IS_LT 7361
Introduction to Digital Media

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Digital Video Project
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Hardware Used

Manufacturer	Dell Inc.
Model	Optiplex 9020
Processor	Intel® Core (TM) i7-4770 CPU @ 3.40 GHz, 4 processing cores
Memory	8.00 GB RAM
System Type	64-bit Operating System
Graphics	AMD Radeon (TM) HD8570, 4827 MB
Monitors	Dell Inc., dual monitors, 1440x900 and 1280x1024
Web Browser	Windows 7 Enterprise, Google Chrome
Headphones	Logitech USB Headset H390

Software Used

Video recording	Screencast-O-Matic, v2.0
Audio recording	Audacity
Drawing / sketching	Microsoft Paint
Still imaging	Open Adobe Acrobat XI Pro
Digital video editing	Windows Movie Maker, v2012
Web hosting	Neocities

Project links

Project links before peer evaluation
https://khedges.neocities.org/Video/Digital%20Video.mp4

Project link after peer evaluation
https://khedges.neocities.org/Video/Digital%20Video%202.mp4

Project Description

My primary objective was to create a digital file that captures and manipulates digital video and audio information for web playback. The theme is higher education instruction, with the topic of column failure mechanisms. The idea was borne from a sample video of someone showing how to use Microsoft Excel (2017SP IS_LT 4361/IS_LT 7361 Kim - Introduction to Digital Media > Files > Intro DigMedia Resources > Video Techniques and Examples > Video-example 2.mp4). I decided to do something similar, but wanted to sketch rather than to move the mouse around. I created (a) three motion sequences (flexural buckling, local buckling, and yielding failures) using Screencast-O-Matic to capture the animated graphics

of me sketching in Microsoft Paint, (b) three separate audio track narrations in Movie Maker (one for each failure), (c) included a still image from my class notes, and (d) included the instrumental background music by the Stray Cats in between the audio tracks.

Technique 1 – Drawing in Microsoft Paint

- Open Microsoft Paint
- Brushes > Calligraphy brushes 2
- Size > 5px
- Color 1 > Black
- Color 2 > Red
- Draw images of columns in black and their failures in red

Technique 2 – Video recording computer screen drawing

- Open Screencast-O-Matric
- Record > Screen > Max Time [None] > Size [720p] > Narration [Off, I prefer to add later] > Computer Audio [Off] > Recorder Preferences [Default]
- Establish screen border to record [800 x 600 max, whoops, missed this for the first submittal]
- Record > Pause as needed > Done. I made three separate recordings while drawing in Microsoft Paint titled: Flexural Buckling, Local Buckling, and Yielding.
- Options > Delete the rehearsals > Save as Video File when ready for editing > Type [MP4] > Filename [Part1, 2, 3,…] Folder [7396] Quality [Normal] > Publish > OK

Technique 3 – Creating still image (converting existing PDF to JPG)

- Open Adobe Acrobat XI Pro
- File > Open > Select Adobe PDF for class notes > Open
- Page Thumbnails > Select single page thumbnail > Right click > Extract > Extract Pages AS Separate Files > OK > Browse Folder > OK
- Open single page PDF
- File > Save As > Save as type [JPEG] > Settings > File Settings [Greyscale Max, Color Max] Conversion [Conversion 300 pixels/inch] > OK > Save

Technique 4 – Making the Title Page

- Open Movie Maker
- Title > Type in Title > Change font type > Change font size as needed to center on screen
- Start time [0.00s] > Text duration [7s, as appropriate]

Technique 5 – Inserting the Video Recordings from Sceencast-O-Matic

- Open Movie Maker

- Home > Add videos and photos > Insert file name > Open (Repeat three times for each of the failure mechanisms)

Technique 6 – Sequence Dissolves

- Animations > Dissolves > Dissolve *(locate between sequence two and three)*

Technique 7 – Credits Page

- Credits > Type in Credits, follow APA or other appropriate standard > Change font type > Change font size as needed to center on screen

- Start time [immediately after previous clip or image] > Text duration [As appropriate]

Technique 8 – Insert Music Track and Making the Audio Track in Movie Maker

- Home > Add music > Add music from PC > Select Filename > Open *(this will insert the music track for the entire duration of the video recording)*

- Home > Record narration > Record and Record again (twice) > Speak into the headset while the movie is running > Stop > File name [Narration 1] > Save *(repeat three times, one for each sequence)*

Peer Evaluation Feedback

Peer 1   The peer had two comments: (1) expressed concern that I did not use a video camera or mobile phone; (2) indicated that I met all of the requirements.

Peer Review Discussion

In response to the peer review: (1) I double-checked that the Excel instructional video came from our class. Since it was posted in the course files under the folder titled 'Video Techniques and Examples', I should be okay to follow and improve upon that model. Video capturing drawing activities is more difficult that working in Excel. (2) After viewing my video, I found several weaknesses that the peer reviewer did not observe.

(a) Appears that the transitions are a dissolve between sequence 1 and 2 and a cinematic blur between 2 and 3. The requirements are a cut between 1 and 2, and a cross-fade or dissolve between 2 and 3. I fixed these.

(b) The credits should include some of the software programs such as Microsoft Paint for the drawing sequence. I added more detail to the credits.

(c) The screen resolution was not originally considered. I assumed that being under 10 MB would meet the requirement, but I was wrong. First, I found that when developing the size of the screen captures in Screencast-O-Matic, numbers appear. These are the screen

resolution dimensions. I re-recorded the drawing sequence at 800 x 600. Second, I found a save setting in Movie Maker regarding resolution. (Save movie > Custom setting > Create custom setting > Width [800 pixels], Height [600 pixels] > Save). Therefore I re-recorded the drawings in Screencast-O-Matic, and save under different conditions in Movie Maker.

(d) Movie Maker appears to not allow multitrack audio. Either the voice or the music would be playing at one time. I did not enjoy the back and forth of my original recording. Therefore, I mixed the voice and music in Audacity (using Project 2 techniques) and then inserted into Movie Maker. The background music is continuous throughout with fading.

Copyright Notices

Music

Setzer, B., Rocker, L., & Phantom, S. J. (1992). Jade Idol [Recorded by Stray Cats]. On *Choo Choo Hot Fish* [CD]. Lookout Mountain, TN: Great Pyramid Records.

Technical Content

Ambrose, J. & Tripeny, P. (2016). *Simplified engineering for architects and builders* (12th ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Screen shot