

Two-Week Project Overview: Spotify PowerHour

The objective of this project is to create a web application that facilitates the drinking game PowerHour. The application, using the Spotify API, will access a user's Spotify account and shuffle play songs in their library, one minute at a time, changing songs to indicate when everyone at the PowerHour should drink.

The features will be simple. The landing page will have a title and a button which, when clicked, will start power hour and go to another page with what song is playing, the timer (counting up minutes and seconds to the 60 mark), two buttons to make the playlist songs more or less intense (explained in next paragraph), then a search bar to add a song into the queue if there is some song preference among the crowd. (mockups are on the next page)

The cool part about this app is that, using Spotify tempo and danceability data, we'll be scaling the intensity of the song over time, subject to input by users as well, to make it more intense over the course of the hour – this should create a superb pregame experience.

The tasks are:

1. **Research into the Spotify API** and its data format (6 hours of work each) – this should be done by the **17th**, and will give us a working knowledge of how to query and interact with the data.
2. **The design mockup** – mostly done.
3. **Creating the react app with styling** (10 hours each) – this should be done by the **20th**, and will give us the layout of the pages with all its elements and dummy buttons and search bar.
4. **The Spotify API call functions + elements** (8 hours each) – this should be done by the **22nd**, and will give us all the tools we need to access API data at will.
5. **The playback functionality** (5 hours each) – this should be done by the **24th**, and will let us play songs for one minute at a time, being able to select songs within a certain tempo range and shuffle them.
6. **Intensity buttons functionality** (2 hours each) – this should be done by the **25th**, and will allow user to push buttons to increase or decrease the intensity range of the playing song.
7. **Song search/queue song** (6 hours each) – this should be done by the **27th**, and will allow the users to search and add a song to the queue.
8. **ERROR BUFFER/Debugging** (5 hours each) – this is a window from the **27th to the 28th** where we'll be testing out the product, thinking of edge cases, and trying to break it so we can spot and fix any bugs that may exist.
9. **Hosting/Deploying** – this should be done by the **29th**, and will make the completed product accessible online through firebase.
10. If time allows, we're also looking into an **Amazon Alexa and a Google Home** integration, to make it start by voice command (should take around 6 hours each). This should take another two days, if we decide to pursue it.

