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SoftDev1 pdo1

Project Name: *Duende* Design Document

<u>Description:</u> Our website is all about music We want to create two games: HigherLower and GuessTheSong. We also want to make user accounts where you can see all the songs you've liked from the two games.

APIs

- **Spotify:** Retrieves a user's playlists, songs, and recommendations
- Lyrics API: (Genius or Musixmatch) Retrieves a song's lyrics.

Core Components

- A. Navigation Bar
 - Present on every page to easily log in/out, view home page, play HigherLower, play GuessTheSong, and see Liked Songs.
- B. User Accounts
 - Users must register for an account and log in to "Heart" new songs that they might like when they're playing the games.
 - Users with accounts can view their "Hearted" songs, which will be linked to listen to the song on Spotify
 - Users can also link their Spotify accounts with their accounts, and use their own music from their Spotify account in the games instead of random songs
 - Don't need to register to play games

C. HigherLower

- You'll be shown two cards with the names of two songs. You simply have to decide whether the second card's number of "monthly listens" is higher or lower than the first card.
 - Data about "number of monthly listens" to a song from Spotify API.
- As you progress, you will be shown a new card. Choose higher or lower to decide whether it is listened to more or less than the previous card. The objective is to get the most right in a row. If you get one wrong, you lose the game.

D. GuessTheSong

- You'll be shown the lyrics to a song. Guess what song the lyrics are from. MC.

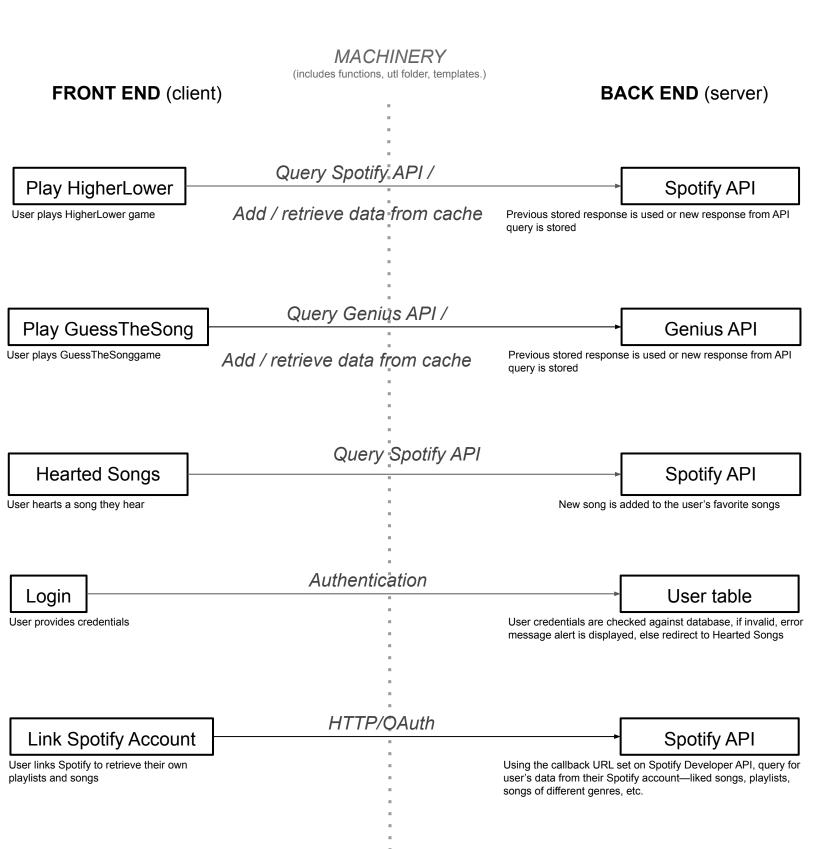
Optional Components (if we have time)

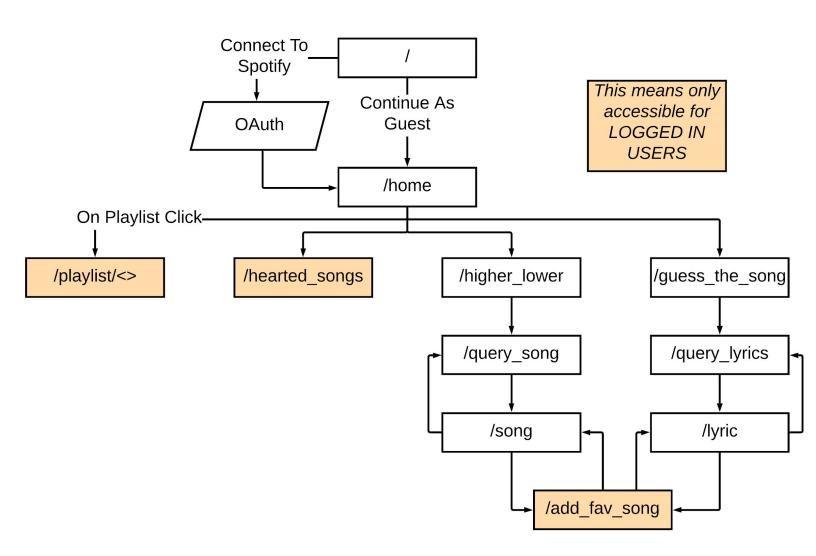
- Allow the user to choose what genre of music they want their HigherLower or GuessTheSong games to be.
- FinishTheLyrics
 - You'll be shown the lyrics to a song with two blanks in it. Fill in the blanks.
 - Multiple choice question.
- Song Search
 - Users can search for songs to find the song's info/link to listen on Spotify or lyrics or songs similar to it.
- Use that quotes API to have motivational quotes

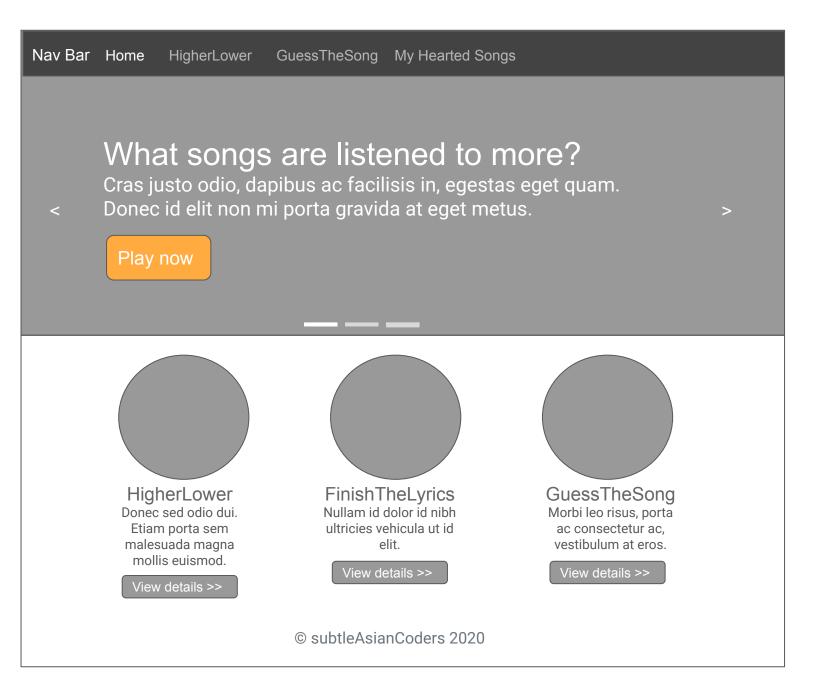
Communication App: Messenger

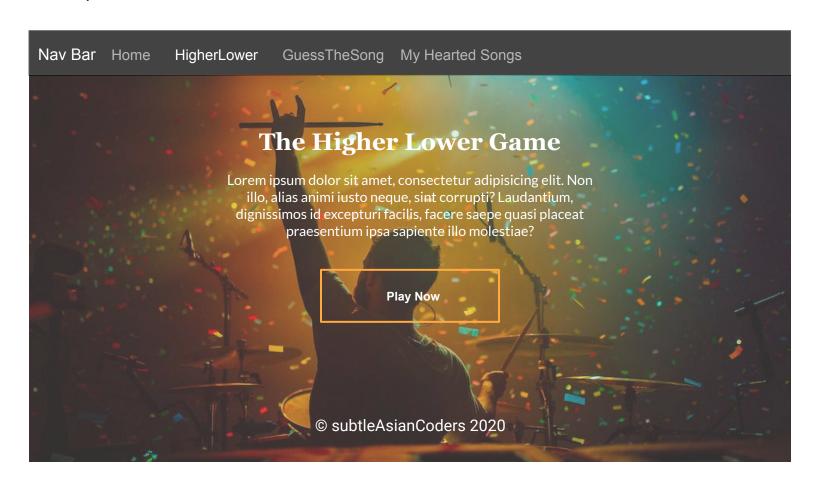
TASKS

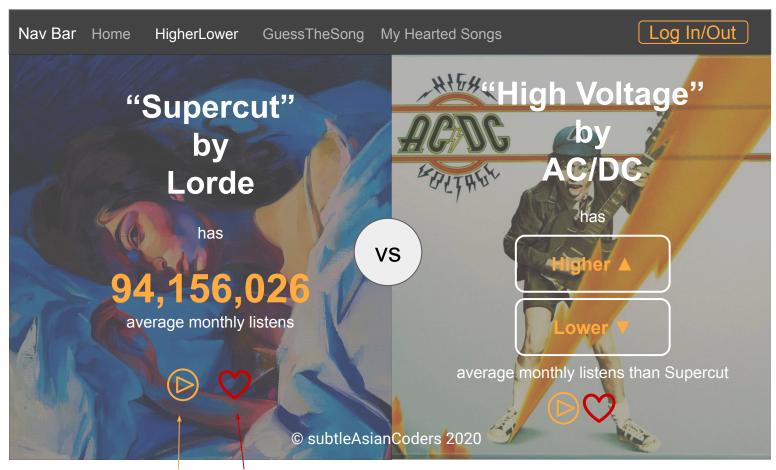
- A. Project Manager (Yaru)
 - Oversees project development
 - Help with frontend/backend development
 - Updates devlog and design doc
- B. Frontend (Eric)
 - Creates HTML templates and pages according to sitemap
 - Jinja
 - Bootstrap and custom CSS styling
 - We are using Bootstrap because we are all more comfortable with it and believe it looks better than Foundation
- C. Backend (Raymond)
 - Write Python scripts to handle requests to modify or retrieve data from databases and APIs using HTTP/necessary OAuth
 - Integrate code from the last project for the login features
 - Make SQLAlchemy models for the database tables
- D. Database (Matthew)
 - Write Python scripts to handle requests to modify or retrieve data from databases and APIs using SQLite
 - Assist with retrieval from APIs using OAuth
 - SQLite/alchemy operations
 - Create, read, update, delete (CRUD) through SQLAlchemy to SQLite



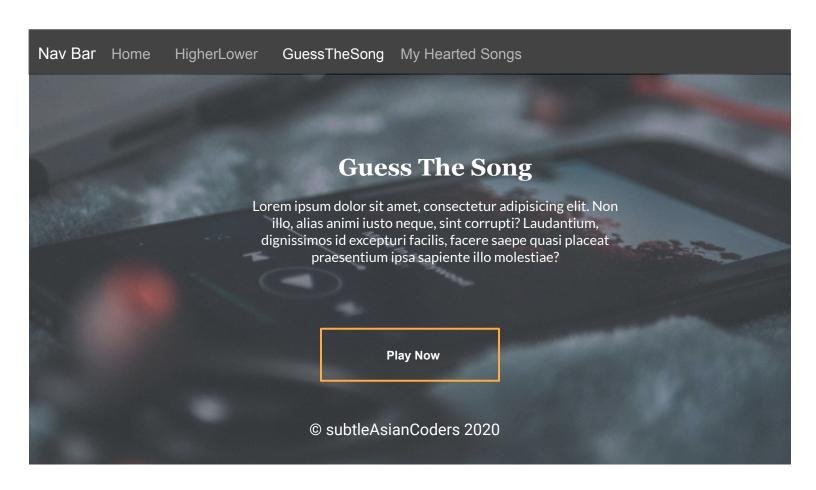


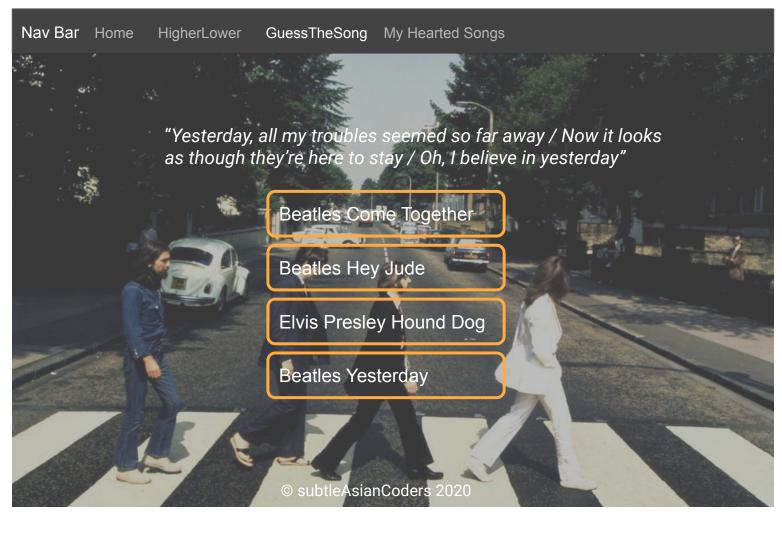




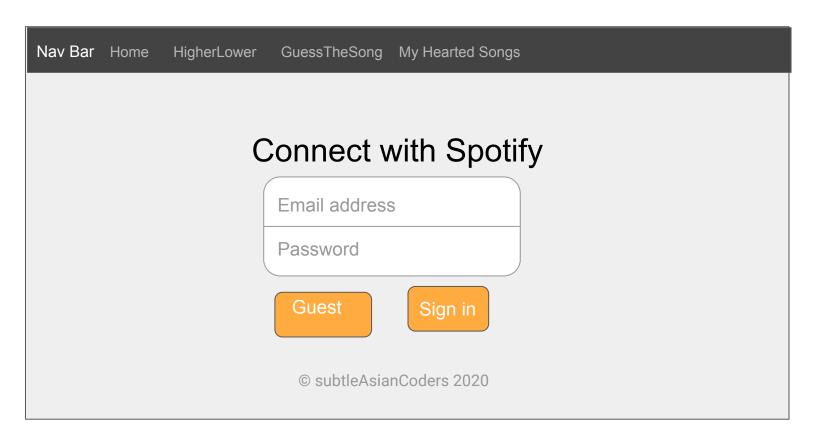


play song heart song (can only heart if logged in)





Site Components



Nav Bar Home

HigherLower

GuessTheSong My Hearted Songs



"Getaway Car"

Artist: Taylor Swift Album: Reputation Listen on Spotify

Listen on iTunes



"Winter"

Artist: Khalid

Album: American Teen

Listen on Spotify

Listen on iTunes



"Whole Lotta Love"

Artist: Led Zeppelin Album: Led Zeppelin II Listen on Spotify

Listen on iTunes



"Aloha"

Artist: Møme

Album: Panorama

Listen on Spotify

Listen on iTunes

