Milestone 2

Project Plan:

Miro (Project Management Tool) Link: https://miro.com/app/board/o9J_kw2mOoc=/

Project Feature List:
- Login to website
  - Input a username and password
- Connect to spotify API
  - Use the Spotify API's built-in login function to keep a user logged in
- Play/access spotify library
  - Have a player that can play music from the users library
- Create the base website to work within
  - Create a front end
- Integrate 3-D graphics for VR/AR visualization capability
  - Create 3d visuals to go along with music in the player.
- Create Account
  - Create an account to work with the Amplify website
- Integrate Song Visualization to Site
  - Connect the visualizer to the Amplify site
- Determine song visualization by mood and by frequency (Spotify feeling classifications)
  - Use song metrics for moods provided by spotify API to provide info for the visualizer.
  - Use song metrics concerning music data to provide info for the visualizer.
- Create song visualization by frequency and by mood
  - Use song metrics concerning music data to provide info for the visualizer.
- User metrics
  - Show info regarding user plays and library construction
- Song metrics
  - Obtain song specific data regarding characteristics (e.g. danceability) and use (e.g. plays per month)
- Integrate Metrics
  - Use metric data to show user listening habits
- Polish Website Design
  - Make the website look and feel like it is well polished

Feature: Create User Login/ Login Page

Functional Requirements:
- Ability to click a button and be directed to a login page
- Ability to see your password if you want
- Ability to choose if you are a new user or existing user
- Ability to submit a username and password combo
- Ability to check a "Remember Me" box

Nonfunctional Requirements:
- Encrypting user password
- Load page in under 2 seconds
- Sync to Spotify user data if returning user

User Stories:
- As a user, I want to see my password so I can make sure that I am entering the right information
- As a user, I want to clearly see a login button that takes me to the login page
- As a user, I want to be able to indicate if I am an existing or new user so that I can follow the correct steps for entering the website
- As a user, I want to be able to log in so that I can save my data and use my spotify account on the website

<u>Feature: Play/Access Spotify Library</u>

Functional Requirements:
- Ability to play/pause a song
- Ability to search through library
- Ability to scrub through a song

Nonfunctional Requirements:
- Uninterrupted music play
- Page Loads in under 2 seconds
- Music does not stop if tabs or pages are changed

User Stories:
- As an Amplify user, I want to be able to see my whole library to keep Spotify functionality as well as to allow me to see what of my content I would be interested in using with Amplify's extended features.
- As an Amplify user, I want to be able to play songs from my library so that I can continue my spotify experience while taking advantage of Amplify's other features.

People Working On: All

Feature: User Metrics

Functional Requirements:
- Ability to see most played songs
- Ability to enter mood and be given matching playlists
- Ability to see hours listened to per week
- Ability to see usage graphs and hover over to further inquire

Nonfunctional Requirements:
- Take data from spotify
- Load page in <2 seconds
- Encrypt user data for safety

User Stories:
- As a user, I want to know what mood each of my playlists evokes so that I can be in touch with my mood
- As a user, I want to be given my own playlists that match my recorded mood so that I can listen to music that matches my feelings
- As a user, I want to be given my spotify playlists that match my recorded mood I don't know so that I can listen to music that matches my feelings
- As a user, I want to see what songs and artists I listen to most because its cool
- As a user, I want to see how my hours of music I listen to a week so that I can understand my relationship with music
- As a user, I want to see a fun metric about my music so that I can visit the website and it will make me happy

People Working On: All

Feature: Create a base website

Functional Requirements:
- Have a website the user can navigate through clicking
- Have a website connect to a backend server that stores user data
- Ability to switch between tabs

Nonfunctional Requirements:
- Load pages in under 2 seconds
- Encrypt all user data
- Host on AWS

User Stories:
- As a user I want to be able to navigate the Amplify website in order to listen to and visualize my music.
- As a user I want a website to visit for functionality
- As a developer I want to have a bare bones version of a website to see how my applications will integrate with it

People Working On: All

Feature: Song Metrics

Functional Requirements:
- Ability to see how popular a song is
- Ability to see mood of song
- Ability to see artist information

Nonfunctional Requirements:
- Take data from spotify

User Stories:
- As a developer, I want to know what exact song metrics Spotify gives me so that I can use them to display info the user wants
- As a user, I want to see general song metrics so that I can know more about what I am listening to
- As a user, I want to see what song attributes spotify gives to the music I am listening so that I can know more

People Working On: All

Feature: Create a visualizer

Functional Requirements:
- Be able to see a full page showing visualization of currently playing song

Nonfunctional Requirements:
- Get song metrics
- Use song metrics to visualize music
- Use data in 2d or 3d environments

User Stories:
- As a user, I want to be able to visualize my music so I can enhance my listening experience.
- As a developer I want to know how I can connect the song data to the visual environment so I can make a nice looking visualization.

People Working On: All