Group Name: BTS(ETJLAT)
Project Name: Top 100 Billboard Tracker

Members:
- Tejas Siddaramaiah
- Eric Tang
- Jason Lei
- Aiden Tan

Applications:
1. Dashboard Application: Song Statistics about top 100 songs
2. Core Application: Basic CSS and Templates

Components:
1. Dashboard/Data Application:
  - Information on how to run the website and mentioning specific features.
  - Data about the song artist, title, rank, and other basic information
  - Graph showing how the song has risen and fallen in the top 100

2. Search Application:
  - Active search bar to find specific songs, artists, or albums
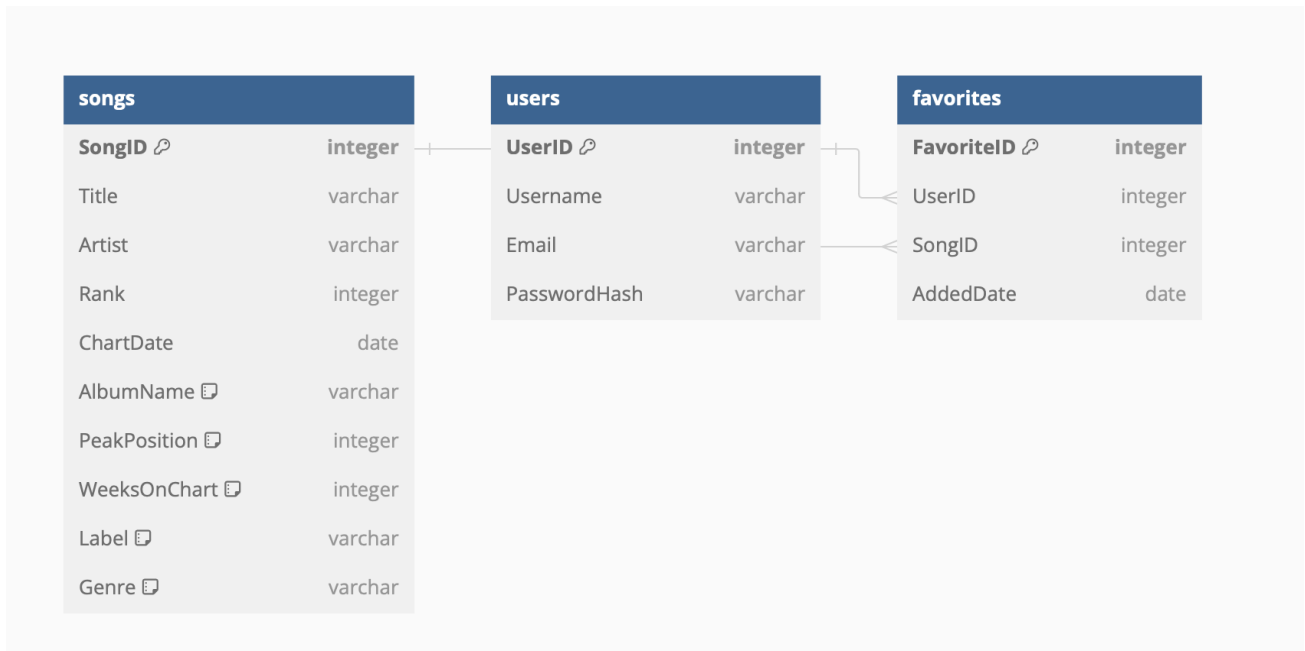
3. User Application:
  - System for push notifications and email alerts on new songs on billboard.
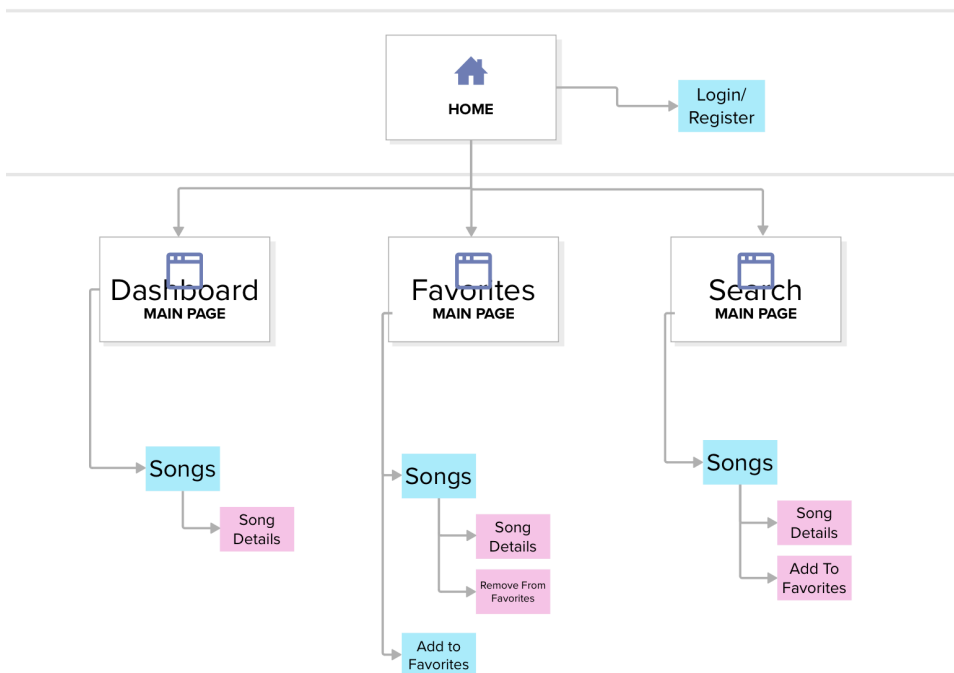 - Playlist for user with selected songs or artists

Relationships Between Components:
- Main Application interacts with the Data Application to retrieve and display songs.
- User Application uses the data from Data Application to personalize user experiences based on saved preferences.
- Search Application uses data from Data Application to actively search for similar information.

Database Design:

songs	
SongID 🔑	integer
Title	varchar
Artist	varchar
Rank	integer
ChartDate	date
AlbumName 🗒	varchar
PeakPosition 🗒	integer
WeeksOnChart 🗒	integer
Label 🗒	varchar
Genre 🗒	varchar

users	
UserID 🔑	integer
Username	varchar
Email	varchar
PasswordHash	varchar

favorites	
FavoriteID 🔑	integer
UserID	integer
SongID	integer
AddedDate	date

Site Map:

Task Breakdown:

1. Search Application: Jason and Aiden
    - Display Song Info: All
2. Data Application: Tejas, Eric, Jason, and Aiden
    - Display Song Info: Eric and Tejas
    - Adding Mechanism: Jason and Aiden
    - Display Graphs: All
3. User Application: Tejas and Eric
    - Login/Register: Eric
    - Connecting to Account to Songs: Tejas

APIs

    1.) Billboard API
- API Documentation: Billboard API
  (https://rapidapi.com/LDVIN/api/billboard-api)
- Endpoints:
    - /charts: Fetches the current top 100 songs chart.
    - /search: Searches for songs, albums, and artists on the charts.
- Usage:
    - The /charts endpoint will be used to retrieve the list of top 100 songs for displaying on the main page.
    - The /search endpoint allows users to find specific songs or artists in the top charts.
- Data Handling:
    - The fetched data will be parsed and stored in the local database under the Songs table, which includes fields like Song ID, Title, Artist, Rank, and Date.