Team Name: zeBois

Project Title: Inside Out the Musical

Roster: Daniel Chernovolenko, Jerome Freudenberg, Jonathan Quang, Henry Zheng



Description:

Our website will take a user input on how they're feeling/what mood of music they want to listen to as well as a last.fm username. The website will then access the "loved" songs on last.fm and use Musixmatch to look up the lyrics. Then, the lyrics will be input into the Watson tone analyzer and the tone of the song will be determined. We then return a playlist of their "loved" songs that match the tone of music they selected and embed a youtube video of the song in the output. The database will keep track of which last.fm usernames the user has called and save the playlist in order to reduce the number of API calls and time spent waiting for them. If the user has recently "loved" new songs on last.fm, then he or she can use the "Force Update" checkbox to make the app request data from the APIs even if the last.fm user is already stored in the database.

List of Components:

- ★ Api interaction library
 - Last.fm

- Access user favorites
- Musixmatch
 - Access lyrics based on song title + artist
- Watson tone analyzer
 - Access tone of lyrics
- Youtube API
 - Get music video for songs, embed into HTML

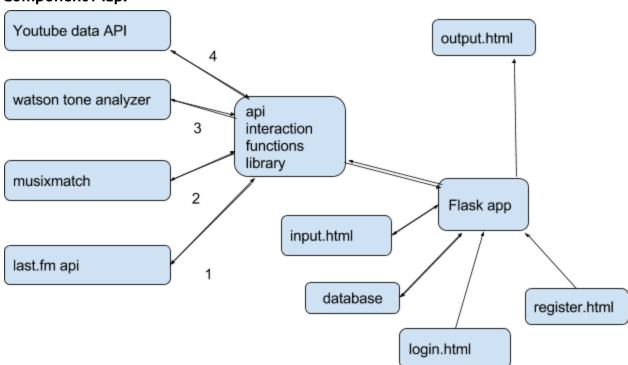
★ Databases

- Saves site username, lastfm username, the tone, the artist, the title, and the YouTube url (in order to save API calls)
- username/password
- ★ Frontend using bootstrap to help with styling
 - Register page
 - Login page
 - Homepage that takes input
 - Textfield for last.fm username
 - Drop down menu to select tone of music
 - Checkbox for force update
 - Output page with playlist of embedded YT links

★ Flask app

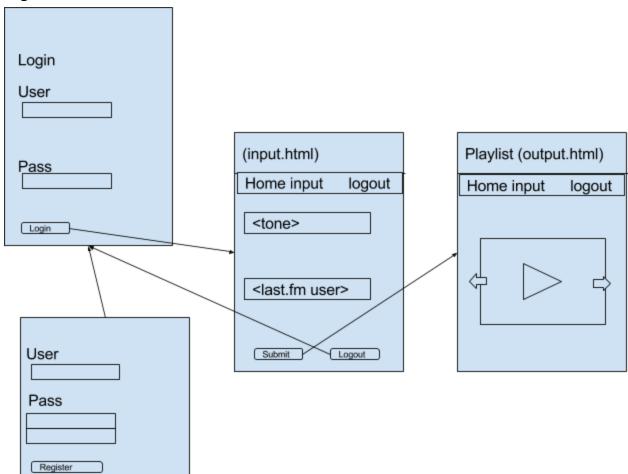
Connects the above with each other

Component Map:



Site Map:

Pages:



Database Schema:

- Login table
 - o username
 - o password
- userSongs table
 - Username
 - o last.fm user
 - o tone
 - Artist
 - o Title
 - Video url

Division of Labor:

- Project Managing and Related Thingamajigs
 - Jerome
- ❖ Flask app
 - > Routes for the home page, login, and playlist page
 - Dan and Jonathan
- Api functions library
 - Henry and Jerome
- Databases (for login and for songs)
 - Jonathan
- Sensational, jaw-dropping, breathtaking, awe-inspiring frontend aesthetics
 - Dan and Jonathan