
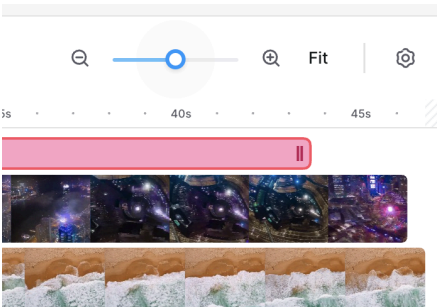


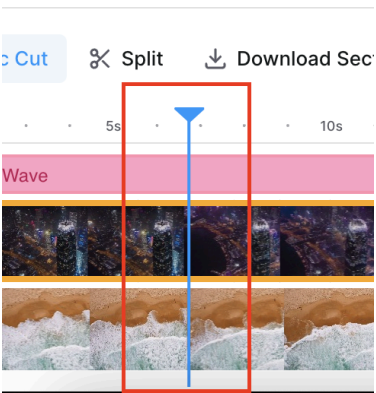
Video editor

Customers are looking for ways to create engaging video content by combining audio and video (or images) and overlaying subtitles or static text. These formats have become increasingly popular for social media sharing and driving engagement.

Requirements

User story	Acceptance Criteria	UX
As a user, I can upload video files so I can edit them	<ol style="list-style-type: none">1. User can select and upload video files from my device.2. Supported formats: MP4 (Maybe more formats later)3. User should be able upload multiple videos. Max of 10 videos with each being <= 25MB. Both of these limits should be easily configurable.4. When user selects Video in the left nav, the resource panel for videos opens up and shows options to upload. Later we will incorporate stock vidoes as well.	
As a user, I want to overlay text over my video	<ol style="list-style-type: none">1. User can input and customize text to be overlaid on the video from a predefined 2-3 designs2. User can set the position of the text with a mouse or touch device.	
As a user, I want to add voiceover audio to my video / images	<ol style="list-style-type: none">3. User can add mp3/wav audio to the project.	
As a user, I want the option to preview my video	<ol style="list-style-type: none">1. User can Play the full length of the video with the text and audio overlaid as set by the user.2. Playback should be instantaneous without any server side processing so the editor feels smooth and fast.3. Playback should include any text, images or audio that was added to the video at the correct frame(s)	

As a user, I want to set the dimensions of the output video	<ol style="list-style-type: none"> Customers can choose between: Original, 16:9 and 9:16 (for use with Instagram/TikTok) 	
As a user, I can see a timeline of my video	<ol style="list-style-type: none"> User should see a timeline component with layers. Each layer represents a video, audio or text asset. If a user uploads multiple videos, they should see multiple layers. The default time will be 1 minute (if media is not uploaded) Customer can zoom in/out of the timeline 	
As a user, I can edit the timeline of my video	<ol style="list-style-type: none"> Customer can shift the objects as to desired start times in the editor. For example, the want the text and video to start at second 0 but then start playing music at 10 seconds. The max time for the video is determined by the end of the last element in the timeline. Empty sections can be rendered as empty. 	
As a user I can modify the start and end time of media in my timeline	<ol style="list-style-type: none"> Each layer can be selected and provides the ability to trim the video to the desired start and end points. 	

I can select a specific point in the timeline and play the video from there	<ol style="list-style-type: none"> For example, if a user has a 1 minute video, they should be able to select :30 second position and play the video. 	 <p>The screenshot shows a video editing interface. At the top, there are buttons for 'Cut', 'Split', and 'Download Sec'. Below these is a timeline with markers at 5s and 10s. A blue playhead is positioned at the 5s mark. A red rectangular box highlights the area around the playhead and the timeline. Below the timeline, there are three video tracks: a pink track labeled 'Wave', a dark track with a blue playhead, and a light track with a blue playhead.</p>
As a user, I can delete the media / text etc, from the canvas	<ol style="list-style-type: none"> User should be able to delete anything added to the canvas using the timeline widget 	
As a user, I want to export and save my edited video	<ol style="list-style-type: none"> The generated video should match the video on canvas including video edits, text, audio or background music. The generated video should be smooth Output will be in mp4 format A 5 minute video should take less than 1 minute (performance To be discussed) 	

UX

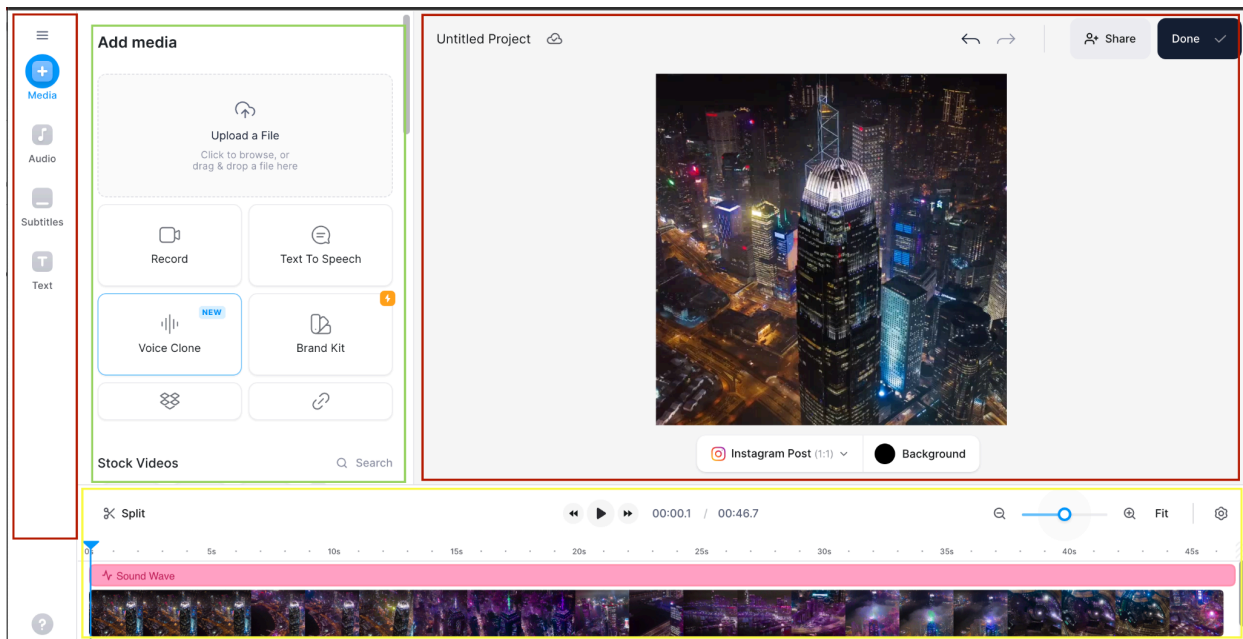
References: Products like veed and lovo have video editing capabilities that can be used as referencing for some of the experiences described here.

The video editor has 4 main areas:

- Left menu / Components
- Option based on the selection made in menu (shown in green). **For v1, the only option will be to upload a file.**

3. Section 3 is the preview Pane
4. Timeline

All of the UI should be built using MUI for consistency with the rest of the app. I will provide the shell app so you can incorporate the changes into it.



Backend

- Backend should be built in nodejs/ffmpeg to create videos.
 - **Please provide requirements for the server recommended for video generation including memory and GPU requirements for the initial test. We can scale that out later.**
- Videos are uploaded to cloud storage (details will be provided later)

Future enhancements:

- Add images in addition to text over the video

- Animate text / images (including gifs) on the canvas (fade in / out)