

Processing Video Editor (PVE)

Team: 'Murica

Members: Elbert Dang and Jacob Gronert

Website: <http://mirix5.github.io/processingvideoeditor/>

Summary: Our Processing Video Editor will be an easy-to-use, Java-Based video editing platform that is able to take in multiple video, audio, and SubRipText (srt) subtitle files and allows users manipulate these along a timeline. The editor will contain a few basic video effects that users can pick and choose from, whether it's in real-time while the video plays, or preset using the timeline. PVE will also allow users to set which audio clips play along the timeline and create subtitle tracks to align with these music and/or video clips. Users can save all loaded files and effects as a project file and subtitles as srt. Project files will load all files used in addition to the video/audio timeline timings.

Use Cases/User Stories:

- User A wants to quickly add interesting effects to a video in real-time, so using our Processing Video Editor (PVE), he plays the video to his friends while playing around with different visual effects in real-time.
- User B wants to add cool music to a video file, so he combines them with PVE and saves the project to send to friends.
- User C has movie and SubRip text (srt) files and just wants to watch them without needing to install anything on his friend's computer. Using PVE, he can load both files and use it as a video player.
- User D wants to learn the lyrics of his favorite song, but wants to see it displayed while he listens to it. Since he's on the go a lot, he doesn't have an internet connection to watch it on YouTube, so using PVE and an appropriate srt file, he'll be able to listen to his songs while seeing the lyrics displayed as the music plays.
- User E wants to help out User D when he can't find the lyrics to his songs, so using PVE, he is able to add subtitles in a timeline to create an srt file for User D's favorite songs.

Input Media Types:

- Local video files (avi, mp4, mov, ogg),
- Local audio files (mp3, wav, flac),
- Local SubRipText files (srt),
- Local Project file

Output Media Types:

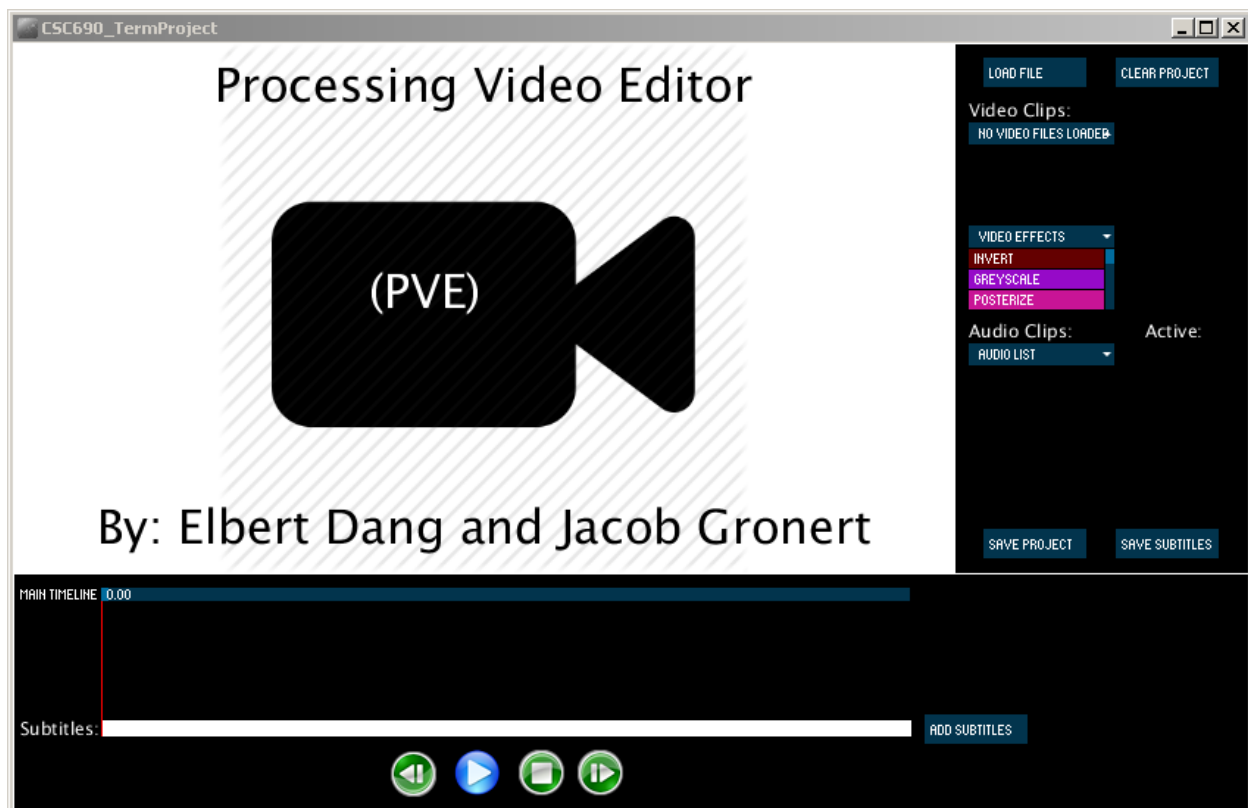
- Local Project file
- Local SubRipText files

Platform: All Java based platforms (Processing)

Libraries:

- **ControlP5:**
 - Buttons for loading, saving and fullscreen
 - Slider for timeline
 - Listbox for video selection
 - DropDownList for audio effect selection
 - Textfield for inputting subtitles
- **Minim:** Playing audio and video files
- **Video:** Playing video files and some video effects

Default view



Audio Only

The screenshot shows the CSC690_TermProject software interface. The main window displays the file name "C:\Users\Elbert\Documents\Queen - Bohemian Rhapsody.mp3" and its length "359288". The title is "Bohemian Rhapsody" and the author is "Queen". The album, date, comment, track, genre, copyright, disc, composer, orchestra, publisher, and encoded fields are empty. The video clips section shows "NO VIDEO FILES LOADED". The video effects section has "INVERT", "GREYSCALE", and "POSTERIZE" options. The audio clips section shows "AUDIO LIST" and "QUEEN - BOHEMIAN RHAPSODY.MP3" as the active clip. The main timeline shows a red line at 9.88 seconds, and the subtitle timeline is empty. The bottom of the interface has playback controls (play, stop, previous, next) and a "SAVE PROJECT" button.

File Name: C:\Users\Elbert\Documents\Queen - Bohemian Rhapsody.mp3
Length (in milliseconds): 359288
Title: Bohemian Rhapsody
Author: Queen
Album:
Date:
Comment:
Track:
Genre:
Copyright:
Disc:
Composer:
Orchestra:
Publisher:
Encoded:

Video Clips:
NO VIDEO FILES LOADED

VIDEO EFFECTS
INVERT
GREYSCALE
POSTERIZE

Audio Clips: Active:
AUDIO LIST
QUEEN - BOHEMIAN RHAPSODY.MP3

Is this just fantasy?

MAIN TIMELINE 9.88 00:00:09,866 / 00:05:59,287

Subtitles: ADD SUBTITLES

SAVE PROJECT SAVE SUBTITLES

Video/Audio/SRT Files Loaded

The screenshot shows the CSC690_TermProject software interface with video, audio, and subtitle files loaded. The main window displays a video clip of a car interior with two people. The subtitle text "America Fuck Yeah!" is visible. The video clips section shows "AMERICANORAU.MP4". The video effects section has "INVERT", "GREYSCALE", and "POSTERIZE" options. The audio clips section shows "AUDIO LIST" and "AUD.MP3" as the active clip. The main timeline shows a red line at 14.60 seconds, and the subtitle timeline is empty. The bottom of the interface has playback controls (play, stop, previous, next) and a "SAVE PROJECT" button.

File Name: C:\Users\Elbert\Documents\Queen - Bohemian Rhapsody.mp3
Length (in milliseconds): 359288
Title: Bohemian Rhapsody
Author: Queen
Album:
Date:
Comment:
Track:
Genre:
Copyright:
Disc:
Composer:
Orchestra:
Publisher:
Encoded:

Video Clips:
AMERICANORAU.MP4

VIDEO EFFECTS
INVERT
GREYSCALE
POSTERIZE

Audio Clips: Active:
AUDIO LIST
AUD.MP3
CENSOR-BEEP.MP3
CYMBOL.WAV
EXPLOSION.WAV
SHOTGUN.WAV

America
Fuck Yeah!

MAIN TIMELINE 14.60 00:00:14,600 / 00:00:33,088

Video: ADD EFFECTS

Audio: CLEAR

Subtitles: ADD SUBTITLES

SAVE PROJECT SAVE SUBTITLES

Fullscreen Mode

