JAVYD

Vananh Le, Amey Erdenebileg,Yosan Russom,Jack Kelly, Drishan Sarkar
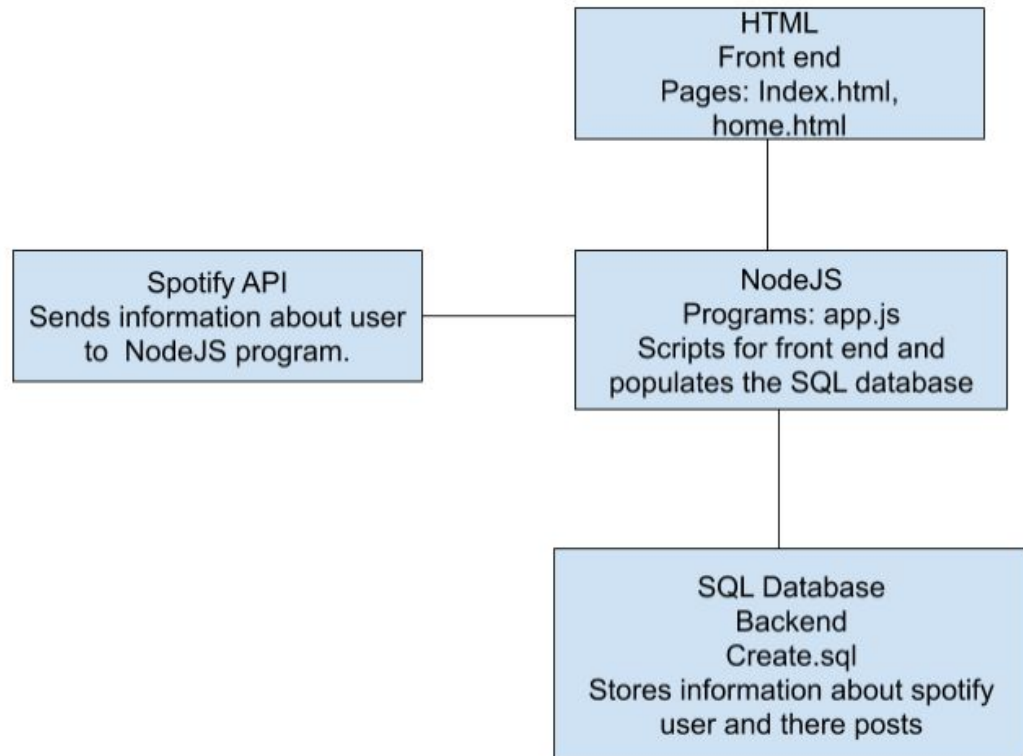
Create a single PDF for the team

- Document what features were completed, what worked during the demo, what issues were faced either during the development or during the demo, and what were the suggestions offered by the TA.
- This project milestone 4 submission should be a PDF document named ProjectMilestone4_[TeamNumber] and pushed to the MILESTONES repository in git.
- On Canvas, include a text file with the link to your MILESTONES git repository

**VALENCE**

REVISED LIST OF FEATURES:
- User Account/Profile
    - Functional: Software should be able to connect user accounts on spotify with ease.
    - Non-functional: The software should be secure and protected from unauthorized access. The data will be collected from the Spotify API.
    - There will also be a user account profile page on our website that shows their profile picture, name, etc.
- Upload a picture
    - Functional: This feature should allow the user to upload a picture from their system to put into their gallery.
    - Non-functional: This feature uses HTML upload and should store it in our database to be used for the gallery.
- Search
    - Functional: The search feature should be able to look for songs the user specificies.
    - Non-functional:
- Commenting
    - Functional: This feature should allow users to comment on other's photos.
    - Non-functional:
- Add audio to picture
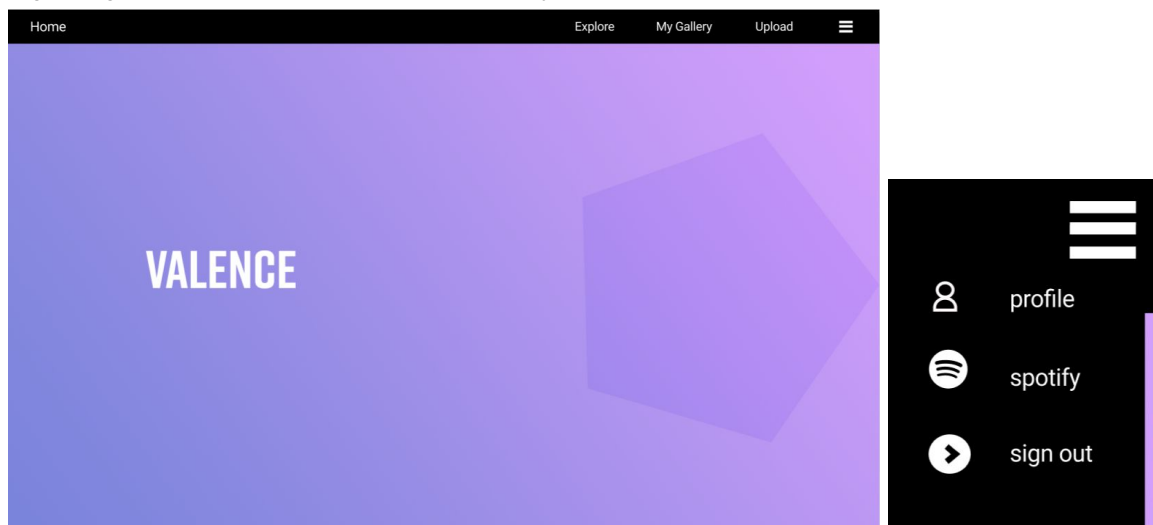   - Functional:
    - Non-Functional:

ARCHITECTURE DIAGRAM:

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FRONT END DESIGN:

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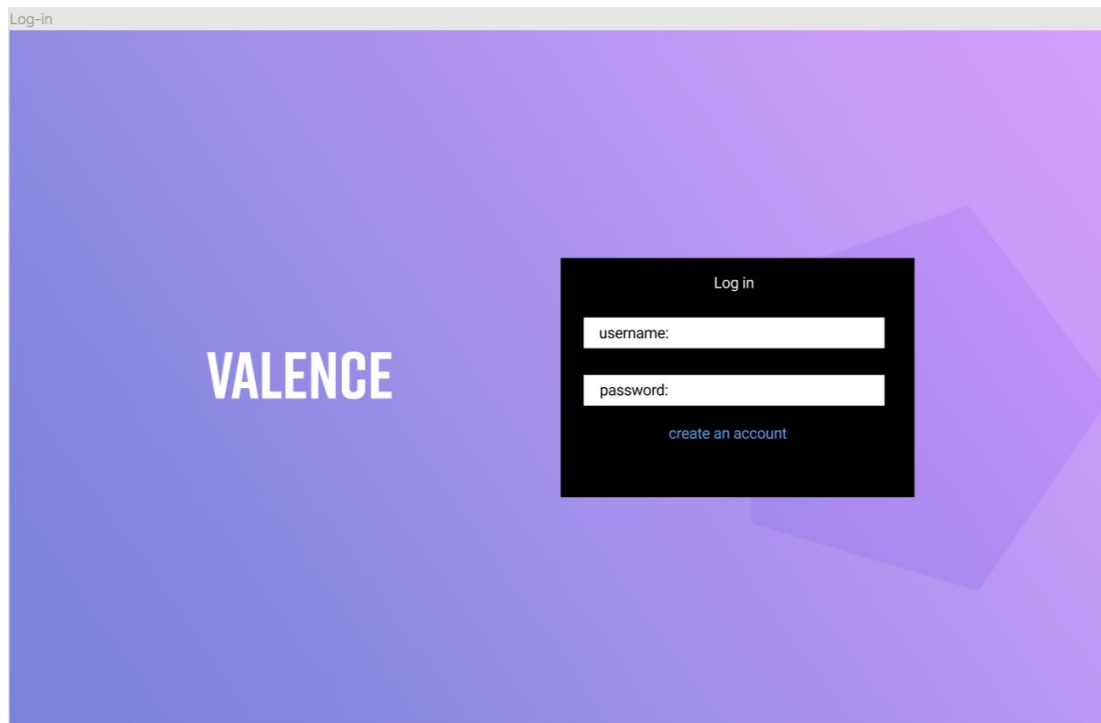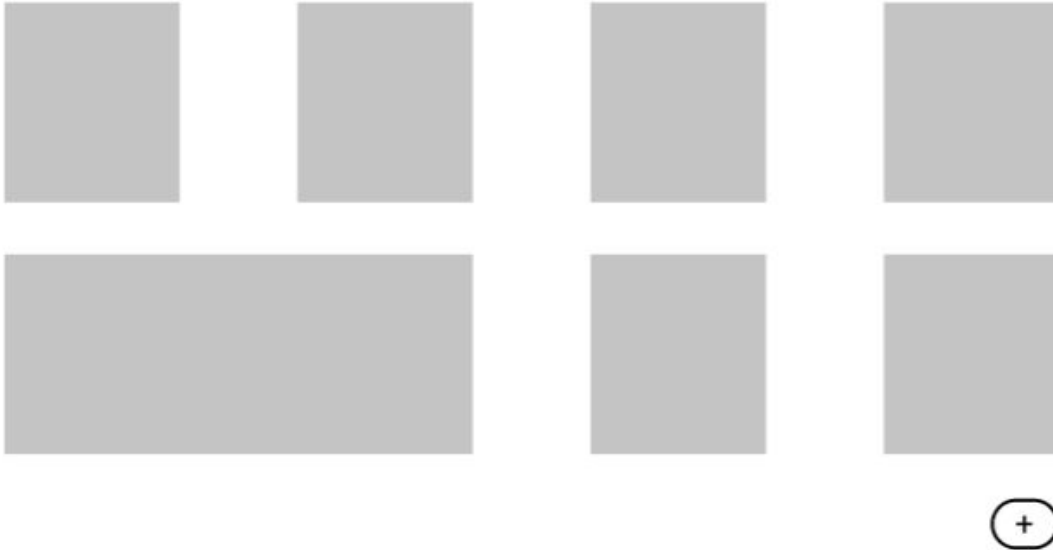

Log-in page. "Create an account" links to the spotify website.

Home page
Sidebar can direct users to the following: profile, spotify, or to log out..

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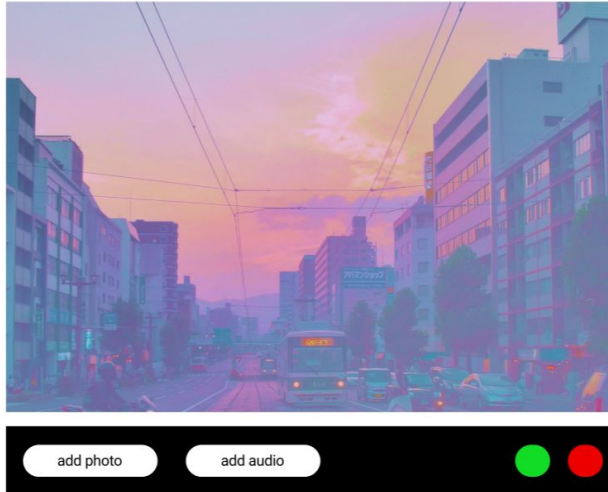
Explore

My Gallery

Note: Every box within the explore and gallery section has an attached audio with it. To play, the user would simply hover over a box, to stop the user can simply click on that specific box that is playing.

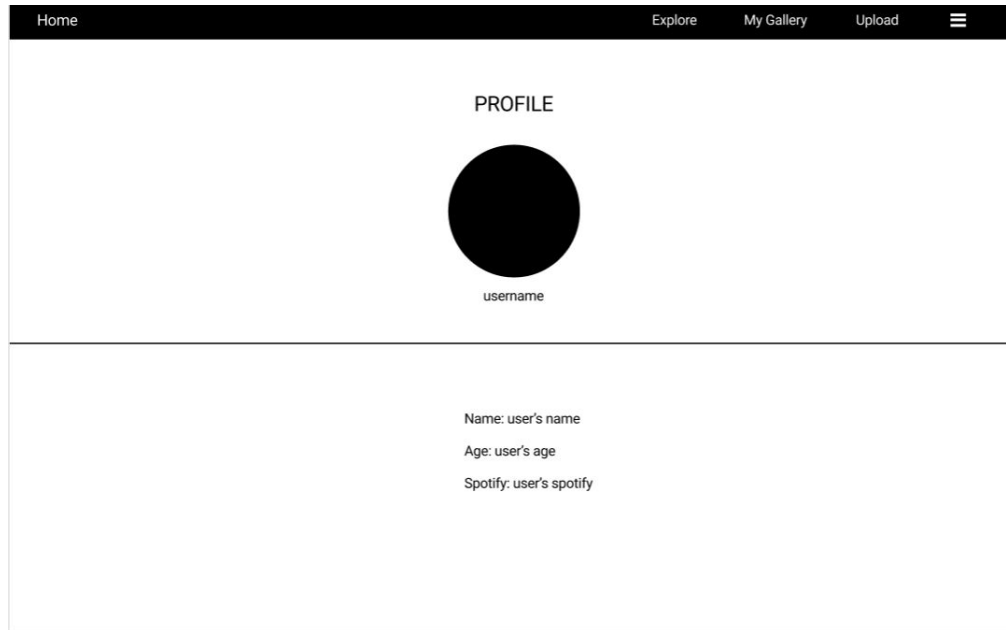Vananh Le, Amey Erdenebileg,Yosan Russom,Jack Kelly, Drishan Sarkar

Upload

Users can upload photos and add audio in their gallery. Green is to upload. Red is to cancel.

For the user to explore more of what other people are uploading.

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Profile page.

WEB SERVICE DESIGN:

- For the web service, Spotify API has a really well-documented API for the project application we are working on. The idea is, when the program is running, the ID and secret will be passed in calls to the Spotify Account service. The Spotify Account service is the service that handles the authentication of the user and asks the user's permission to access data from their account. For the search feature, within the JavaScript, a call is being made by the search endpoint that passes the artist's name that the user entered and asks for any matching albums. Once the JSON result returned, it is analyzed to remove the links to the albums. A second set of calls is being made after that in order to get the album's main cover art image.

- For authorization, we need to get permission from the user in order to manipulate their data. We would have to use the OAuth in order to get the data we need. We also need to get the access token in order for the program to pass in calls to the Web API. To accomplish that, we registered our application to the Spotify Developer websites and obtained the client ID and client secret key that will be generated and displayed in the application detail page. While the application is running, the ID and secret will be passed in calls to the Spotify Accounts service. This handles the authentication of the user and asks the user's permission for

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data. For our application, we are planning to use Heroku to store the client ID and secret for security reason. This method just helps the user access the program without manually entering the client ID and secret.
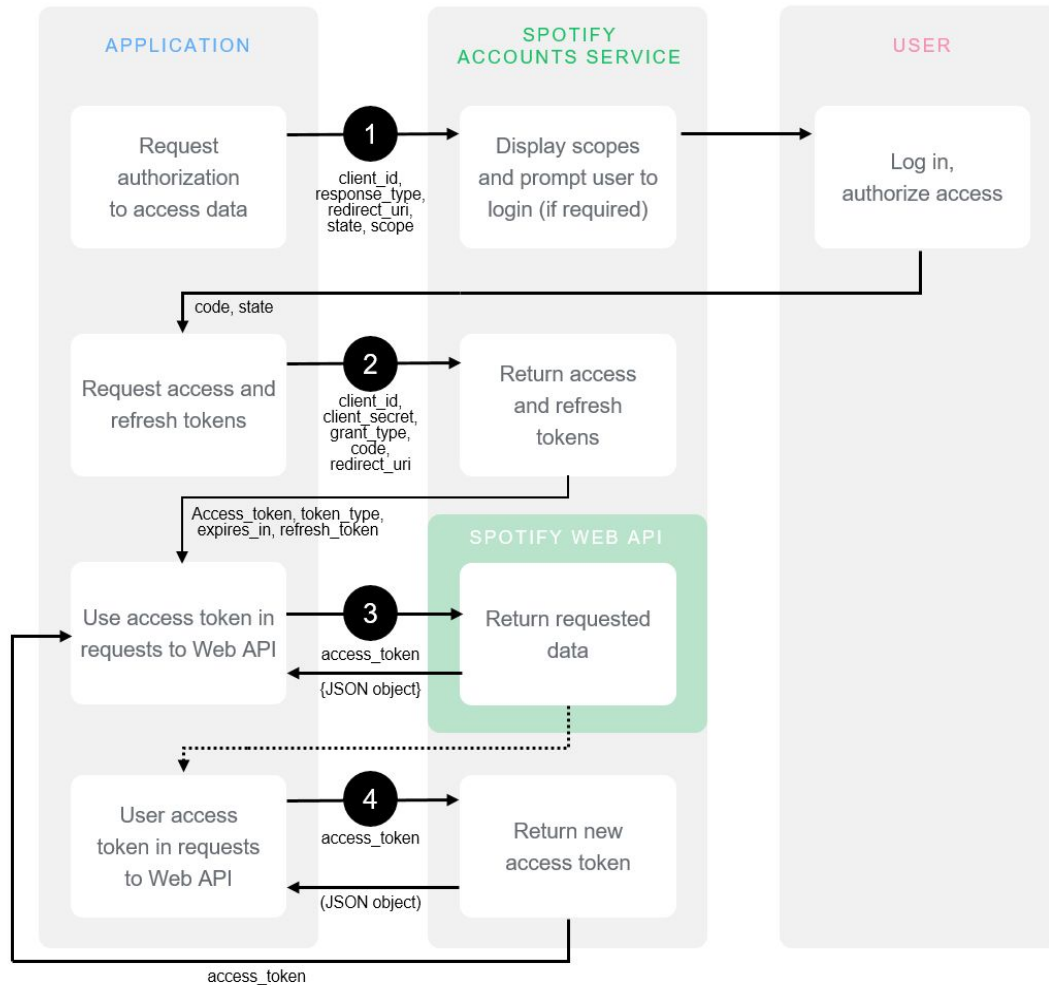
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DATABASE DESIGN:

- PostgreSQL is the primary DBMS technology we use for this project
- Entity Relationship Diagram:
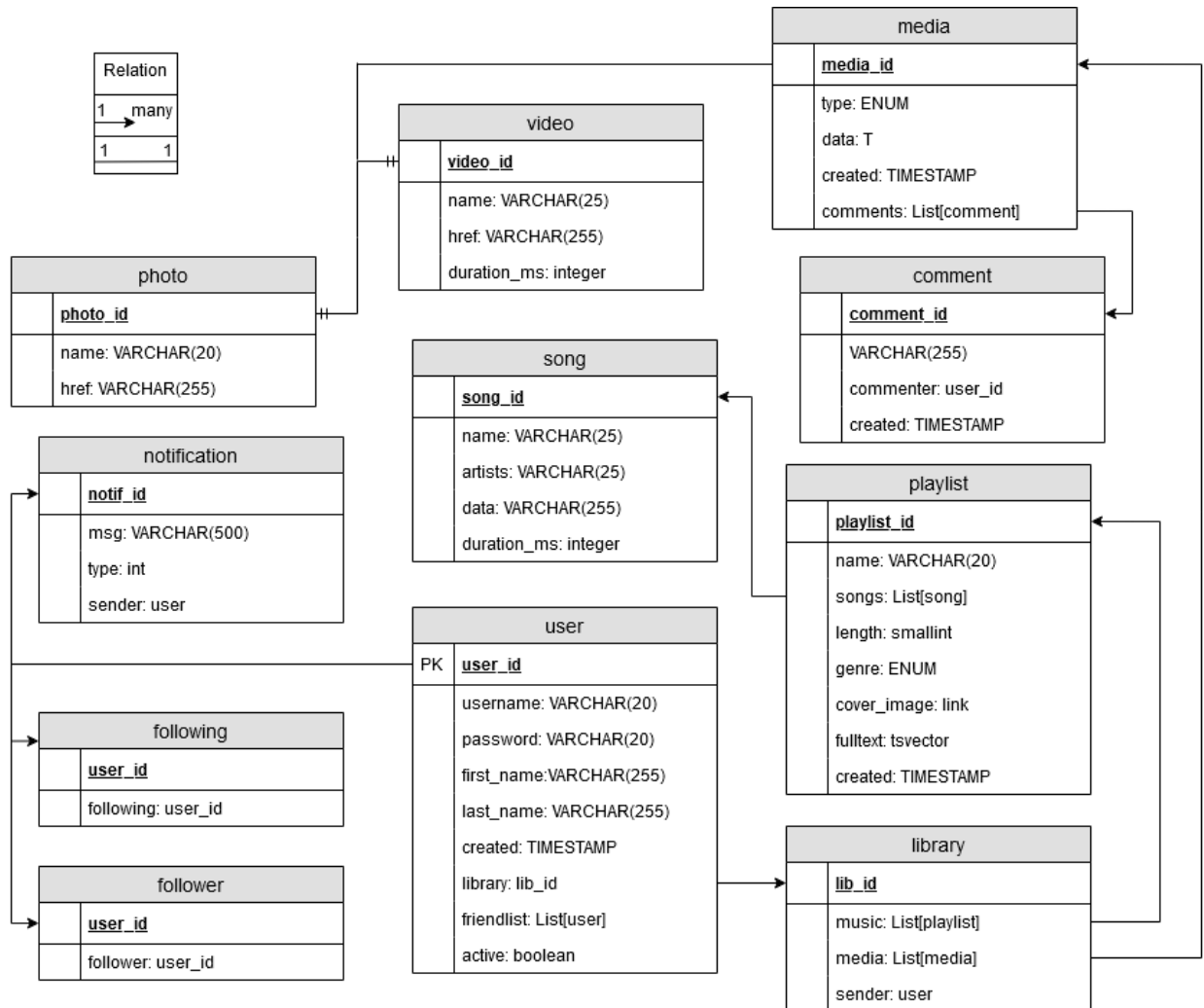
- We use GET requests to fetch song and playlist data from spotify's web service
- NoSQL/MongoDB may be used to store the user's friends as a graph