Music Player

Overview

In this project, a simple music player is build. The purpose for the music player is to provide user with the shuffled songs. To be more specific, each time the songs (in this case, in a mockup database which is stored as samples) will be looped in different order.

Quick Start

npm install - to install all modules listed as dependencies
npm start - to open http://localhost:3000 to view it in the browser

*This project was bootstrapped with Create React App.

Feature Summary

- ❖ Shuffle the music

After opening the page, user can start shuffling by clicking "play" button. The songs appear in the play list are all the songs that are going to be played. They will be loaded in random order.

Alternatively, user can pause any music by clicking the "pause" button next to it.

If user wants to play it again, he can simply click the "step-backward" button which is placed left to the play button.

- ❖ Adjust the playlist

Whether the list is too short or too long for user, he can easily change its length by sliding the slider on the top right corner of the player.

- ❖ Preview Current Playing

The song that is currently playing can be seen in the left bottom corner of the music player, with its album cover, tile and singer name displayed. Click it, and all the details about this song will be displayed.

- Download music freely

Hover any music in the list, user will see a "download" button and can download whichever he likes.

Functions

onPlay(song)

Receives the next song to play as parameters, binds onended function to the audio element, and plays the song.

getNextSong()

Returns the next song to play as displayed at the top of peekQueue

onPlayButtonClick()

Handles the situation when play or pause button is clicked, and play or pause the song accordingly.

handleAudioPlay(audio)

Handles audio play promise, and give warning to user if promise is rejected.

onAngleButtonClick(direction)

Handles the situation when backward or forward button is clicked, and replay/play the next song for user.

rearrangeSongs()

Shuffles the order of songs within the given array, and tries to avoid two same songs one after another as long as the total number of songs is greater than 2.

shiftList()

Updates the peekQueue and backupArr each time a new song is played, so that the peekQueue is always updated with the next few songs to play.

replay()

Replays the current song.

togglePreview()

To show or hide the preview of the current song.

onSliderChange(value)

Triggered when user changes the number of songs he wants to peek. Receives the number as parameter, and updates the peekQueue and backupArr when necessary.

Corner Cases to Consider

If song number = 0

If song number < peek number

When user plays for the first time

If in slow network, and playing songs takes time or even fail