

Project Planning

Project Description

Title	Drop the Beat
Description	A 2 player "name that tune" game in which players will compete to see who knows their songs best just by listening for a short amount of time (10s - 30s). The host can select a playlist of songs they generated and invite players into the game.
Target Audience	Everyone who loves music - a simple game that anyone can play online and enjoy without much knowledge! Strives to be like Pictionary (Scribblio), Heads Up, Kahoot, Among Us in it's wide target audience

User Stories

USERS (General - Host & Players)

Title: User should be able to hear the music when the host plays it

Traditional User Story	As a user (player), I want to be able to hear the music in real time because I want to be able to guess the correct answer
Traditional User Story	As a user (host), I want to be able to hear the music in real time because I want to know the current game flow/status
Scenario	Given that a game is on, when a song is playing then it will be heard by both (or more) players without delays

Title: User should be able to see the score during the game

Traditional User Story	As a user (player), I want to see my and my opponent's score because I want to know who's winning and if I'm winning
Traditional User Story	As a user (host), I want to see the players' scores, because I want to know who's winning my game!
Scenario	Given that the game is on, when a score is updated then it will be updated for all players and a host

Title: User should be able to see the song details of a song previously played/guessed

Traditional User Story	As a user (player), I want to see the details (name, artist, album cover) of any songs previously played because I may like them and want to look them up after, and want to know the correct answer (if I didn't get it)
Traditional User Story	As a user (host), I want to see the details (name, artist, album cover) of any songs previously played because I want to know the current game flow/status
Scenario	Given that a game is on, when a song has been played (in a previous round) or guessed correctly, then it will display the details

Title: User should be able to see winner at the end

Traditional User Story	As a use (player), I want to see the winner at the end because I want to be congratulated and have bragging rights if I win!
Traditional User Story	As a user (host), I want to see the winner at the end because I want to know who knows my playlist best ;)
Scenario	Given that I'm in game, when the game is over then it will display the winner

Title: User should not be able to see anything other than the landing page and the game room (if they're a player) - stretch

Traditional User Story	As a user (player) I should not be able to see anything other than the main page or game room that I was invited to because I just want to play a game
Traditional User Story	As a user (host) I should not be able to navigate to playlists if I'm not logged in because playlists belong to those who own (created) them
Scenario	Given that a game is on, when I try to cheat and navigate to the specific playlist (player), then it redirects me to the home page

USERS (Host)

Title: User(host) should be able to see all their playlists

Traditional User Story	As a user (host), I want to see all the playlists I've created because I want to host different games depending on my mood
Scenario	Given that I'm logged in, when I click "My Playlists", then all the playlists will be listed

Title: User(host) should be able to select a playlist

Traditional User Story	As a user (host), I want to select a specific playlist because I want to see the details and start a game
Scenario	Given that I have a list of playlists, when I click a specific one then I'm taken to the page with details of the playlist and ability to start a game for that playlist (name, songs, difficulty level for a game, link for game)

Title: User(host) should be able to control the game

Traditional User Story	As a user (host), I want to be able to click "Next Song" to start a new round because I want to make sure everyone is ready
Scenario	Given that a round has ended, when I click "Next Song", then the next round begins with the next song in the playlist

Title: User(host) should be able to log in - authentication stretch

Traditional User Story	As a user (host), I want to be able to log in because I want to see my playlists and start a game
Scenario	Given that I'm on the website, when I enter my credentials then I will be able to use it's features

Title: User(host) should be able to invite players with a game link - stretch

Traditional User Story	As a user (host), I want to invite others to a game, because I want to test their knowledge of songs I know
Scenario	Given that I want to host a game, when I send out the link then other can join the game

Title: User(host) should be able to change settings for a playlist (stretch)

Traditional User Story	As a user (host), I want to change settings for a game related to a playlist, because I want different options depending on who's playing (ex. Difficulty level)
Scenario	Given that I have a specific playlist, when I select different settings (ex. difficulty) then the game will adjust these settings based on my preferences

Title: User(host) should be able to edit/delete playlist (stretch)

Traditional User Story	As a user (host), I want to edit/delete a specific playlist, because I want to make it better or don't like it anymore
Scenario	Given that I have a specific playlist, when I edit/delete it then I'm able to adjust the playlist to my preferences

USERS (Players)

Title: User(player) should be able to join/enter a valid game with their name

Traditional User Story	As a user (player), I want to be able to join a game when invited because I want to compete and see my song knowledge
Scenario	Given that I want to play a game when I go to the link that a host sends then I've joined their game and can enter my name

Title: User should be able to propose the correct answer and get a score

Traditional User Story	As a user (player) I want to be able to propose the correct answer and be understood (multichoice or input) and get a score for the correct one (and get some animation - congratulation) Because I want to get a score for the correct answer
Scenario	Given that a game is on When a song is playing and nobody guessed it yet Then it will recognise and take the first correct answer and give player a score

Title: User(player) should not be able to see song details for songs not yet played or not guessed correctly (maybe) in the current round

Traditional User Story	As a user (player) I should not be able to see song details for upcoming songs Because I don't want to cheat!
Scenario	Given that I'm in a game When a song hasn't been guessed Then the details of the song will not be available

Title: User(player) should not be able to start a round

Traditional User Story	As a user (player), I am not able to control the game status such as starting rounds because that's the host's job
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Stack Choices

Main Stack	PERN (Postgres, Express, React, Node)
Front-End	React, Websockets (Socket.io), Material UI, Spotify API, SASS, Axios
Back-End	Node, Express, Websockets (Socket.io)
Database	PSQL

Resources/Routes

Front-End (Navigation Purposes)

Users

Action	View & Path	Description/Use
Read	/	→ Home (landing page)
Read (stretch)	/login	→ display login form
Read (stretch)	/register	→ display register form
Read (stretch)	/join	→ Form for joining a game

Playlists

Action	View & Path	Description
Browse (Read All)	/playlists	→ displays all the playlists
Read	/playlists/:id	→ displays a single playlist
Read (stretch)	/playlists/new	→ displays form for new playlist

Game

Action	View & Path	Description
Read	/game/:id	→ displays game room (lobby, current game or game end view) depending on status of game → specific rooms (id) will be stretch

Back-End (Requests)

Users

Action	Verb	Endpoint	Description
Create (stretch)	POST	/api/login	→ login an existing user
Create (stretch)	POST	/api/register	→ register a new user
Create (stretch)	POST	/api/logout	→ logging out an existing user

Playlists

Action	Verb	Endpoint	Description
Browse (Read All)	GET	/api/playlists	→ get all playlists for a specific logged in user, including all the songs in the playlists
Create (stretch)	POST	/api/playlists	→ create new playlist
Update (stretch)	PUT	/api/playlists/:id	→ edit a playlist
Delete (stretch)	DELETE	/api/playlists/:id	→ delete a playlist

MVP/MVD/List of Features

1. Skateboard

- One-player game
- Hardcoded user data
- Hardcoded playlist data

2. Bicycle

- Live chat + socket.io
- Two player game
- Spotify API
- Hardcoded user data
- Hardcoded playlist data
- Login logic + real user db
- Count and store the score

3. Cadillac

- User create/edit/delete own playlists (search form)
- Ratings for playlist
- Day/night theme
- Players can change their name and colour upon arrival into game

4. To the moon

- Flag of the user's country
- Avatar
- Responsive design
- Visualizer
 - Wave.js <https://codepen.io/RubyZhuang/pen/wvJmrOK?editors=0100>

Data Structure

Playlists

```
const playlists = {
  1: {
    id: 1,
    name: 'Pandemic',
    imageURL: 'path in assets folder',
    songs: [1, 2],
    rating: 4,
  },
  2: {
    id: 1,
    name: 'Christmas',
    imageURL: 'path in assets folder',
    songs: [1, 3],
    rating: 5,
  },
};
```

Songs (this may be combined directly into playlists)

```
const songs = {
  1: {
    id: 1,
    spotifySongId: '11dFghVXANMlKmJXsNCbNl',
    name: 'Toxic',
    artist: 'Britney Spears',
    album_photo:
      'https://i.scdn.co/image/966ade7a8c43b72faa53822b74a899c675aaafee',
    preview_url:
      'https://p.scdn.co/mp3-preview/8465386fd6ce10f7ae3bd9c907825d7cb955ade0?cid=804b5742dbd34f6fae0807b70d81e576',
  },
};
```

```
2: {
  id: 2,
  spotifySongId: '1ldFghVXANMlKmJXsNCbNl',
  name: 'U can't touch this',
  artist: 'MC Hammer',
  album_photo:
    'https://i.scdn.co/image/966ade7a8c43b72faa53822b74a899c675aaafee',
  preview_url:
    'https://p.scdn.co/mp3-preview/b3b11fad170bccccca0af7325c6f75f7ec3c06b78',
},
3: {
  id: 3,
  spotifySongId: '1ldFghVXANMlKmJXsNCbNl',
  name: 'So sick',
  artist: 'Ne-Yo',
  album_photo:
    'https://i.scdn.co/image/966ade7a8c43b72faa53822b74a899c675aaafee',
  image_url:
    'https://p.scdn.co/mp3-preview/ccccb919a088e0d873fe63a3e6d5f8fad7c170d6 ',
},
};
```