MVC and Multimedia

- MVC is actually a general approach to interactive application development, not multimedia alone

- But, multimedia is a specific type of interactive application, and so has its own twists on MVC

Digital Assets: M, V, or C?

- Since multimedia applications focus on the organization and presentation of digital assets, the question arises: are digital assets part of the *model*, *view*, or *controller*?
- The answer, it turns out, is *all of the above*.
- Technical term: a multimedia application's digital assets are *orthogonal* to its MVC organization

	model	view	controller
images	gallery, actual content (e.g. what the user actually wants to see)	icons, buttons	transitions, rollovers, feedback, effects
audio		ambience, accents	
video/ motion		animations, styling	

- Literally, "orthogonal" means "at right angles to each other" (*ortho* = *right*)
- When two concepts can be tabulated against each other — the way digital assets and MVC are correlated above — one can think of these concepts as being "at right angles" to each other; thus, "orthogonal"

Authoring with MVC in Mind

- Not all multimedia authoring environments explicitly support (or enforce) MVC

  Exception: the latest Web standards
  HTML = model, CSS = view, JavaScript = controller

- MVC is more of a guide for you or your team to use internally

Gather Raw Material

- This is where a sufficiently detailed specification may start reaping dividends
- Never overwrite or erase your raw material — you never know when you'll need to revert to the original
- Scans, digital photos, recorded tracks, unprocessed video clips

Create Separate Sections

- On disk, create separate folders for: *raw*, *model*, *view*, *controller*
- You may want to create subfolders, for instance to separate *images*, *audio*, and *video*
- Alternatively, separation may be subject-driven instead

Start "Repurposing" the Raw Digital Assets

- *Repurposing* is the process of combining, cutting, or modifying your raw material for final use in the multimedia application

Images: compositing, color corrections, retouches, effects, filters
Audio: mixing, mastering, effects, clean-up
Video: editing, transitions, splicing, dubbing

- Never delete the raw material — you might need to go back to them

Prepare the Model

- Repurpose assets toward "final viewable form" — the exact content that the user will perceive
- May require different levels of quality (for example, different video sizes)
- Placeholders can help move things along if the content isn't available yet

Prepare the View

- Repurposing typically involves stylization or toning down
  - Tinting to a color
  - Compositing into a background
  - Lowering volumes, looping, cutting
  - Similar to "skinning"

Glue through the Controller

- Generally done under an overall authoring environment (DVD, Flash, Web)
- Highly interactive and iterative: composing model and view elements, sometimes realizing that these need to be changed
- Controller used to involve a lot of scripting; it has decreased as authoring environments grew in sophistication

Remember…

- Let your spec guide you
- Keep your assets organized
- Don't delete your raw materials
- Stay aware of the MVC role of a particular element
- Note that this is still all "source" work — we haven't talked about deployment yet