Team Mangosteens - Cathy Cai, Tabassum Fabiha, Angela Tom, Stefan Tan
SoftDev1 pd06
P01 -- ArRESTed Development (Task the Second: The Plan)
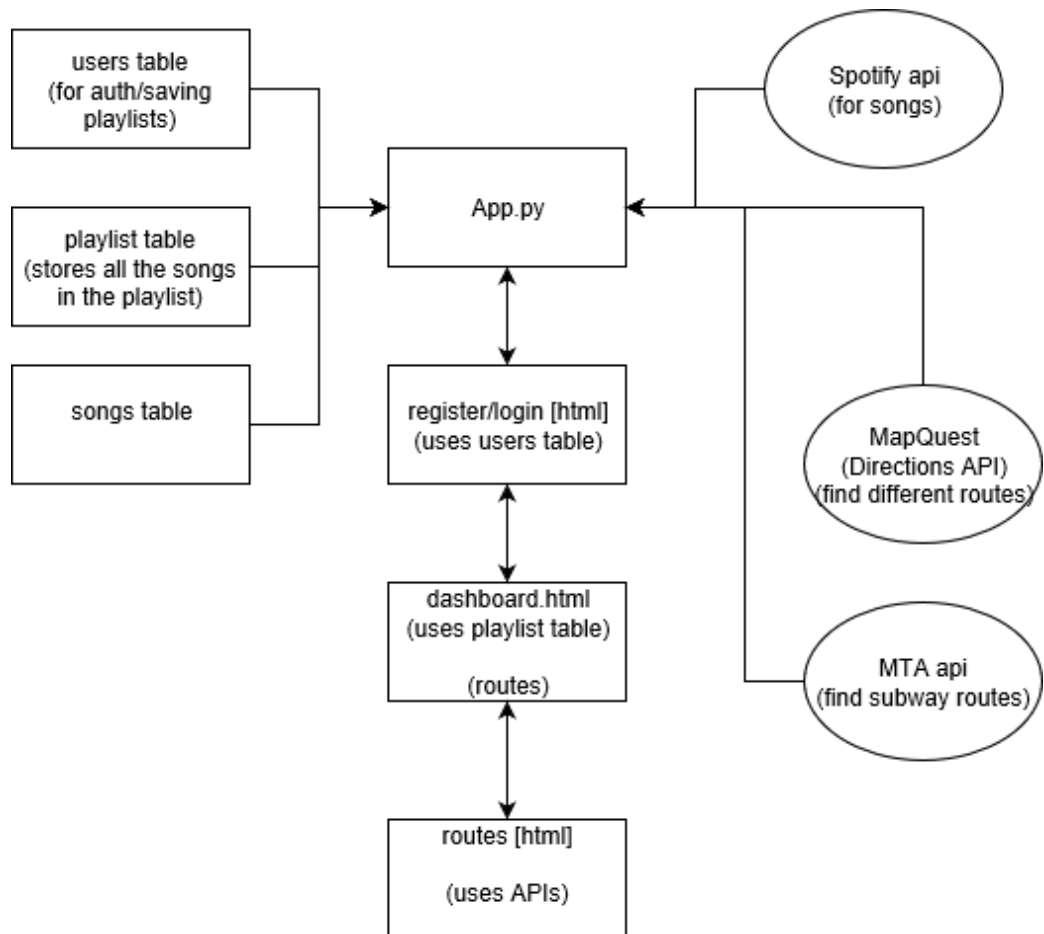2018-11-24

Project Smapify

Synopsis

- Tired and frustrated of being forced to cut off your music while you are the middle of jamming to it when you reached your destination? With Smapify, nothing can disrupt you from jamming to some sick beats!

- Given the addresses of current location and the user's destination, including other factors like the genre and mood, Smapify returns to you a list of possible results and creates a music playlist based on the user's inputs that matches the duration of the route.

- APIs used: Spotify, MapQuest, and MTA

Program Components

- Register and login to save playlists that the user frequently uses and enjoys

- Searching for shortest commute time and possible routes

- Providing direct directions to reach destination along with a map

- Creating a filtered playlist based on the length of each commute time

- Editing playlist (shuffling the playlist to find a new set of songs, specifying a few songs from old playlist to keep before shuffling)

Component Map

Site Map

```
                        ┌─────────────────┐
                        │   LOGIN PAGE    │
                        └─────────────────┘
                                 │
                                 ▼
                        ┌─────────────────┐
                        │   HOME PAGE     │
                        └─────────────────┘
                          │            │
              ┌───────────┘            └───────────┐
              ▼                                    ▼
┌─────────────────┐   ┌──────────────────────┐  ┌─────────────────┐
│  View Playlist  │◄──│ Choose Saved Playlists│  │  Choose Routes  │
└─────────────────┘   └──────────────────────┘  └─────────────────┘
                                                    │           │
                                       ┌────────────┘           └────────────┐
                                       ▼                                     ▼
                         ┌──────────────────────────────┐  ┌────────────────────────────────────────┐
                         │ Route 1 Map + Customized      │  │ Route 2 Map + Customized Playlist       │
                         │ Playlist                      │  │ (and so on...)                          │
                         └──────────────────────────────┘  └────────────────────────────────────────┘
                                       │                                     │
                                       ▼                                     ▼
                              ┌─────────────────┐                  ┌─────────────────┐
                              │  View Playlist  │                  │  View Playlist  │
                              └─────────────────┘                  └─────────────────┘
```
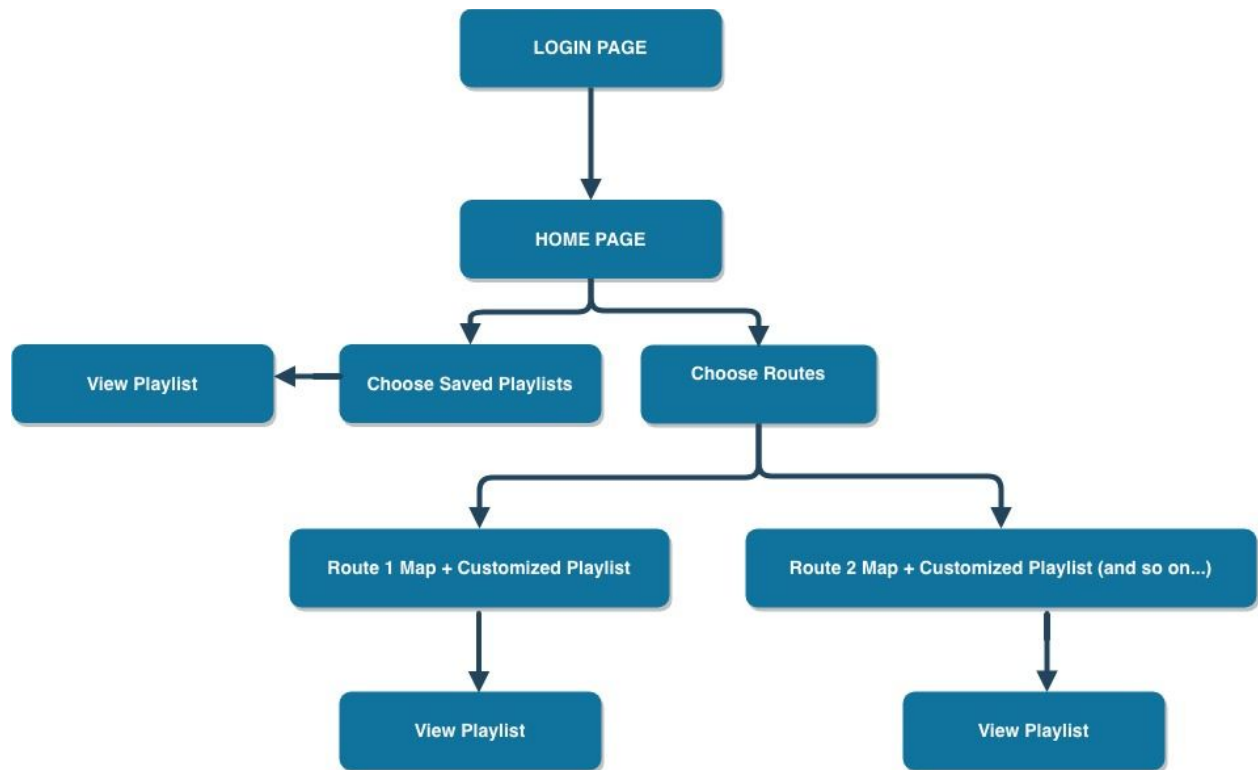
Smapify

Welcome! Please login in to continue.

Username: _____
Password: _____

Don't have an account yet? Sign up here:

Username: _____
Password: _____
Re-enter Password: _____

Smapify

Find a customized Spotify playlist to fit your commute.

Starting Address: _____
Destination: _____

Optional filters:
Mood: (dropdown)
Genre: (dropdown)
Artist: _____

Other filters:
Word of the day: ("toxic")
Spotify's Top Hit: ("thank u, next")

Saved playlists? Click HERE to view them.

SUBMIT

Smapify

SAVED PLAYLISTS:
Playlist 1:

Song1
Song2
Song3
…

VIEW

Playlist 2:

Song1
Song2
Song3
…

VIEW

Smapify

Results:

Your shortest commute time: 45 min.

MAP HERE

Possible routes:

A, C, E transfer to the F	45 min.	CHOOSE
W transfer to the M	55 min.	CHOOSE
2, 3 transfer to the R	1 hr. 5 min.	CHOOSE

Smapify

Your route: 1 hr. 5 min.

2, 3 transfer to the R

MAP HERE

Mood: Depressing
Genre: Pop

Playlist (1 hr. 7 min., 18 songs)   **EDIT**

"consequences"   Camila Cabello

"Mad World"   Jasmine Thompson

"Dying in LA"   Panic! At the Disco

...

Smapify

Playlist

Length: 1 hour 7 minutes
Quantity: 18 songs

"consequences"   Camila Cabello   (-)   (S)

"Mad World"   Jasmine Thompson   (-)   (S)

"Dying in LA"   Panic! At the Disco (-)   (S)

...

SHUFFLE
(reruns algorithm for new list of songs, keeping
the ones selected - (S))

PLAY

Database Schema

- Table: song

    - UNIQUE ID - song ID

    - TEXT - song title

    - TEXT - artist

    - TEXT - genre

    - TEXT - mood

    - INTEGER - minutes

    - INTEGER - seconds

- Table: playlist

    - UNIQUE ID - playlist ID

- STRING - songs

This database will store every new song received from the Spotify API. In case there is an error in requesting songs from the API the site will default to the database to provide a playlist to the user.

- Table: users

    - unique ID - user ID

    - TEXT - username

    - TEXT - password

    - STRING - playlists

Database for login accts.

Roles

Cathy Cai: Project Manager, handling the database and playlist-creating algorithm

Angela Tom: Working on the CSS and routing

Stefan Tan: Working on the CSS and the playlist-creating algorithm and database

Tabassum Fabiha: Designing the front-end framework (Bootstrap) and working with finding routes