Chapter 14. Using Non-Flash Graphics

* Importing Bitmaps
  + To import bitmaps
    - File > Import > Import to Stage
    - File > Import > Import to Library
  + Can also edit imported bitmap
  + To import a series of bitmap images
    - Same process as before. If conditions are met:
      * All images in the series are in the same folder
      * All file names differ only by a number at the end
    - Flash will ask if you want to import the series, and will place on timeline accordingly.
* Importing Photoshop Files
  + To set import preferences for PSD files
    - Flash > Preferences on Mac or Edit > Preferences on Windows. Choose PSD file importer.
    - Import image layers as…
      * Bitmap images w/editable layer styles = most flexibility
      * Flattened bitmap layers = most faithful reproduction
    - Import text layers as…
      * Editable text – editable with text tools (as Flash text)
      * vector outlines – editable with drawing tools
      * flattened bitmap images – not editable but faithful
    - Import shape layers as…
      * Editable paths and layer styles – most flexible
      * Flattened bitmaps – most faithful, not editable
    - Layer groups – adds the contents of a layer group to a movie clip
    - Merged bitmaps – places merged layers inside movie clips
    - MovieClip registration point – publish settings compression, similar to that of images.
      * Lossless – like PNG files
      * Lossy – like JPEG
  + To import content from PSD files
    - File > Import > Import to Stage or Library
    - Select layers to import
    - Select options for each layer and/or for whole document
      * GIVE INSTANCE NAMES on import
      * Set stage to size of PSD
      * Place layers at original position
  + About adjustment layers
    - Flash does not like them. It will merge them down or ignore them. See Flower PSD.
* Importing Adobe Illustrator Files
  + To set preferences for importing AI files
    - Flash > Preferences on Mac and Edit > Preferences on Win
    - Select AI file importer
      * General options
      * Import text as…
      * Import paths as…
      * Images, groups, layers…
      * MovieClip registration
  + To import content from AI files
    - File > Import > Import to Stage or Library
    - Mostly same options, but
      * Convert layers to “single flash layer”
      * Import unused symbols
      * Import as a single bitmap image
    - Otherwise, select layers the same
  + Incompatibility reports
    - Show where incompatibilities are and recommends settings to resolve.
    - Flash does not support the CMYK color-space – best to have the illustrator (or yourself) convert to the proper RGB color profile before importing.
* Importing Fireworks Files
  + Similar to PSD, but not nearly as flexible (or common)
* Importing from FreeHand
  + Even less common, and much less flexible than Illustrator.

Chapter 15. Adding Sound

* Importing Sounds
  + To import a sound file
    - File > import > import to Stage
      * Does NOT place an instance on the timeline – must manually place sounds.
      * Command R on Mac
      * Ctrl+ R on Windows
    - File > import > import to Library
* Adding Sounds to Frames
  + To assign sound to a key frame
    - Create a layer for sounds (adjust layer height if you like)
    - Place blank keyframes that sync with action
      * Select keyframe and drag sound to stage.
      * Or select keyframe and choose sound from properties panel
  + Organizing sounds
    - Use Layer Folders Folders!
    - Name layers mnemonically (name them after their content)
    - Place sound folders at top or bottom of timeline stack so you can find it easily.
    - Increase the height of the sound layer so you can more clearly see the waveform.
    - Lock layers after sounds have been placed to prevent accidentally using them for artwork.
* Adding Sounds to Buttons
  + To enhance buttons with auditory feedback
    - Same as adding to timeline, only add sound on “up”, “over” and “down” states (hit state will never play a sound.
* Using Event Sounds
  + To set up a file for testing sounds
  + To make an assigned sound an event sound
    - Select a keyframe with sound, and in the properties inspector select “Event” from the Sync-pop-up menu.
  + To play overlapping instances of the same sound
    - Event sounds can be layered by placing multiple instances closely together.
  + To start different sounds simultaneously
    - Place two sounds on a different layer on the same frame
* Using Start Sounds
  + To set an assigned sound’s Sync parameter to start
    - Select a keyframe with sound
    - In the property inspector, select “Start” from the Sync-pop-up menu
  + Start sounds do not let other instances of the same Start sound run at the same time (additional instances will not play).
  + Start sounds will only play if the play head passes the sounds keyframe.
* Using Streaming Sounds
  + To make an assigned sound a stream sound
    - Select a keyframe with sound
    - In the property inspector, select “Stream” form the Sync-pop-up menu
  + Stream sounds sync to the play head – if the play head stops, so does the stream sound.
    - Hint: you can scrub stream sounds.
    - Hint 2: if you modify the frame rate of the movie, the sync of your stream sound will be adjusted
    - Hint 3: click “edit” in the properties inspector to see where the stream sound will stop (indicated by a vertical line)
* Stopping Sounds
  + To stop playback of a sound
    - Find a sound with a keyframe, and create another keyframe where you want the sound to stop.
    - In the properties inspector
  + Stop sounds will stop any instance of a running Start sound of the same sound.
  + Stop sounds will not stop unless the playhead passes through the stop sound’s keyframe
  + If you want only one instance of a sound to stop, use a stream sound instead, and stop it with a blank keyframe.
* Repeating Sounds
  + To Set a repeat value
    - Select a keyframe with sound
    - In the properties inspector, set the number of times to repeat (default) to the desired value.
    - Can also set “Repeat” pop-up to loop, which will result in the sound looping until it can no longer play.
      * Stream will loop until the playhead stops moving.
      * Event and Start will loop infinitely until stopped by a stop sound frame (be careful!)
      * Looping and repeat have no effect on stop sound frames
* Editing Sounds
  + To assign packaged volume effects
    - Select a keyframe with sound
    - In the properties inspector, the effect pop-up can assign any of these basic sound effects to a single sound
      * Solo left channel
      * Solo right channel
      * Pan left to right
      * Pan right to left
      * Volume fade in
      * Volume fade out
  + To customize volume effects
    - Select a keyframe with sound
    - In the properties in spector, select “Custom” from the effect pop-up, or click the “Edit…” button
      * Use and create volume handles to create custom pan/fade effects.
      * Show left channel, right channel.
      * Show canned effects
      * Show zoom, and time/keyframes.
      * Show play and stop
  + To edit sounds for length
    - While in edit mode, drag the “time-out” control to the desired location.
    - Can drag “time-in” control as well
    - Pay attention to how this type of edit affects volume envelopes.
    - Always do time-in / time-out first if possible.

Chapter 16. Adding Video

* Importing Video for Progressive Download or Streaming
  + To prepare video for progressive download or streaming in Flash Player
    - File > Import > Import Video
    - Select Video - Browse to a file or enter the file path in the dialogue box (“sunbeam\_commercial\_5.mpeg”)
    - Deployment – choose how the video will be delivered (for now choose “progressive”)
    - Encoding – Select basic settings (for now)
    - Skinning – select skin style and color
    - Flash will prompt you to save then begin encoding
  + Use external encoder! (Flash Pro comes with Flash CS3 video encoder, use that or other pro encoder (Sorenson Squeeze, Cleaner, etc)
* Importing Embedded Video
  + - To import and embed video clips
    - File > Import > Import Video…
    - Select Video – same as before
    - Deployment – select “embed” option
      * note: embedding makes HUGE SWFs
    - Embedding – Symbol type (MovieClip preferable)
      * Audio track – certain types of files will not allow use of a separate track (demuxing), such as MPEG
      * Place instance, expand timeline
      * Select – edit ability depends on video file
  + To edit embedded video clips
    - Basic editing options
      * Punch-in / Punch-out
      * Frame backward / frame forward
      * Play / Stop
      * Scrubbing
      * Create multiple clips
    - Much more flexibility with a video encoding / editing suite
* Setting Encoding Options
  + To use preset encoding settings
    - Discuss default encoding profiles
  + To use custom video encoding settings
    - Select video codec (CODEC)
      * FP6 and 7 use Sorenson Sparq
      * FP8 use On2 – (more CPU intensive)
        + On2VP6 and alpha channel
    - Deinterlace
    - Select framerate
      * Framerate of Flash movie versus framerate of video
      * Convert framerates when possible
        + Discuss frame sync with embedded video
    - Select Bitrate
      * Discuss Constant vs average
      * Recommend using quality settings until familiar with effect of specific bitrates (lots of calculations)
    - Select keyframe interval
      * Recommend automatic
    - Select audio code and bitrate
    - Set cue points for progressive or streaming video (cue points are accessible only via actionscript).
    - Set Crop and resize
* Working with Embedded Video
  + To place embedded video clips in the timeline
    - Can work with embedded video like other symbols, but must be careful to maintain frame sync, as video frame rate will drop out of sync with timeline if frame rates are different
    - Audio will playback at a constant speed, however
* Working with the FLVPlayback Component
  + To chose source video for an FLVPlayback instance
    - Window > Components (Ctrl + F7 on windows)
    - Drag an FLVPlayback instance to the stage and select it
    - Open the components inspector
      * Window > Component Inspector
      * Select the “Parameters” button / tab
    - Select the “source” parameter and click the magnifying glass
    - Either enter a URL or click the folder and browse to a file on your machine
      * MUST BE FLV!
      * Select Match Source
    - FLV playback will appear on stage with new size
  + To create an author-time preview for a video component
    - Not very useful
    - Select “preview” parameter and click the magnifying glass
    - Resulting window will playback your FLV. Find the frame you want and press OK.
    - That frame will appear in the video at author-time only.
    - For posterframe, export using this tool and create with custom actionscript.
  + To change controller bar skins
    - Select the “skin” parameter and click the magnifying glass
    - The resulting window allows you to choose controller skin as before
  + Final steps