Video on the Net

...I want my DVD...MTV

Video for the Web

- Video used more for lots of purposes.
  - Entertainment
  - Education
  - Sales
- Tips on making the most of Web videos.

Number one goal

- Want easy compression for fast downloads.
- Keep in mind the download capabilities of your audience.
- If 56K modem, limit the amount of movement. Provide the movie in several downloadable formats/speeds.
- Problem of delivering video is tied to bandwidth.

Formats

- Video
  - QuickTime (Apple) = .mov, .qt
  - Real Video/Audio (RealNetworks) = .ra, .ram, .rm, .rmm
  - Audio Visual Interleave = .avi
  - Windows Media = .asf, .asx
  - Audio = .wav

Delivering video (slow to fast)

- Modem
- ISDN (Integrated Services Digital Network)
- DSL (digital subscriber line)
- Cable

Popular sizes

- 1024x768 or 640x480 = full screen (video, computers, DVD)
- 320x240, 256x192, 240x180 = CD-ROM
- 192x144, 160x120, 128x96 = Web

What to use for this class?

- 160x120 = Web
- 320x240 = CD-ROM
What does it hold?
- CD-ROM = 650 megabytes
- DVD = 4.7 gigabytes

Compressing files
- “Raw” video (uncompressed) is 30 to 40 times the size of compressed.
- For Web or CD-ROM, use fewer frames per second.
- CD-ROM = 15 fps
- Web = 5-15 fps
- Compress files with MediaCleaner.

Audio
- Audio: use high-quality Web audio.
- Audio does not take up much bandwidth.
- Check this site:
  - [http://foodsae.ucdavis.edu/music.html](http://foodsae.ucdavis.edu/music.html)

Streaming audio
- Popular for radio stations.
- Popular for start-up musicians.
- Cheap, easy to do.
- Share audio files across the world.
- Copyright issues!!!

Shooting for Web videos
- Simple, simple, simple!!
- Stationary objects and people are easier to compress.
- If you use pans/zooms, do them slowly.
- Keep shot composition and lighting simple.
- But don’t keep it so simple that it bores your audience.

Shooting for Web videos
- Use a tripod. Minimizes image degradation.
- If you do a pan, make sure the camera is mounted on a good tripod.
- Tight shots let viewers recognize faces and objects. No large vistas, panoramic shots.
- Background: want to avoid fancy backgrounds. Keep them easy to compress.
- Minimize spatial complexity: trees, crowds, shadows.
Shooting for Web videos

- Lighting: minimize the amount of hard shadows.
  - Diffuse light when possible.
- Extraneous motion is a main enemy to successful Web video production.
- Don’t pan, zoom or tilt when a static shot will do.

Editing for Web videos

- Cuts work best.
- Minimize dissolves or wipes.
- Titles need to be bigger.

Putting it on the Web

- Can link directly to video file with hyperlink in a Web page.
- Can embed the video so it “pops up” on the Web page.

Important software associated with Web videos

- Adobe Premiere (video editing)
- MediaCleaner (compression)
- Final Cut Pro (Apple)
- Other software available, but usually costs more.

Future??

- More education online with Web videos.
- “Marriage” with TV.
  - Simulcasts with TV programs.
- “Extra” footage not shown on TV (example: Big Brother, Survivor)
- Video/movies on-demand.
- Videoconferencing.

Web sites with video

- Education: http://agvideo.tamu.edu/vnr.html
- News: http://www.cnn.com
- Agriculture/sales: http://www.eHARVEST.com/
To show video on laptops

- Hold down Fn key (bottom, left) and the Fe key (top row) twice.
- Will lose picture on your laptop screen, but will be able to see it on the connected computer projector.