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SPOTIFY PLAYLIST FINDER & SOCIAL MEDIA



PROJECT OVERVIEW:

- Using Spotify's API, we want to create a platform where:
 - Spotify users who want to discover new music can indicate their preferences for the kinds of music they enjoy listening to or the kinds that they want to discover more of, and each week, our program will follow existing Spotify playlists for them based on those preferences.
 - Spotify users can enhance the social aspect of music streaming. This will be achieved by providing users with a social platform on our app that expands upon Spotify's existing social features by allowing users to have more control.

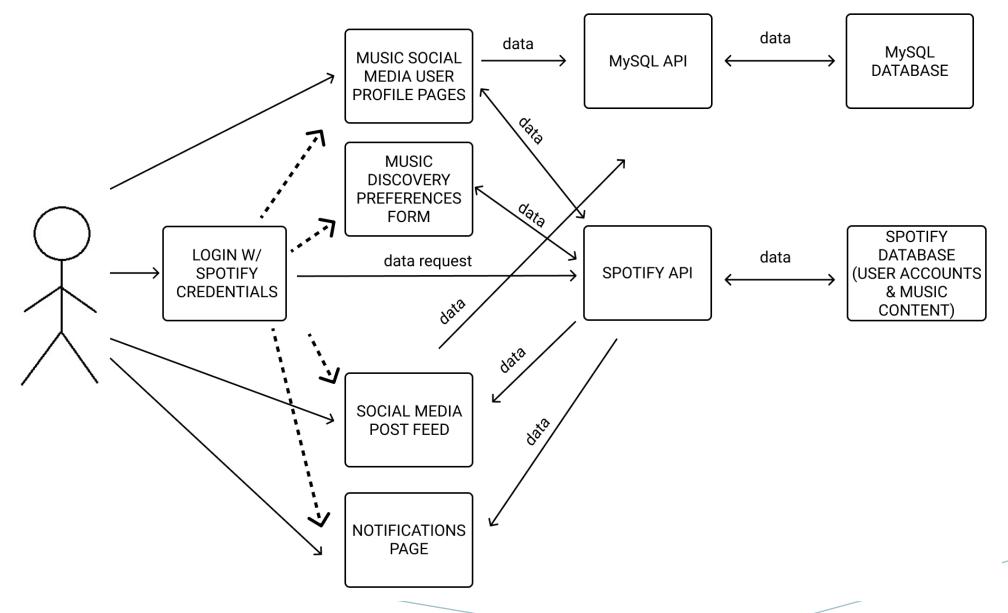
SYSTEM OVERVIEW

- Our application behaves as follows:
 - Login to Spotify account
 - Filling out music discovery form
 - Notified as to which playlists have been followed on notification page
 - Interaction with music social media aspects
 - Specialized profile pages and central post feed
 - Posts are stored into a database through MySQL

SYSTEM OVERVIEW CONTINUED

- The application has the following functional requirements:
 - Spotify Login
 - Log in to Spotify account through Spotify API
 - Music Discovery Preferences
 - Filling out music form to find playlists via the Spotify API and Spotify database
 - Expanded User Profiles
 - Display Spotify user profiles with greater detail
 - Music Social Media Post Feed
 - A central location for all user posts, stored in a MySQL database
 - Notifications Page
 - The location where followed playlists are sent to the user

SYSTEM DIAGRAM



ARCHITECTURAL STYLE – PIPES AND FILTERS

- Pipes and Filters is an architectural style in which filters take inputted data which is then outputted by certain processes, and that output becomes the input to another process. Pipes serve as connectors for the stream of data being transformed.
- The architectural style of this application is Pipes and Filters because of how data is constantly being transformed from one output to the input of another process.
 - One filter is the Music Discovery Preferences Form that takes input from the user about the kinds of playlists they are looking for, is then outputted in the form of followed playlists on the notification page.
 - The Spotify API servers both as a Pipe, to connect streams of data being transformed such as followed playlists and user profile information, and as a filter to help follow playlists.

DESIGN PATTERN

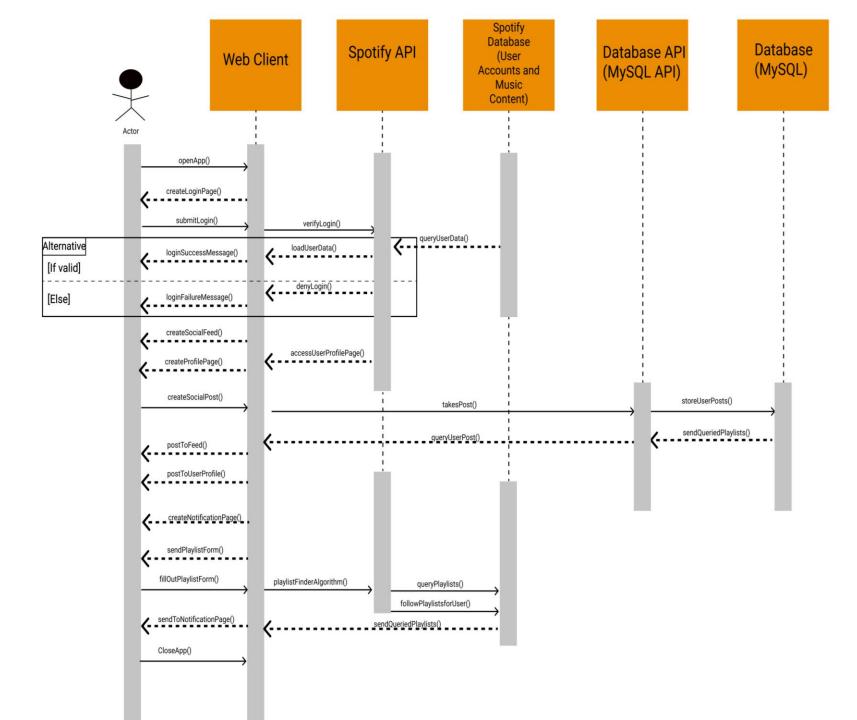
- Based on this type of application and system we will be creating we believe that the
 Façade design pattern would be most applicable because it will give us the unified
 interface we are looking for on this project.
- Gives us a simplified and straightforward view of the functionality of our system
 - Makes it easier for users to do what they want to do most such as discover playlists and share posts with friends and followers.
 - Our web-client for this application is the Façade in this case, with the Spotify API, Spotify API, and MySQL working in the background.

ACTOR IDENTIFICATION

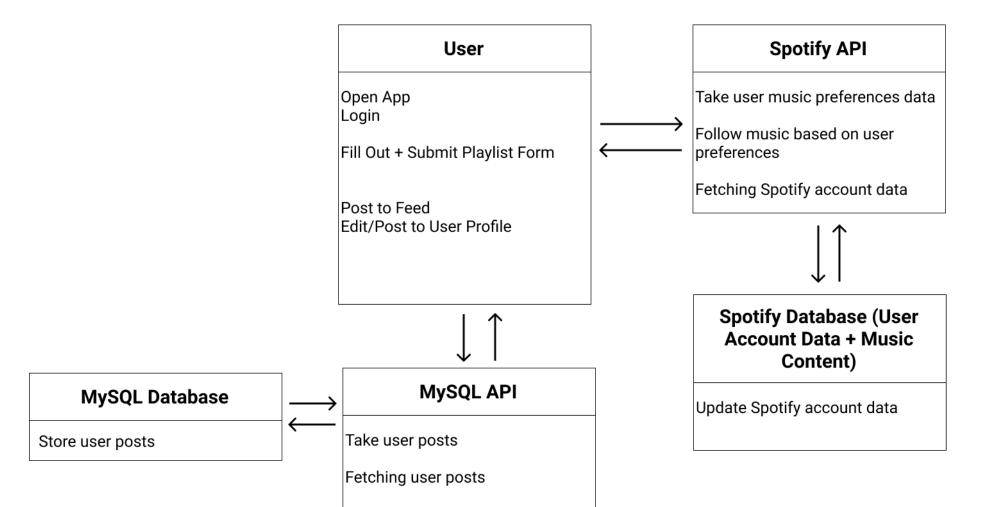
FRAMEWORKS

- We will be using the Spotify API to be able to use the functionality of some Spotify features, such as their playlist catalog and user profiles, in order to lay the foundation of our application. We do not need to create the Spotify API, we just need to take advantage the existing Spotify API's functionalities. We will be able to make Spotify API calls using JavaScript code.
- We will also be using the Node.js framework, as suggested by the Spotify API
 Developer Guidebook, to handle the back-end and server-side of this application since
 our front-end logic will be created using JavaScript.

SEQUENCE DIAGRAM



CLASS DIAGRAM



Spotify Social Media and **Playlist Finder**

Notifications

Preferences

Click here to start a

new music discovery preferences form to find new playlists!

Form

You are now following 6 new playlists, click to here to view them

What's on your mind?

Post

Activity of Who You Follow



Justice by Justin Bieber

Music Discovery

I can't recommend this new Brockhampton album "ROADRUNNER: NEW LIGHT, NEW MACHINE" enough! I've had it on repeat!

Feed

User rating: 9/10



ROADRUNNER: NEW LIGHT, NEW MACHINE by Brockhampton

Click album cover to listen on Spotify



Jazz UK playlist



I've been listening to this new playlist that was discovered for me quite a bit recently. It is a great mix of classic rock and new wave alternative rock. Great job to whoever put it together!



Classic and Modern Rock N Roll by JuanFer Molina

"Nights" by Frank

Following List

User rating: 8/10



Click on playlist cover to listen on Spotify

A BASIC

GITHUB LINK

THANKYOUFOR LISTENING

ANY QUESTIONS?