Video Editing

- Create a project
- Capture and import video
- Trim clips
- Assemble clips
- Apply special effects filters
- Insert transitions between clips
- Mix audio
- Output to web, tape, DVD, files
Windows

Also the capture window
Images stolen from http://users.design.ucla.edu/~jbishop/FCP/FCPtutor.htm
Browser Window

• Contains project components
• Includes sequences, clips, filters, transitions
• Select components and drag to Timeline
• Tabs for projects and effects
• Display as list or icons
Viewer and Canvas

- Video monitors
- Trim clips
- Set marks, in/out points
- Adjust transitions
- Jog wheel
- Shuttle tab
- Play clips
Viewer “Monitor”

- Viewer is the studio *preview monitor*
- View clips from the Browser
- Edit clips with *in* and *out point* marks
- Double click on clip in browser to view
- Drag from Viewer into Timeline
- Controls—play, shuttle, jog, mark points
- Time display—clip length, timecode
Canvas “Monitor”

- Canvas is the studio *program monitor*
- Displays the video from the timeline
- Controls-play, shuttle, jog, scrubber bar
- Time display-length, timecode
Timeline

- Multiple audio and video tracks
- Assemble clips
- Drag from Browser or Viewer
- Add transitions
- Upper video tracks show
- All audio tracks mixed
- Disable tracks
Timeline Tracks/Channels

- Audio and video tracks
- Linked for audio synchronization
- Assemble clips from Browser or Viewer onto tracks

- Drag effects and transitions from effects menu in browser window
- Snap control
- Link sync control
Timeline Tool Palette

- Select single clip
- Edit and range selection
- Track selection
- Roll and ripple edit tools
- Slip and slide edit tools
- Razor tool-cut clips in Timeline
- Zoom and hand tool
- Crop, distort tools
- Pen tool-keyframes for audio fade
Selection Tools

• Select single clip-Select a single clip in the Timeline
• Edit and range selection-selects cuts, multiple clips or range of clips
• Track selection-selects clips on a single track or multiple tracks
Timeline Trim Tools

- **Ripple edit**: Modify duration of a single clip with following clips placement adjusted.
- **Roll edit**: Moves an edit point between two adjacent clips, duration of one clips is lengthened and the other shortened.
- **Slip edit**: Slips a clip between adjacent fixed clips, the duration is not changed, the in and out points change.
- **Slide edit**: Slides a fixed duration clip between two adjacent clips, the adjacent clips change duration.
Capture Window

- Two sections - preview and clip logging
- View image from tape
- Control DV deck
- Captured clips go into browser
- Enable capture bin
Capture Logging

- Fill in capture information in logging window
- Select the project’s capture bin
- Create new capture bin
- Input clip information including clip name, clip description, shot/take
Capture Options

- Clip capture-in preview window mark in and out points of a shot on tape, click on clip button in capture section of logging window
- Now capture-While tape is playing in preview window, click now button
- Project capture-Recapture original clips from tape based on original capture
Completing a Project

- Projects have several phases
- A project is a project file and raw media files
- The project file contains the editing and assembly operations applied to the raw media files
- Raw media files are not changed by the editing process
Project Phases

• Collecting raw media
  – Capture from tape through firewire
  – Import files of various media

• Edit and assemble
  – Trim clips
  – Apply filters
  – Assemble clips and transitions

• Output project
  – Tape-automatic, manual
  – Files-DVD, CD, streaming video, etc.
Collecting Raw Media

• Capture DV with firewire
  – Clip size
  – Select and capture separate clips
  – Balance file size and number of clips
  – Each captured clips is a master clip

• Import
  – Various types of media files
  – File and media compatibility
  – Example-MP3 problems
Separate Individual Shots

- DV Start/Stop Detect
- Automatically separates individual shots and takes into subclips
- Capture multiple shots in a clip
- Open clip in Viewer window
- Select DV Start/Stop from mark menu
Clips Types

- Master clip-A full clip as captured
- Subclip-A separately named item in the Browser that represents a portion of a master clip, by Modify>Make Subclip
- Segment-a component of a master clip as divided up by DV Start/Stop, can be made into subclips
- Sequence-Assembly of media clips that can be represented on the Timeline, a project may have one or more sequences
Edit and Assemble

- Separate shots in master clip and make subclips-DV Start/Stop, markers, in/out points, range clipping
- Trim clips to precise frames-in Viewer, Canvas or Timeline
- Assemble clips on Timeline, cuts only transitions
- Apply filters to correct or modify cut image and audio
- Add and edit transitions between clips
Trim and Assemble

• In Timeline-easiest, small projects, single linear raw video source
• In Viewer-Complex projects, multiple media sources, allow modifications and maintenance later, adjust using timeline tool palette editing
• In Canvas-Using the Canvas editing overlay
Edit and Assemble
In Timeline

- Drag master clip from Browser into Timeline
- Using razor tool from tool palette cut sequence, delete unwanted clips
- Modify sequence with drag and drop, or cut and paste
- Adjust in/out points of clips with edit functions from Timeline tool palette
Clips in the Timeline

- Select single or multiple clips with selection tools
- Drag, copy, paste clips
- View Timeline in Canvas window-play or scrub in Canvas or in Timeline window, shortcut is space bar
- Drag edit in to Canvas-overwrite, insert between, insert within
- Trim with razor tool
- Roll, ripple, slip, slide edit
Edit and Assemble in Viewer

- Open clips (master or sub) in Viewer
- Choose in/out points
- Make a subclip Modify>Make Subclip
- Name subclip in Browser
- Drag into Timeline
Clips in the Viewer

- Open clip in Viewer by double clicking on clip in Browser
- Play clip with play button, scrub, jog or shuttle
- Mark clip-in and out points with edit point buttons
- Mark by two points or one point and duration
- Modify edit points by dragging
Assemble in Canvas

- Choose edit point which is the frame displayed in Canvas
- Drag subclips into Canvas from Viewer or Browser
- Edit Overlay appears in Canvas
- Deposit clip into appropriate section of Edit Overlay
- Edit Overlay options include Insert and Overwrite with/without transition, Replace, Fit to Fill, Superimpose
Transitions

• Audio and video transitions
• Overlapping clips past in/out points
• Drag transitions to cuts in Timeline from effects tab in Browser
• Types-dissolve, wipe, stretch, peel, iris, etc.
• Transition editor-transition duration, position, color, other specific options
• Default/favorite transitions
Filters

- Modify audio and video clips
- From effects tab of Browser
- Drag to clips on Timeline
- Video types-blur, color correct, distort, image control, sharpen, stylize, etc.
- Audio types-audio levels, band pass filters
- Render
Text and Titling

- Video generator menu from Viewer window
- Select text, title 3D, title crawl
- Generates an entry in the Browser, drag into Timeline
- Titles over background-drag to separate video track
- Text motion and effects-crawl etc.
Exporting Project

• File for streaming, DVD, CD, online, media for applications
• Timeline to tape
• Print to Tape, automatic
Export File

- File use-DVD, CD, online, Web streaming, media application (in powerpoint, etc.)
- File type-quicktime, avi, mpeg, windows media, realmedia streaming
- Compression-codec
- Video format-color depth, frame size, frame rate, aspect ratio, data rate
Tape Export

- Output as DV on firewire
- May require rendering
- Automatic, include tone and bars
- Export from Timeline
- External conversion to composite video to write VHS or other analog tape