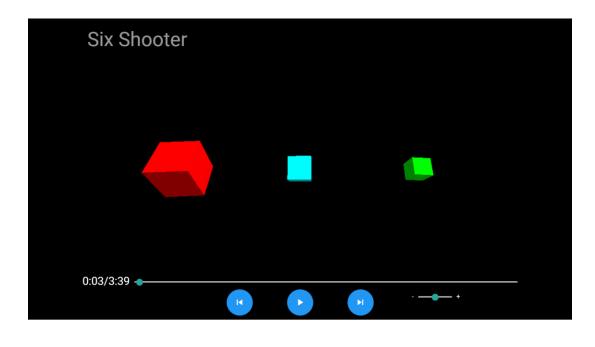
Manual Test Plan

Ethereal Viz – asthana4

Testing Procedure

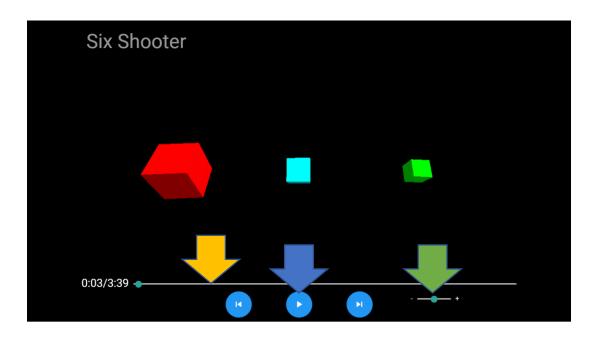
- Navigate to project directory using cmd/terminal/bash
- Type: "npm start"
- Using any browser (example: Chrome) Navigate to localhost:8080 to start the application

Music Player Interface



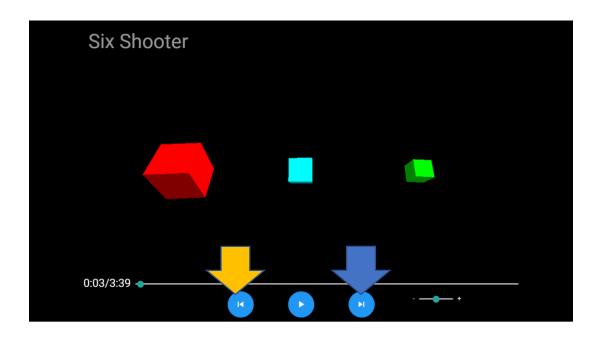
- On navigating to the web page, the user should be presented with the interface on the left. The interface should occupy the full screen
- There should be three buttons placed on the bottom center of the screen. A volume slider should be present on their right side
- Above the three buttons, there should be a long seek slider. On the left of the slider, there should be a timestamp showing the current position and total duration of the track in human readable format
- Three cubes should be floating and rotating in the middle of the screen. The cubes should be shaded as if there was light falling on it from one particular direction
- On initialization, the sample audio track should not start playing automatically.
- The name of the currently played track should show up on the top left

Music Player Controls



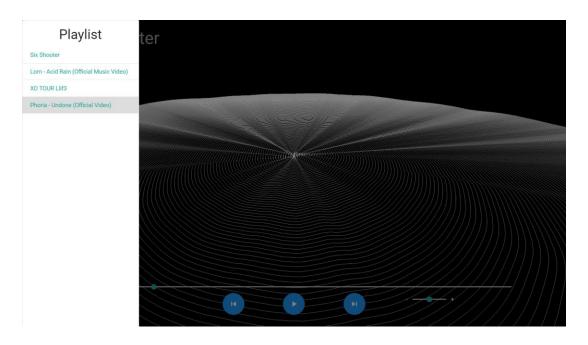
- The play/pause button changes depending on whether music is being played or not. The user can control the playback state
- The seek slider shows the current position in the track and should update with the playback. The timestamp text on the left of the slider should also update
- The volume slider shows the current volume level and starts out at 50% by default. User can change the volume through the slider
- When user stops playing the music, the interface should appear.
- When the music is playing, the interface should disappear into the background, unless the user places cursor within the area of control panel.

Music Player Controls



- The next button plays the next track, if are no next tracks available, it loops the playlist and plays the first song.
- The previous button plays the previous track, if are no previous tracks available, it loops the playlist and plays the last song.
- When either next/ previous is clicked, the time stamp should update indicating the timestamp of the currently played song
- When a particular song finishes, the next song in playlist is automatically played. If the current song is the last song in the playlist, the next song played is the first song in the playlist
- User can drag and drop .mp3/.wav/.ogg files into the visualizer window to load them into the current playlist

Music Player Controls

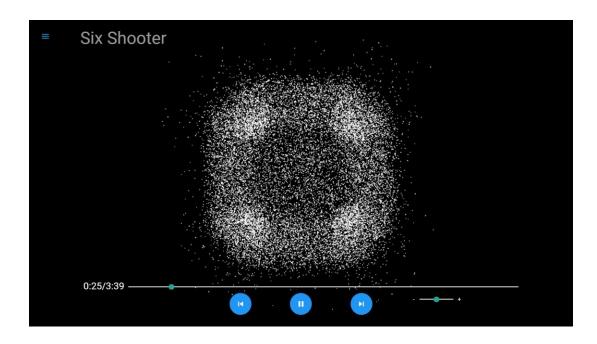


There is a playlist overlay available now accessible from the hamburger icon on the top left.

The playlist shows a scrollable list which gets populated with the user drag-n-dropped songs.

The list items are selectable, and on clicking the audio being played switches to the selected one.

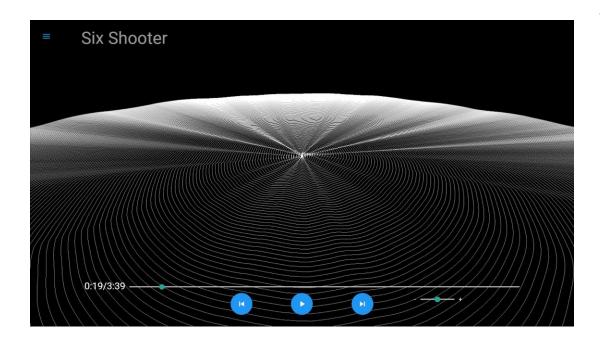
Audio reactive visuals



There are two visualizer modes present now.

The particle system visualizer is shown by default where the particles respond to the beats of the audio.

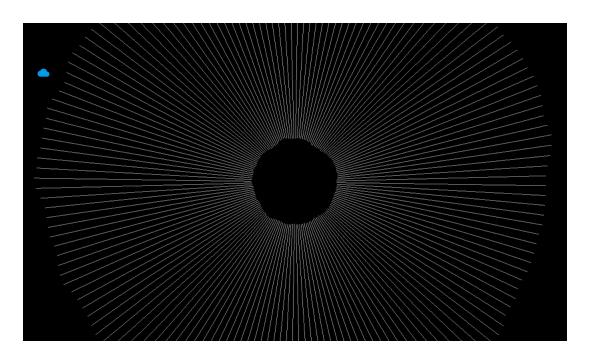
Audio reactive visuals



The loop visualizer generates loops which correspond to the waveform of the currently played audio.

The beats generate an impulse which propagates outwards

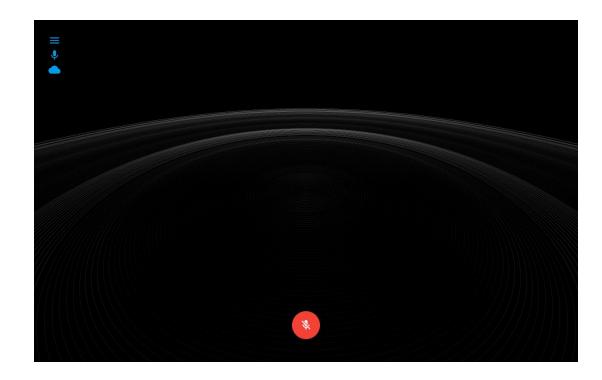
Audio reactive visuals



The wave visualizer generates lines arranged in a circle which correspond to the waveform of the currently played audio.

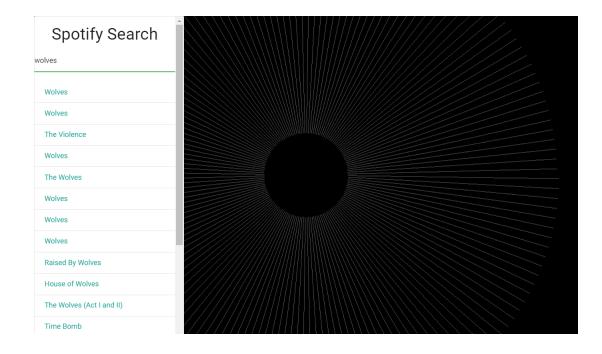
The beats generate an impulse which propagates outwards

Microphone mode



The user can now switch to mic input using the button on the left pane. This switches the UI to show a red mic button which controls the mic input. The visuals respond to mic input now.

Spotify Integration



The user can search the spotify database can play selected songs from the generated list.

On clicking, the visualizer automatically switches to mic mode.

Responsiveness



 The application is responsive enough to accommodate changes in resolution on normal laptop/desktop screen sizes.