MMGD0203 MULTIMEDIA DESIGN

Chapter 5
Multimedia Software
Topics:

- Authoring
- Multimedia Authoring Tools
- Text Editors
- Paint Program
- Image Editor
- Drawing program
- Wave Editing Program
- Video editing programs
Multimedia Authoring

- Multimedia authoring involves collating, structuring and presenting information in the form of a digital multimedia, which can incorporate text, audio, and still and moving images.
Multimedia Authoring Tools

• A program that helps you write hypertext or multimedia applications.
• Authoring tools usually enable you to create a final application merely by linking together objects, such as a paragraph of text, an illustration, or a song.
Multimedia Authoring Tools

- Most authoring systems also support a scripting language for more sophisticated applications.
- Authoring tools require less technical knowledge to master and are used exclusively for applications that present a mixture of textual, graphical, and audio data.
Multimedia Authoring Tools

- Two basic features:
  - Ability to create and edit a product
  - Presentation scheme for delivering product
Multimedia Authoring Tools

Four main perspectives in multimedia authoring tools:

- **Tool** (any software package that could authors multimedia product)
- **Product** (the result of combining all multimedia components)
- **Developer** (designers, programmers, and multimedia authors)
- **End user** (customer or viewer)
Multimedia Authoring Tools

There are three types of authoring tools, which are divided by the style in which the multimedia presentation is created:

- Card-based
- Time-based
- Icon-based
1. Card-based Authoring Tools

- Using a card stack metaphor.
- Cards are developed that have different elements associated with them and are put in stacks.
- You can link the cards by allowing the user to click on buttons or other elements and jump to a different card in the stack.
Multimedia Authoring Tools

1. Card-based Authoring Tools Example:

- Hypercard
- ToolBook
- HyperNext Studio
- Hyper Studio
- PhytonCard
- Revolution
Multimedia Authoring Tools

2. Time-based Authoring Tools

- Time Based Authoring Programs use a movie metaphor.
- Like a movie on videotape, you start the multimedia title and it plays until some action causes it to pause or stop.
Multimedia Authoring Tools

2. Time-based Authoring Tools

- These programs also allow for branching to different parts of the movie, and any amount of user control and interactivity may be built in.
- Good for creating animations.
Multimedia Authoring Tools

2. Time-based Authoring Tools Examples:

- Director
- Flash
3. Icon-based Authoring Tools

- With icon-based programs, you use symbols in a flowchart scheme.
- Each icon represents a particular event.
- For example, the Wait icon stops the process until the user clicks the mouse button or presses a key or a specific amount of time passes.
3. Icon-based Authoring Tools

- An advantage of icon-based programs is that you can easily see how a title is structured, that is, the flow of a program and especially the branching.
Multimedia Authoring Tools

3. Icon-based Authoring Tools Example:

- Macromedia Authorware
Using Programming Language

- **Multimedia** product still can be developed using programming language.
- Quality is about the same.
- Amount of work to code every element and function in the product can be extensive and labor-intensive.
- **Authoring tools** can save a lot of time and money.
- Not suitable for beginners.
Text Editor

- A **text editor** is a type of program used for editing plain text files.
- Text editors are often provided with operating systems or software development packages, and can be used to change configuration files and programming language source code.
Text Editor

- Common features:
  - Cut, copy and paste
  - Text formatting
  - Undo and redo
  - Data transformation
Text Editor

- Examples:
  - Windows Notepad
  - Emacs
Image Editor

• A graphics program that provides a variety of special features for editing bitmap images.
• Common features:
  – Selection
  – Layers
  – Image size alteration
  – Crop
  – Enhancing images
  – Change color depth
Examples of Image Editor

- Adobe Photoshop
- GIMP (freeware)
- Microsoft Office Picture
- Fotografix (freeware)
Drawing Program

- Drawing program is a computer program that allows users to compose and edit vector graphics images interactively on the computer screen.
Drawing Program

- Drawing programs are better for
  - graphic design
  - page layout
  - typography
  - Logos
  - sharp-edged artistic illustrations (e.g. cartoons, clip art, complex geometric patterns)
  - technical illustrations, etc.
Drawing Program Examples

- Xfig
- Inkscape (freeware)
- Adobe Illustrator
- CorelDRAW
Computer Animation

- Computer animation can be created with a computer and animation software.
- Some impressive animation can be achieved even with basic programs; however, the rendering can take a lot of time on an ordinary home computer.
Computer Animation Techniques

1. Tweening

- *Inbetweening* or *tweening* is the process of generating intermediate frames between two images to give the appearance that the first image evolves smoothly into the second image.
Computer Animation Techniques

2. Morphing

- **Morphing** is a special effect in motion pictures and animations that changes (or morphs) one image into another through a seamless transition.
Computer Animation Techniques

3. Onion Skinning

- Onion skinning a technique used in creating animated cartoons and editing movies to see several frames at once.
- This way, the animator or editor can make decisions on how to create or change an image based on the previous image in the sequence.
Computer Animation Software

- Adobe Flash
- Adobe Image Ready
- XARA 3D
- Ulead GIF Animator
Waveform Editor

• Waveform programs is a computer application for audio editing, i.e. manipulating digital audio.
• Allow the user to do the following:
  – Record audio and store as digital audio
  – Mix multiple sound sources/tracks
  – Apply simple or advanced effects or filters
  – Conversion between different audio file formats, or between different sound quality levels
Examples of Waveform Editor:

- Adobe Audition
- Creative Wavestudio
- Goldwave
- Sound Forge
- Wavelab
Video Editing Program

- **Video editing program** is application software which handles the editing of video sequences on a computer.
- Common features:
  - Splitting
  - Add background sound
  - Transition
  - Crop
  - Add title
  - Add special effect
Examples of Video Editing Program

- Adobe Premiere
- Pinnacle Studio
- Video Studio
- Windows Movie Maker
Lab Practical

TEXTANIM - animated text generator
http://www.textanim.com

3D Editor
http://www.3dtin.com/

LunaPic - Free Online Photo Editor and Edit Gif Animation
http://www133.lunapic.com/editor/