What is a Multimedia Application?

- DVDs
- Web sites
- Movie publicity sites
- Self-contained programs (e.g. iTunes Music Store)

A Definition

A multimedia application is an organized, directed, and interactive collection of digital assets that provides something of value to its user.
“Organized”

• Not just a bunch of files
• Two levels of organization:
  • Internal — how the author puts them together
  • External — how the user sees them

“Directed”

• Not a shoebox — follows from organization
• The author imposes or proposes a structure through which the user experiences the application
“Interactive”

• Users are *active participants* of a multimedia application, not passive
• Listening to music, reading a book, or watching a movie is considered passive
• Passive activity occurs at the “leaves” of a multimedia application

“Digital Assets”

• Can be anything, really, that can be stored on and presented by a computer
• But, more commonly: images, sound, video, copy (text)
“Something of Value”

- What does the user get out of a multimedia application?
  - Entertainment
  - Information, Skills
  - Insight…? Transformation…?

- The bottom line: why would someone want to sit through your application?

Delivering Multimedia

- Multimedia applications are delivered or deployed in different ways

- Note how it is useful to view the deployment mechanism as distinct from the application itself
“source” application — raw assets, scripts, code

deployment mechanism — DVD, Web, standalone

user

Note how users don’t typically distinguish the deployment mechanism from the application — but you’re authors now, and it is useful for us to make that distinction.

Ideally, a single “source” application can be seamlessly delivered through multiple mechanisms.

DVD

CD-ROM

one source

Web

standalone program

“Seamlessly,” meaning “no extra work on your part.”
— Nice in concept, but not always true in practice.
Frequently, the source application is distinct from its deployed form

This is true of media delivery in general; for example, a burned audio CD:

- Source — audio files on your computer (MP3)
- Deployed — standardized format that is readable by CD players
  - Sound is *re-encoded* in a form that standard CD players can play back (AIFF)
  - CD structure, tracks/time, also included

### A Sampling

<table>
<thead>
<tr>
<th>Source</th>
<th>Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>iDVD, DVD Studio Pro project</td>
<td>DVD disc</td>
</tr>
<tr>
<td>Flash .FLA file</td>
<td>Flash .SWF file</td>
</tr>
<tr>
<td>HTML files (among others)</td>
<td>Web browser window</td>
</tr>
<tr>
<td>Program code</td>
<td>Double-clickable application</td>
</tr>
</tbody>
</table>
Terms Terms Terms Terms

- Depending on the technology, the conversion of source to deployment can take on many terms:
  - Encoding — typically refers to digital assets
  - Compilation — deployment of program code
  - Rendering — usually refers to computer graphics

From Assets to Application

<table>
<thead>
<tr>
<th>“Raw” Assets</th>
<th>“Camera-Ready” Assets</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>images from camera</td>
<td>clean, composited images</td>
<td>depends on the technology: DVD authoring, proprietary editor (e.g. Flash, Director), Web site editor, programming language</td>
</tr>
<tr>
<td>DV video</td>
<td>edited video</td>
<td></td>
</tr>
<tr>
<td>recorded tracks</td>
<td>mastered audio</td>
<td></td>
</tr>
<tr>
<td>words</td>
<td>proofread, perhaps formatted, text</td>
<td></td>
</tr>
</tbody>
</table>

This is what we’re about — this is multimedia authoring.