Final Study Guide

Arts & Communications

CHAPTER

Programs Used in Multimedia

Developing a multimedia production requires an array of software to create, edit, and combine text, sounds, and images.

Elements of Multimedia

Different software is used to create the various elements of multimedia. These elements are:

- Text
- Graphics and animation
- Sound or audio
- Video

Programs for Graphics

Graphics software is used for creating, editing, manipulating, and storing graphics.

- Graphics software is also known as image management software.
- It works with still and animated drawings, as well as photographs.

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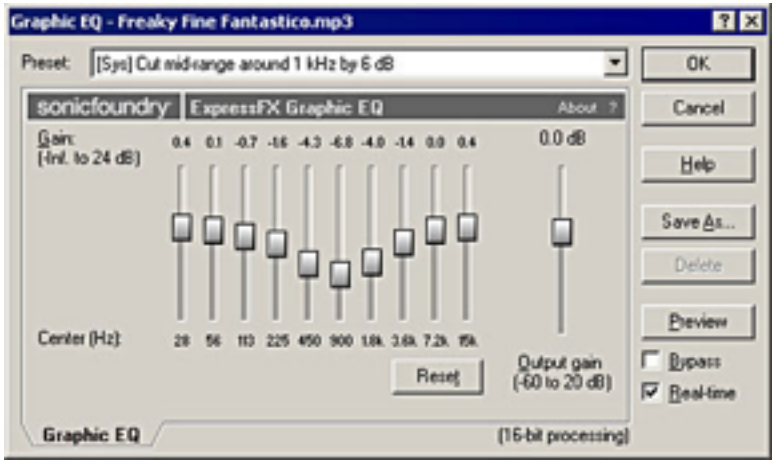
Programs for Sound or Video

Most operating systems have the capability of playing sound or video files.

- Audio or sound software is used to create or edit music or sound files.
- Video software is used to edit video files.



CHAPTER 7

Text in Multimedia

Text is used in multimedia projects in many ways:

- Web pages
- Video
- Computer-based training
- Presentations

Guidelines for Using Fonts

- Do not use more than 2 font styles in the same project.

More Tips for Using Fonts

- Use fancy or whimsical fonts sparingly for special effects or emphasis.
- Keep paragraphs and line lengths short.
- Use bold, italic, and underlining options sparingly for emphasis.

More Guidelines for Using Fonts

- Avoid using text in all uppercase letters.
- Use font, style options, size, and color consistently.
- Provide adequate contrast between text and background when choosing colors.
- Always check spelling and grammar.

CHAPTER

What is a graphic?

A graphic can be a:

- Chart
- Drawing
- Painting
- Photograph
- Logo
- Navigation button
- Diagram

CHAPTER

What do graphics look like?

Graphics can be:

- Black and White
- Grayscale
- Color
- Still
- Animated

What do graphics do?

Graphics can:

- Illustrate or demonstrate procedures
- Clarify data
- Convey ideas
- Tell stories
- Add visual appeal

CHAPTER

Computer Graphics Technology

Images created or edited on computers are either:

- Bitmapped graphics
- Vector graphics

What are bitmapped graphics?

Bitmapped graphics, also known as raster graphics, consist of grids of tiny dots called pixels. Each pixel is assigned a color.

- Can be a continuous-tone image, such as a photograph
- Bitmap graphic editors are called paint programs
- Enlarging a bitmap graphic may cause the image to lose crispness and clarity

What are vector graphics?

Vector graphics use mathematical formulas to define lines, curves, and other attributes.

- Generally much smaller than raster graphic files
- Vector graphic editors are called draw programs
- Do not lose clarity as you enlarge them.
- Appear as bitmaps on computer monitors because computer monitors consist of pixels

Graphic File Formats

A computer can save and interpret graphic images in a variety of formats. Some of the most common are:

- GIF (Graphics Interchange Format)
- JPEG (Joint Photographic Experts Group)
- TIFF (Tagged Information File Format)
- PIC (PICTure)
- BMP (bitmap)
- TGA (Targa)
- PNG (Portable Network Graphics)

What is animation?

Animation is when images achieve the illusion of motion.

CHAPTER

Animation in Multimedia

Some common uses of animation include:

- An animated navigation button that changes when the cursor passes over it (rollover)
- Tutorials using animated graphics for demonstration
- Web site advertisements that are animated to attract attention
- Computer games using animation to simulate action

CHAPTER

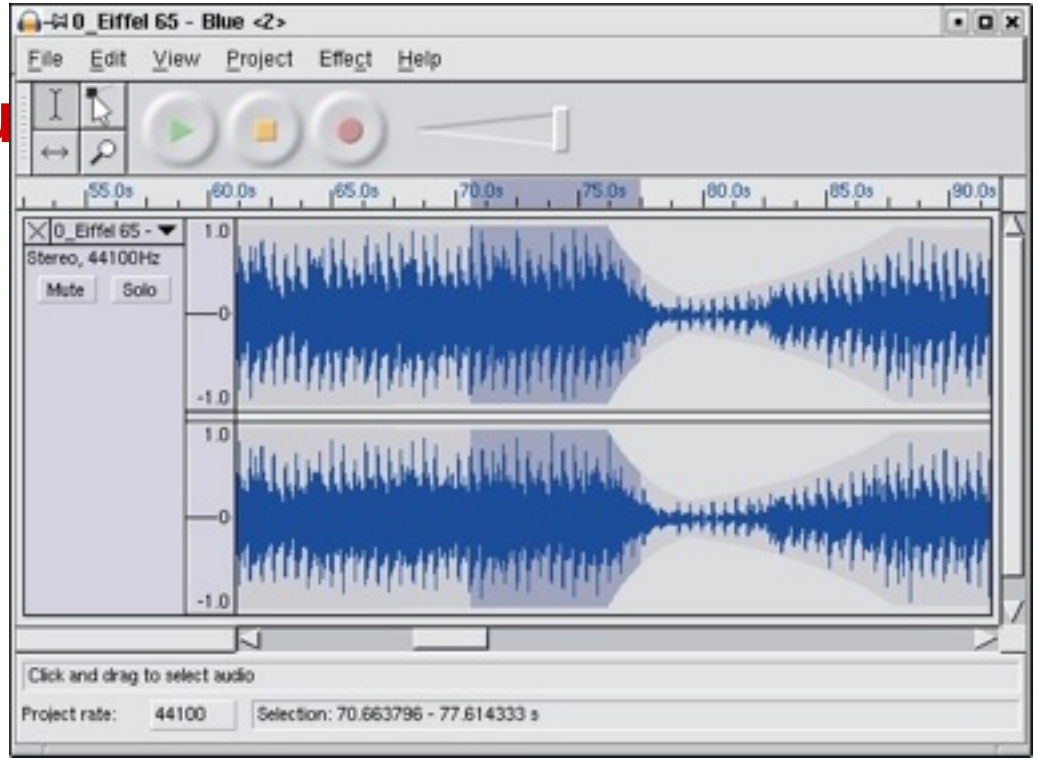
Audio in Multimedia

In a multimedia production, sound and music are crucial in helping to establish moods and create environments.

CHAPTER 9

Digital Audio Recording

Digital recording devices capture sou by sampling the sound waves.



Digital Audio Quality

The quality and size of digital audio depends on:

- The sampling rate
- The sample size
- The number of channels
- The time span of the recording

Audio File Formats

An audio file's format determines what files a PC can open and play, and how much space the file occupies on a disk. File formats include:

- MP3
- WAV

WAV Format

WAV is a standard for sound files on Windows and Macintosh PCs. WAVs:

- Do not compress audio as much as MP3s
- Are generally used for sound effects and other small files

CHAPTER

Video Editing Final Cut Pro

- Voice Over: an audio track that has been separately added to the video to provide narration
- Clip: an individual section of a video or audio file
- Compositing: combining two images together to create a single image; use this to place an image over the top of your video

CHAPTER

Video Editing Final Cut Pro

- Compression: this is a process that can be used to make your video use less memory; however, the more memory you save, the more quality you lose
- Export: create a new file in a different format (for example, a single QuickTime movie) so that other programs can read it

CHAPTER

Video Editing Vocabulary

- Import: bringing material into a video editing program to use in a project
- FPS -FRAMES PER SECOND- used in animation and video

CHAPTER

Flash Animation Vocabulary

- Flash- A vector-based rich media drawing and animation program from Adobe
- Keyframe- A frame in an animation that marks a key point of change or action.
- .fla - is the original editable Flash file
- .swf - is the published flash movie- used on the web for animation and movies

CHAPTER

Flash Animation Vocabulary

- Motion Tween- Animation where the COMPUTER creates the “frames in Between or tween-
- Tweening—-“the frames between” The addition of frames in between keyframes
- Frame - A single complete graphic image that is displayed in sequence with other complete graphic images.