Software Test Design (STD)

1. Introduction –
   This Software Test Design document outlines the test cases for the functionality of the DramaTune web application, which is an app designed to find a specific dramatic soundtrack for an mp4 short video (scene) and merge it to the desired soundtrack along with the video – to create a final dramatic scene.

2. Test Cases

Test Case ID	Description	Preconditions	Test Steps	Expected Result	Actual Result
TC-001	The user enters the landing page, and inserts a mp4 file	Server running, database initialized	1. Open web application 2. Click on the "Upload" button 3. Window pops up 4. Chooses a mp4 file from the window	Video uploaded and viewed in preview mode	The user has successfully uploaded the intended video.
TC-002	Begin the analyzation process	User uploaded video (mp4)	1. Select the "Analyze" button 2. A progress bar will appear 3. Once finished the tracks will be presented	3 Optional dramatic soundtracks presented	The system analyzed and presented 3 optional tracks
TC-003	Option to listen to each track separately	User has 3 options of music presented	1. User can click play for each track 2. Once selected, the track will be played in another tab	1/2/3 windows opened with the selected track playing	The system has generated new tabs for each played track

TC-004	The user selects the desired soundtrack	User has 3 options of music presented	1. User selects the desired song with “Select” button	The song out of 3, has the “Select” button turn into “Selected”	The system presents the button clicked
TC-005	The “Generate a new video” button appears	User has selected the desired music	1. User selects the desired music track 2. Then appears the “Generate” button	The “Generate” button appears	The system has presented the generate button
TC-006	The new video has been generated	User has the “Generate a new video” button available, video ready	1. User selects the “Generate” button 2. A progress bar appears 3. Once finished, the old video disappears 4. And then, the new video appears slightly below	The newly generated video, which is the merged old video with the soundtrack, appears	The new generated video has appeared
TC-007	Download the new video	User has the new video (merged) presenting, final video available	1. User selects the “Download” button 2. A window pops up 3. User chooses where to save video and what to call the file (mp4)	The “Download” button works as intended and lets the user download the final video	The system has successfully completed the task of download when prompted
TC-008	Change video after uploading	User uploaded video (mp4)	1. User selects the “Change video” button 2. A new window pops up 3. The user selects a new	A new video has appeared in preview mode, instead of the old one	The system has successfully executed the change video task

			video to replace the old one (mp4)		
TC-009	The user applies “Fade in/Fade out” effects to the audio	The new video has been generated and is present	1. User selects the checkbox for “Add fade in/fade out” 2. The video is generated once more 3. Now with the updated audio	A new video will be generated again with the faded audio component attached to the audio	To be implemented and tested
TC-010	The user applies “Mood Intensity” effects to the audio	The new video has been generated and is present	1. User selects the slider for “Mood Intensity” 2. User chooses a value from the slider 3. The video is generated once more 4. Now with the updated audio	A new video will be generated again with the mood intensity audio component attached to the audio	To be implemented and tested
TC-011	The user applies “Instrumentation” effects to the audio	The new video has been generated and is present	1. User selects the slider for “Instrumentation” 2. User chooses a value from the slider 3. The video is generated again 4. Now with the updated audio	A new video will be generated again with the instrumentation component attached to the audio	To be implemented and tested

TC-012	Preview of video plays in preview mode	The video has been uploaded from user	1. User uploaded a video 2. Video showing in preview mode with different controls	Video is playing in browser (with different controls)	The system shows the video properly
TC-013	Preview of merged video plays before final export	Video and music matched, new video generated	1. User has clicked the "Generate" button 2. Video showing in preview mode with different controls	Video is playing on browser with new audio (and various controls)	The system shows the merged video in preview with relevant controls
TC-014	UI disables "Generate" button after generation has been prompted	The newly merged video has appeared after generation	1. User has prompted the system to generate a new video 2. The "Generate" button has disappeared 3. The new video is presented	The "Generate" button will disappear and instead the new video will appear	The system has executed the task, and the button disappeared – user prevented from invalid action
TC-015	UI disables "Analyze" and "Upload" buttons	The user has uploaded a video via "Upload"/ began the analyze process via "Analyze"	1. User selected the upload/ analyze button 2. The respective button disappeared 3. Then began the analyzing process/ video has appeared	The video uploaded will appear/ the analyzation process will begin/end – and the respective buttons will be disabled	The system has presented the relevant video/ begun the analyzation process and the buttons disappeared

TC-016	The system (algorithm) tags the video with emotion label (New tagging system)	Video uploaded and analyzed	1. User has begun the analyzation process 2. System analyzes frames 3. Tags emotion by label	Emotion label displayed in video metadata in the project	Emotion tagging visible (in metadata) - To be implemented
TC-017	The system (algorithm) tags the audio with volume and tempo labels (New tagging system)	Video uploaded and analyzed, music files suggested and matched according to video	1. Video has been analyzed 2. Music files features have been analyzed and labeled	Tags will be added to music metadata in the project	Volume and tempo (BPM) tagging is visible (in metadata) – To be implemented
TC-018	User uploads invalid video file	User is in landing page with “Upload” button presented	1. User clicks the “Upload” button 2. Try to select a non mp4 file 3. Fails since it doesn’t let him choose	Video is not chosen or a non mp4 file, since the system doesn’t let the user choose a non mp4	The system executed properly and only let the user choose an mp4 file for upload
TC-019	User reselects a different recommended track	User has the suggested tracks available and has selected a track	1. User has selected a track 2. Selects a different track 3. The “Select” button updates to “Selected” in the new track 4. Video then updates itself once generated with the new track	The new reselected track has the “Selected” button next to it, after the old track has the “Select” button next to it, and once generated, the merged video updates with new track.	The system executed properly, and the selected track has been updated (if changed each time)

TC-020	The matching algorithm uses 50% tempo and 50% volume	All music files are tagged	1. System performs match scoring 2. Successfully tags all music	Matches will be ranked by weighted scores for each video in the metadata, and by demand (of user)	Correct and more precise choice of music displayed, based on weighted matches.