Digital Video
Act II – Introduction to Editing and Distribution

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More classes

- This class is a series
  - Act I – last week
    - Introduction and camcorders
  - Act II – today
    - Introduction to Editing and Distribution
  - Act III – next week
    - Tuesday, April 22nd, 1–3 PM, MMC 1745
    - Editing and Distribution tips
Class overview

- Importing video
- Editing video
- Exporting video
What is video editing?

- Linear
  - Physical tape cut and pasted/taped together

- Non-linear
  - Video saved on a hard disk
  - Frames can be moved anywhere easily
What is video editing?

- Process
  - Put video on hard disk
  - Edit video
  - Publish
Editing Software

- Used to import, edit, and export video
- Many different applications
- In 1999, Apple released iMovie
- 4 years later...
Editing Software

- Cost
  - iMovie FREE
  - Windows Movie Maker FREE
  - Adobe Premiere $549
  - Final Cut Express $299
  - Final Cut Pro $999
  - Avid $12,000 – $53,000
Editing Software

• **iMovie**
  – Credited with reviving interest in video!
    • Credited with reviving interest in COMPUTERS...
  – Children use it
  – Used by professional studios

• **Windows Movie Maker 2**
  – Reviewers like iMovie better

• **Everything else**
  – Requires extensive (and costly) training
iMovie

- Lets get started!

- Open iMovie
  - Dock
  - Apple Menu
  - /Applications/General/Video/iMovie
Interface

- Only one window
- No longer full screen
- 3 areas
  - Monitor
  - Panes
  - Viewers
Interface – Monitor

- Monitor
- Scrubber bar
- Volume
- Playback Controls
- Mode buttons
Interface – Viewers

- **Toggle button**
- **Clip viewer**
  - Clip
  - Transition
- **Timeline viewer**
  - Video
  - Audio
  - Zoom
Interface – Panes

- Switch at bottom
- Options at top
- Panes
  - Clips
  - Photos
  - Audio
  - Titles
  - Transitions
  - Effects
  - iDVD
Import video

- Plug in Firewire
  - 4 pin: camera, 6 pin: computer
- Get camera ready
  - Put camera into VTR mode
  - Rewind tape 5 seconds before desired spot
- iMovie
  - Put in Camera mode
  - Click play button
  - Click import button
  - Click stop button
Import video

- iMovie will place clips into the Clip Viewer Pane
Import video

- Automatic scene detection
  - Splits clips
  - Where recording paused/stopped
- Can be turned off in Preferences
Import video

• If you have video files
  – .mov, .dv, .mpg format
    • Resolution will be stretched to fit
      – Correct resolution is 720x480
      – Modify with QuickTime Pro
      – Export using custom size
  – File → Import
Selecting clips

• View one clip
  – Click on clip

• View multiple
  – Shift- or command-click on clips

• View all clips in movie
  – Click on background or Edit -> Select None
Viewing clip(s)

- Press play button
- Drag scrubber
- Use arrow keys
Cleanup video

• Trim
  – Deletes selected frames

• Crop
  – Deletes unselected frames

• Split
  – Turns one clip into two
Cleanup video – Trim

• Select a clip

• Click and drag the crop markers
  – Select what you don’t want

• Press Delete key or select Edit -> Clear
Cleanup video – Crop

• Select a clip

• Click and drag the crop markers
  – Select what you want to keep

• Select Edit -> Crop
Cleanup video – Split

- Select a clip

- Drag playhead to desired cut location
  - Use arrow keys if necessary

- Select Edit -> Split Clip at Playhead
Cleanup video – Undo an edit

• If you make a mistake, select Edit -> Undo

• You have 10 Undos
  – Unless you empty trash
Photos – Add

- Use iPhoto to import picture files
- Open Photos pane
- Choose an album
- Select a photo
- Drag image to viewer
Photos – Ken Burns Effect

- Click “Start”
  - Choose zoom value
  - Drag image to desired start location
- Click “Finish”
  - Choose zoom value
  - Drag image to desired end location
- Set duration
Transitions

- Always add fade in and fade out
- Most clips should have no transition
- Cross dissolve is the most common transition
- Some transitions cause clips to overlap
  - Clips have to be longer than transition
  - Movie length will decrease
  - Add transitions before editing audio!

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Transition here
Transitions – Add

- Open Transitions pane
- Move playhead or select clip
- Click on transition name
  - You will see a preview
- Change duration
  - Listed as seconds:frames
- Change direction if available
- Click Preview
Transitions – Add

- Click on transition icon and drag it between desired clips
- Work while it renders
Transitions – Edit

- Select transition

- In Transitions pane, change Speed or direction

- Click Update
Transitions – Delete

- Select transition
- Press Delete key or Edit -> Clear
Motion Effects

- **Reverse**
  - Select clip
  - Select Advanced -> Reverse Clip Direction

- **Speed up or slow down**
  - Select clip or desired portion of clip
  - Open Timeline viewer
  - Drag rabbit/turtle slider
Video Effects – Add

- Select Effects pane
- Select clip or portion of clip
- Change fade in/out
  - 00:00 is instant appear/disappear
- Change options
  - Direction, location, etc
- Click Preview
- Click Apply
Video Effects

- Clips can have more than one effect
  - Number of effects shown at top of clip
Video Effects – Delete

- If you haven’t saved or emptied the iMovie Trash

- Select clip with effect

- Select Advanced → Restore Clip
Titles – Add

- Select Titles pane
- Select type of title
- Type text
- Choose font, size, color
- Speed slider sets in/out speed
- Set pause
- Set direction if possible
- Click Preview
Titles – Add

- Over black
  - Click Over Black
  - Otherwise it is over video

- QT Margins
  - Changes margins
    - QT is full window
    - Otherwise it is TV margins

- Drag title to clip
Titles – Delete

• Click on clip with text and hit delete key
Chapter markers

- Makes DVD chapters
- Move play head to desired location
- Click Add Chapter
- Set name
- Timeline viewer diamonds
Audio

- Finish video before working on audio!!!
- Click Audio Pane
- Select Timeline Viewer
Audio – Add

- Four sources of sound
  - Audio track included with imported video
  - Sound effects included with iMovie
  - CD or iTunes
  - Record your own
Audio – Add

- Audio track included with imported video
  - Select the video clip
  - Click Advanced -> Extract Audio
  - Audio clip appears below video clip
Audio – Add

- Audio track included with imported video
  - Video clip is muted, not stripped
  - Audio is “Locked” to video

- To unlock, select Advanced → Unlock Audio Clip
Audio – Add

• Sound effects included with iMovie
  – Select “iMovie Sound Effects”
  – Select a sound and drag to Timeline Viewer
  – Demo of sounds...
Audio – Add

- Sound effects included with iMovie
  - Skywalker Sound and iMovie sound demo
Audio – Add

- CD
  - Insert CD
  - Select CD in popup
  - Select track and drag
  - Or click “Place at Playhead”
Audio – Add

- iTunes
  - Select iTunes in popup
  - Select track and drag
  - Or click “Place at Playhead”
  - AIFF, MP3, WAV formats
Audio – Add

- Record your own
  - Get a microphone
  - Move playhead to desired location
  - Click record button
    - If meter turns red, you are too loud
  - Click stop button
    - Same button
Audio – Move

- Click audio clip and drag
  - Beginning frame shown in monitor

- Drag it to either audio track if desired
  - Top track is default extracted audio location
  - Bottom track is default imported audio location
Audio – Delete/Crop

- To delete entire clip
  - Click on clip and press delete key

- To crop clip (method 1)
  - Move playhead to desired cut location
  - Select Edit -> Split Selected Audio Clip at Playhead
  - Click on unwanted half
  - Press delete key
Audio – Delete/Crop

- To crop clip (method 2)
  - Select audio clip
  - Drag crop markers to shorten clip

- Select Edit -> Crop
Audio – Volume

• To change computer volume
  – Menu
  – Keyboard

• To change movie volume
  – iMovie window
Audio – Clip volume

- Select clip
- Adjust volume slider (below Timeline window, not above)
- Mute track
Audio – Clip envelope

- Click Edit Volume checkbox
- Click the line at desired location
- Drag dot up or down
- Change slope with smaller dot
Audio – Clip envelope

- To remove, click dot and press delete

- Use this to add fade in and fade out
Export movie

• Burn to a DVD
• Save to DV tape
  – Storage
  – Send to VCR
• Save as a file
  – Put it on the web
  – Send in email
Export movie – iDVD

- Open iDVD pane
- Click “Create iDVD Project”
- Wait
- Open iDVD and burn
Export movie – DV tape

- Connect camcorder to computer
- Put DV tape in camcorder
- Put camcorder in VTR mode
- Select File → Export → To Camera
Export movie – DV tape

- Set seconds to wait for camcorder
- Set seconds of black time
- Wait (this is a 1x process)
Export movie – File

- Select File -> Export -> to Quicktime
- Select format
  - Email
  - Web
  - Web Streaming
  - CD-ROM
  - Full Quality DV
  - Expert Settings
Let’s play!

- But first...
  - Questions and answers
  - Next class
  - More information on the web
  - Contact info
  - Survey
Next class...

- Tuesday, April 15th, 1–3 PM, MMC 1745

- Introduction to editing and distribution
  - How to import
  - How to edit
  - How to publish
This info on the web

- http://www.macos.utah.edu
- Click on “Documentation”
- Click on “Digital video”
Contact

- Web – www.macos.utah.edu
- Email – mac@scl.utah.edu
Survey

• Please fill out survey
  – How was the instructor?
  – How was the content of the class?
  – Have suggestions on improving classes?
  – Want to have us teach other classes?
Let’s play!

- Now let's play