

Video Editing Tools

I. Introduction and Significance of the Topic

Video editing once to be privilege of few, however, with recent advances in digital video equipment and editing software, more and more people are able to be engaged in producing and editing their own video. With the needs and purposes of editing video are different, to select a right editing tool to fit individual's needs becomes essential. Therefore, to comparing different video editing programs to gain understanding on such programs may become necessary.

This paper aims to present and discuss the differences in several digital video editing software programs. Research was conducted on the market availability and the functional strengths of those software programs. Review articles of related websites, magazines and manufactures home pages have provided resources of identifying the special features of such programs.

II. From Basic to Professional: A Complete Range of Video Editing Tools

Among tons of video editing software programs available on the market, Apple's iMovie, Adobe's Premiere, Media 100's Media 100i have received much attention. The special features of each program have appealed to many amateur or professional digital video (DV) editors. The iMovie is recognized to be geared toward the novice. Contrary to iMovie, the Media 100i is reputed to its professional use. The Adobe Premiere whereas falls somewhere between iMovie and Media 100i. In this paper, I will

briefly introduce each program respectively. The special features of each program will be discussed as well.

1. iMovie 2.1.1

The iMovie is a digital video editing program that comes bundled with Apple computer. It is aimed at entry-level, so it's incredibly easy to use and yet it even does not need a manual. The most important feature of this program is its clean and easy interface. The interface is divided into three primary zones: the Marquee, where video is viewed, the Clip shelf, where clips are stored and Timeline, where to edit clips and audio. The drag-and-drop approach in iMovie allows users to edit audio and video very easily.

The special features in this latest version include special "expert effect", transitions, easy-edit audio, customizable title, and preconfigured exporting settings. The "expert effect" allows users to create effect such as sepia tone, slow motion, water ripples, etc. Options in transitions include fade in, fade out, cross dissolve and overlap. Users can easily drag the effect to the timeline and drop it between the clips of two scenes. iMovie also allows users to split audio clips in two, which means that users can work on sound and music separately before fusing them together. Users can also separate audio from captured video, which makes audio editing more easily. As for title, iMovie 2 comes with a selection of title templates, and these can be customized to suit personal needs. Finally, iMovie allows users to select the predefined QuickTime formats for creating movies so that the movies can be emailed, posted to the web, or placed on a CD-ROM without users worrying about adjusting settings.

The shortcomings of iMovie are relatively few. The most limiting, however, probably is the fact that iMovie is a Mac-only application.

2. Adobe Premiere 6.5

Adobe Premiere is a superior video editing program whose highly customizable interface makes it become approachable for the novice as well as helpful for seasoned editors to speed up their production. The interface of Adobe Premiere includes Project window, which manages all the files that will be used in the video project including video, audio, stills, and title; the Storyboard window, where to quickly layout or rearrange projects; the Timeline window where graphically shows the placement of each clip; and the Dual Monitor window, where individual clips can be viewed.

The special features of Adobe Premiere 6.5 includes: clips organizer, a variety of effects and transitions, advanced audio editing, sophisticated title creator, real-time preview, and web integration. Adobe Premiere 6.5 allows users to store their captured clips, and other related files (i.e. audio, still, and title files) in to the Project window. The Project window provides an area to represent all files hierarchically. With this organizer, users are able to find the needed file fast. On the top of the organizer is a preview area. Preview area in this project window allows users to preview a video clip as well as basic information about the clip. A variety of effects and transitions (such as blur, wipe, and dissolve) are included in this program. Moreover, the effects palette has a keyframe feature, which is a visual marker that records and displays the state of a particular effect so that users can have greater control over the appearance and duration of effects. This program has up to 99 audio tracks for audio editing. It provides a wide range of built-in

controls for sound processing so that users can edit, add effects, and mix up audio more efficiently. Adobe Premiere 6.5 provides a Title window that allows users to create and modify text, shapes, and apply motion to title. As for real-time preview, this program allows users to preview effects, transitions, titles, motion and transparency instantly without delay. Finally, this program lets users export movies to a variety of Web video formats, including RealVideo and Windows Media Player. This program is both PC and Mac compatible.

3. Media 100i 8

Media 100i is a professional video editing tool. It is also the first system that designed to create video explicitly for the internet's interactive capabilities. It can automatically synchronize HTML, JavaScript, and Flash animations by embedding events in the video timeline so that give audience the options to isolate objects in the video and turning them into interactive hot spots that link to new URLs or launch other content. Its high quality analog video and DV capture system can capture data as mathematically lossless streams.

The interface of Media 100i includes Project window, where lists all files associated with the project; Bin window, where digitized clips can be reviewed; Program window, where work area is provided, Edit suite window; where provide a wild range of editing functions; Audio window, where provides control over digitized audio media and audio clips, Input setup window; where users can adjust input signal into optimal; and Gunlock setup window, where users can adjust the appropriate stable signal for output. Special features in the program include: using drag and drop approach to edit, having great range of visual effects as well as integrate with Adobe After Effects for advanced

composting, synchronizing text, video, and graphics so that users can locate certain subjects in the video and turning them into hot spots, compressing video into any standard format with one click of the mouse, and output the video to any media format (i.e. analog, digital, or streaming media).

III. Summary

Product	Interface	Special Features	System Requirements	Company	Price
iMovie 2.1.1	<ul style="list-style-type: none"> ▪ Marquee ▪ Clip shelf ▪ Timeline 	<ol style="list-style-type: none"> 1. Allows the user to transfer video and audio from a digital camcorder to a computer through a single FireWire cable 2. Allows the user to organize clips into a story using the Timeline feature 3. Enables the user to record voice-over narration using built-in microphone or an external microphone 4. Allows the user to capture music from audio CDs and MP3s and import AIFF sound files 5. Allows the user to select from predefined QuickTime formats for creating movies that can be emailed, posted to the web, or placed on a CD-ROM 	<p>Min operating system: Mac OS 9.1 or higher, Mac OS X 10.1</p> <p>Min hard drive space: 200 MB</p> <p>Min processor type: IBM PowerPC G3, G4</p> <p>Min RAM size: 64 MB (Mac OS 9.1 or higher), 128 MB (Mac OS X 10.1)</p> <p>Interface devices: CD-ROM drive, DVD drive, 800 x 600 resolution monitor</p>	Apple	\$49.00
Adobe Premiere 6.5	<ul style="list-style-type: none"> ▪ Project window ▪ Storyboard window ▪ Timeline window ▪ Dual 	<ol style="list-style-type: none"> 1. drag and drop clips in the Storyboard to quickly lay out projects and rearrange as necessary. 2. Real-Time preview 3. Simultaneously send a sequence of clips from the story board or project window to the Timeline and get 	<p>Min operating system: Microsoft Windows 98 or higher</p> <p>Min hard drive space: 600 MB</p> <p>Min processor type: Intel Pentium III 500</p>	Adobe	\$529.00

	monitor window	<p>started editing immediately</p> <ol style="list-style-type: none"> 4. View all the project settings in one convenient location with the Settings Viewer 5. Customized workspace 	<p>MHz or higher</p> <p>Min RAM size: 128 MB</p> <p>Interface devices: CD-ROM drive, SVGA, Sound Card</p>		
Media 100i 8	<ul style="list-style-type: none"> ▪ Project window ▪ Bin window ▪ Program window ▪ Edit suite ▪ Audio window, ▪ Input setup window ▪ Gunlock setup window 	<ol style="list-style-type: none"> 1. Can automatically synchronize HTML, JavaScript, and Flash animations so that give audience the options to isolate objects in the video and turning them into interactive hot spots that link to new URLs or launch other content. 2. Provides high quality analog video and DV capture system 3. Includes professional visual, audio, and text effect creation 	<p>Min operating system: Mac OS 9.04 or higher, Mac OS X 10.1</p> <p>Min processor type: G4 (PCI) 400, 350 or higher</p> <p>Min RAM size: 256 MB</p>	Media 100	\$ 2,995-\$14,995 depending on system configuration

Reference

Adobe System Incorporate. <http://www.adobe.com/main.html>

Apple. <http://www.apple.com/imovie/>

Holsinger, H (2002). Adobe Premiere 6.5. In <http://www.cnet.com/software>

MscCentral (2002). Media 100i touted for new Power. <http://maccentral.macworld.com>

Media 100. <http://www.media100.com/>

Wilson, T. (2002). Analysis: Media 100 i: Delivering the Future, Ahead of Schedule New product announcement delivers big news for traditional video editing and streaming media creation. In <http://www.creativemac.com>

Acknowledgement

Thank Mr. Mike Bell for providing the initial idea that I could start with.

This paper is written by Min- Yi Shih for the course EDC385G Multimedia Authoring at the University of Texas-Austin.