the tabs, there is a text instruction: "First, before crossing the road, make sure you look to your left, to your right and then left again." This text is followed by three small video thumbnails, each showing a cartoon character standing on a road. To the right of the video thumbnails, there is a control panel with the following settings: "Sound: NG 12905", "Effect: Custom", "Sync: Start", "Repeat: 1", and "44 kHz Stereo 16 Bit 67.2 x 305.9 KB". At the bottom of the interface, there is a timeline and a list of tracks.

5 Elements of Multimedia



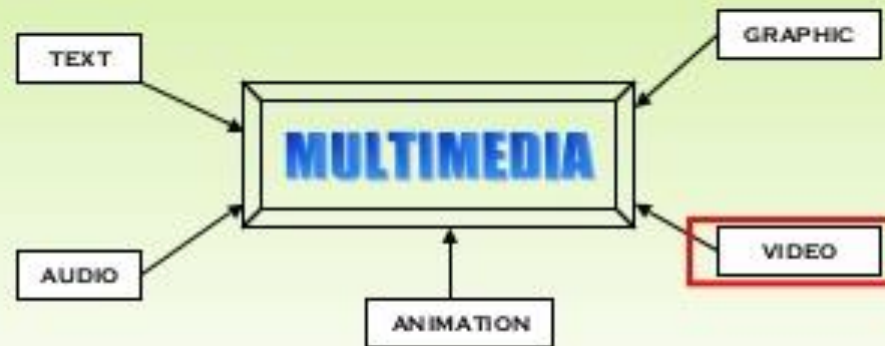
- The illusion of motion created by the consecutive display of images of static elements.
- In multimedia, animation is used to further enhance / enriched the experience of the user to further understand the information conveyed to them.

- Example



5 Elements of Multimedia

VIDEO



- Is the technology of capturing, recording, processing, transmitting, and reconstructing moving pictures.
- Video is more towards photo realistic image sequence / live recording as in comparison to animation.
- Video also takes a lot of storage space. So plan carefully before you are going to use it.

Interactive Multimedia

- When the user is given the option of controlling the elements.

Hyper Media

- A combination of hypertext, graphics, audio, video, (linked elements) and interactivity culminating in a complete, non-linear computer-based experience.

Example

- Hyper Text and Hyper Media



- Main Page
1. Video link
 2. Image link
 3. Audio Link



Linear VS Non-Linear

LINEAR

- A Multimedia Project is identified as Linear when:
 - It is not interactive
 - User have no control over the content that is being showed to them.
- Example:
 - A movie
 - A non-interactive lecture / demo show



Linear VS Non-Linear

NON-LINEAR

- A Multimedia Project is identified as Non-Linear when:
 - It is interactive
 - Users have control over the content that is being showed to them.
 - Users are given navigational control
- Example:
 - Games
 - Courseware
 - Interactive CD



Authoring Tools

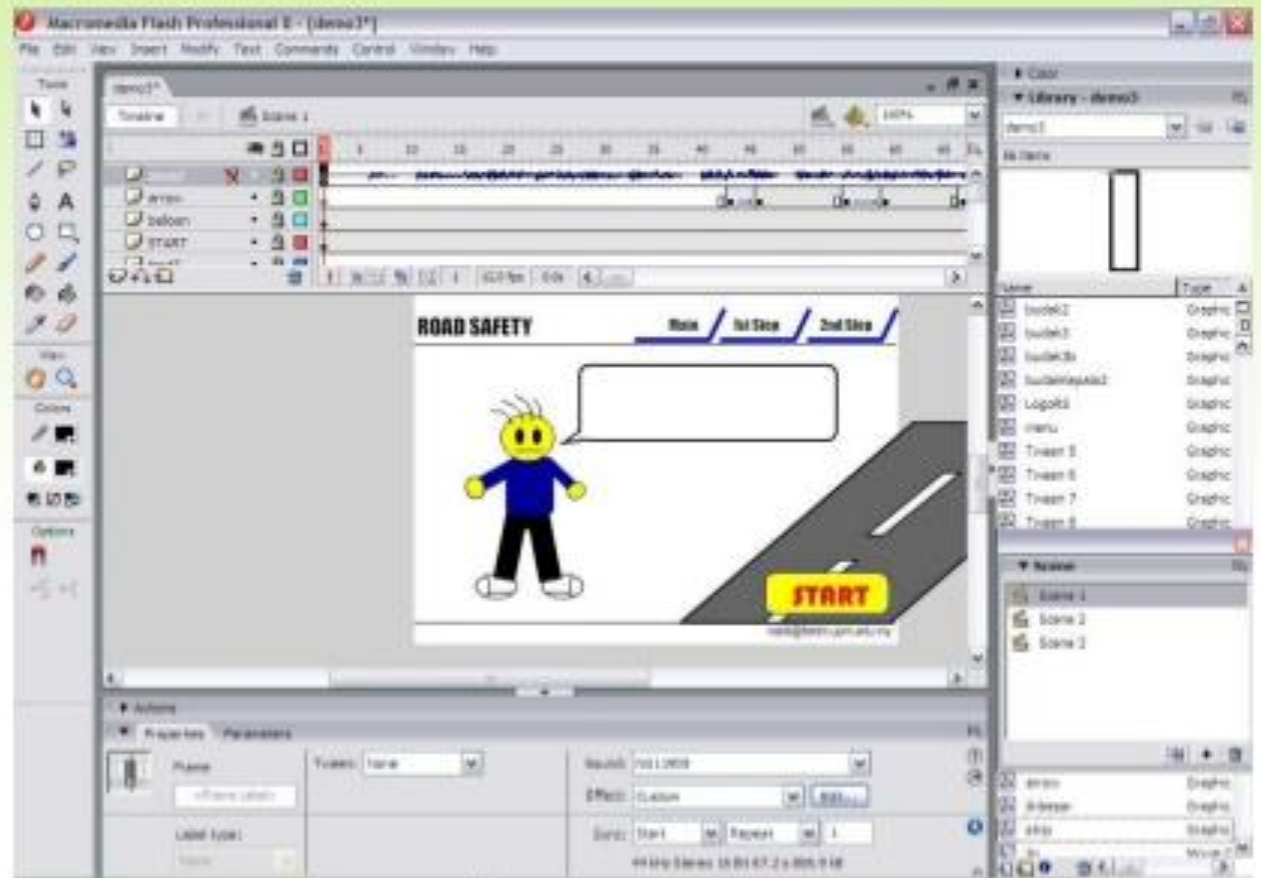
- Use to merge multimedia elements (text, audio, graphic, animation, video) into a project.
- Designed to manage individual multimedia elements and provide user interaction (if required).



Authoring Tools

Example:

- Macromedia Authorware
- Macromedia Director
- Macromedia Flash
- Microsoft Power Point



Importance of Multimedia

- There are a number of fields where multimedia could be of use. Examples are:-
 - Business
 - Education
 - Entertainment
 - Home
 - Public Places



Importance of Multimedia

- **Business**

- Use and Applications

- Sales / Marketing Presentation
- Trade show production
- Staff Training Application
- Company Kiosk



Importance of Multimedia

- **Education**

- Use and Applications

- Courseware / Simulations
- E-Learning / Distance Learning
- Information Searching



Importance of Multimedia

- Entertainment

- Use and Applications

- Games (Leisure / Educational)
- Movies
- Video on Demand
 - Online



Importance of Multimedia

- Home

- Use and Applications

- IPTV
- Satellite TV
- Games



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Importance of Multimedia

- Public Places
 - Use and Applications
 - Information Kiosk
 - Smart Cards, Security

