VidEdit

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GitHub Link: https://github.com/C-lp/csc690-final-project

Website Link: https://videdit.herokuapp.com/

Use Case

User X recorded an amazing video to capture San Francisco's beauty and would like to edit the video. Our application will allow User X to upload his video/photos and even an audio file to complement the video. User X can then edit the video by cropping segments out, changing hue, saturation or grayscale. Since User X also recorded locals speaking, with our application, he can create subtitles just by using our sound to text recognition.

Category

This application falls under a category of movies and videos.

Development Language

Python as a desktop application. Application runs only on Windows.

Major Multimedia Operations

- Edit Since we have a video as a final product, being able to place audio files and video showcases the operation of edit.
- Annotate The function of adding subtitles is considered annotating the video at certain points of time.
- Browse -After browsing and selecting files from the desktop, we are able to browse the files we have imported by clicking each list. Order and name of files are shown.
- Display The function of previewing each item in the import list and displaying the whole video.

Libraries

Libraries we would use are: FFMPEG, PYQT5, TKinter

Media Types and Input/Output Files

The input data is located on the hard drive. Input types are video (.mp4, .mov)
Audio (.mp3,.wav)
Subtitle text file(.srt)

Output

Video file(.mp4)

Interactions

Mouse events:

- Menu bar containing buttons
 - Click functional buttons
 - Import videos/audios
 - Select directory items,
 - Playback/ Pause/ Stop video
 - Adding subtitles
 - Placing files on timeline and moving them
- Select frames from the timeline

Accomplished Functions

- Importing files(Audio and Video)
 - Import List is created for browsing
- Preview of imported Files
 - Separated playback
- Adding of subtitles to timeline and displaying them on screen
 - o Partially working, One subtitle shown
- Placing files on timeline based on user input
 - o Can move after on timeline
- Playing back all files on timeline
 - o Some bugs, but works on first run
 - Videos should still play after moving them on timeline
- Exporting project as a video
 - Can be exported if there is only one video, Audio file has to be on timeline also
 - Multiple rendering of videos exports as a black(empty) video but sound plays for duration of soundtrack

Conditionals While Running Program

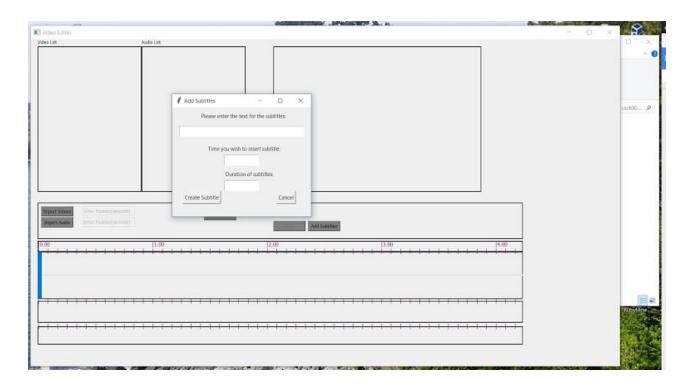
- If an audio file or subtitle is imported and in the timeline, must import a video file as well.
- Videos can played alone on the timeline.
- Any media can be previewed while in the list.
- Can only export/save a video with an audio file if there is a video.
- Save/export works if only videos are on timeline

Display Resize Toolbar with buttons etc. TimeLine: with current time played Video/Images

Audio Subtitles



Subtitle button pressed



Imported video and audio, subtitles added, video playing

