Building an Open Source Rich Media Workbench

Jeffrey Berman and Chad Kealey





Overview

- オ Terminology
- The Need for Rich Media in Education
- **The Need for Open Source Alternatives**
- Image Editing with GIMP
- Audio Creation & Editing with Audacity
- Video Editing and Transcoding with AVIDemux

Terminology: Open Source

- **Free software is a matter of liberty, not price**
 - **7** Freedom to Run, Study, Redistribute, Improve
 - Community Mentality
- Source Code is freely and publicly available
- Security, Support, Sellable

- In short:
 - These software packages are available to you at no monetary cost and are legal

Terminology: Rich Media

- オ Still images
- Audio recordings
- Video recordings
- Interactive simulations
- More than just words on a page...

The Need for Rich Media in Education

- Meet the needs of different types of students
 - Auditory Learners
 - Visual Learners
 - **7** Kinesthetic (Physical) Learners
 - **7** Experiential Learners
- Provide tangible examples and analogies
 - A picture's worth 1,000 words
 - **7** Teach a man to fish...

The Need for Open Source Alternatives

- Commercial Products:
 - **オ** Are expensive
 - Often have features you don't need
 - Can lock you in to a proprietary system
- Open Source Alternatives:
 - Cost less
 - Are usually more interoperable
 - **7** Give greater flexibility

What is GIMP?

- GNU Image Manipulation Program
- http://gimp.org
- Comparable to Adobe Photoshop
 - Except Photoshop costs: \$699 (Upgrading \$199)
 - Essentially equivalent, especially for nonprofessionals
 - Can read/write Photoshop format
 - Scripting

Getting and Using GIMP

- Installation
 - http://gimp.org/downloads
 - Follow instructions on page for your operating system
- Support
 - http://gimp.org
 - A complete user manual
 - **7** Tutorials
 - Plug-ins for download

GIMP Demo

What is Audacity?

http://audacity.sourceforge.net/

- **You can use Audacity to:**
 - **7** Record live audio
 - Convert tapes and records into digital recordings or CDs
 - Cut, copy, splice or mix sounds together
 - **7** Repair and enhance audio files
 - And more!
- Comparable to Sony SoundForge (\$40) and Adobe Soundbooth CS4 (\$170)

Getting and Using Audacity

- ↗ Installation
 - http://audacity.sourceforge.net/download/
 - Version options:
 - 1.2.5/6 (Stable *highly recommended*)
 - **7** 1.3.11 (Beta − *use with caution*)
 - Click the link for your OS and follow the provided instructions
 - ↗ If you plan to export MP3s, get the LAME plug-in
- **Tutorials & Support:**
 - http://audacity.sourceforge.net/help/

Audacity Demo

What is AVIDemux?

- Audio Video Interleave Demultiplexer
- http://fixounet.free.fr/avidemux/
- A free video editor designed for simple cutting, filtering and encoding tasks
- (Somewhat) Comparable to iMovie, Windows Movie Maker and Adobe Premiere Elements

Getting and Using AVIDemux

- ↗ Installation:
 - http://fixounet.free.fr/avidemux/download.html
 - Download the installer for your OS
 - Install as you would any other software
- **Tutorials & Support:**
 - http://www.avidemux.org/admWiki/index.php

AVIDemux Demo

Other Open Source Options

- Ubuntu Studio
 - http://ubuntustudio.org/
- オ AV Linux
 - http://www.bandshed.net/AVLinux.html
- VLC (the "Swiss Army Knife" of media players)
 - http://www.videolan.org/

Conclusion

- Rich Media
 - Enhances the educational experience
 - Makes content more accessible
 - Bridges gaps that ink & paper never will
- Open Source Tools for Rich Media
 - Help you do all of the above at no monetary cost
 - Are abundant, available, and just as capable, if not more capable than commercial products