Spotify Web App: Friendly Jam

Purpose:
To enhance the joint listening experience amongst peers and users by changing the shared queue feature to be more equitable.

GOAL:
Develop a web application that can rotate songs for shared listeners using the Spotify API.

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Project Abstract

+This project aims to create a web application that improves Spotify's group listening functionality by implementing fair queue management. Using the Spotify API, our solution will ensure all users in a shared session are equally represented in the song rotation. This approach will enhance user satisfaction and encourage a more enjoyable, balanced experience for group listening. Key aspects include API integration, queue logic design, and a user-friendly interface for selecting queue preferences. This project addresses technical, ethical, and legal constraints associated with fair queue management.

User Stories

+ 1. "As a user, when I am listening to music with my friends I want everyone to be fairly represented in the songs that play"

+ 2. "When using Spotify, I think it would be cool if there were different ways of sorting/randomizing queued songs"
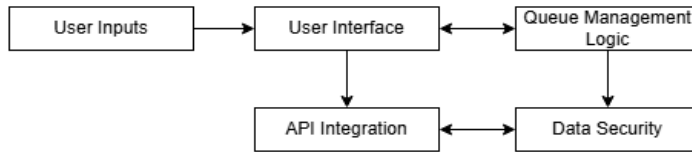
DIAGRAMS

In these diagrams there are 4 things to pay attention to:

1. Rectangular boxes indicate an action or an entity that can perform actions

2. An arrow points towards another box and the direction indicates the flow of information

3. Oval Shapes attached to a line indicate potential subprocesses that fall underneath the block PROCEEDING the ovals. They are attached via dashed lines

4. Diamond shaped boxes indicate a conditional with two arrows leaving it. One arrow will have a 'YES' and the other a 'NO', indicating the answer to the proposed question in the box
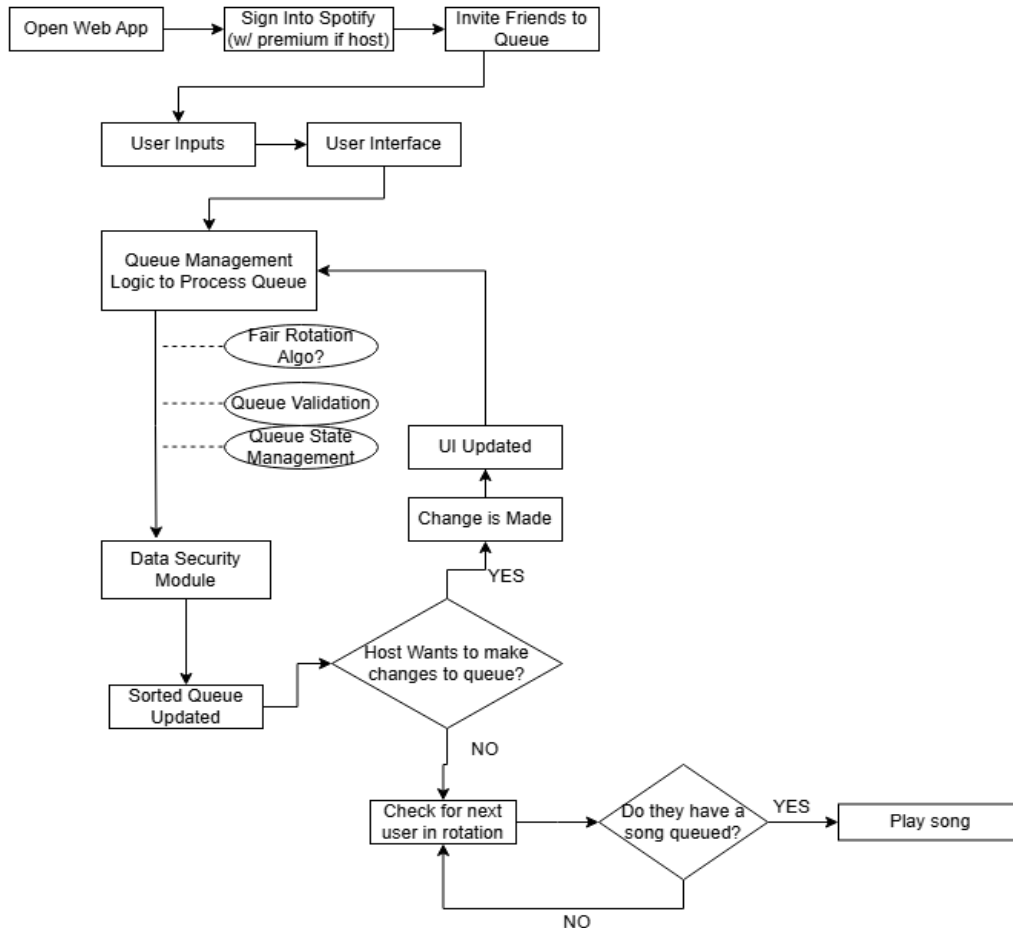
Project Constraints

+**Economic**: This project relies on free and/or open-source tools due to budget limits for developers and consumers

+**Professional**: As a portfolio project, this project should be developed with high-quality code.

+**Ethical/Legal:** Ensure fair use of Spotify's API and protection of user data

Current Progress

+**Completed**: Project required tasks development, Research on API integration, Design UI for host and friends

+**In Progress:** Queuing/sorting backend logic, ensuring reliable API calls with multiple users

Expected Accomplishments By Term's End

+ Logic for important backend is developed
    + Everyone adding songs, queue being sorted properly, songs playing in proper order
+ UI for queue host and other members is drawn up and partially coded

Division of Labor

+I will be working on all parts by myself as this is a solo project

Expected Demo at Expo

+ I expect to showcase the system in full use.

+ I want to:

  + Start a queue

  + Let observers join and add songs

  + Have a big screen showing the host's view of the app as I let some songs play and let the system do it's work