

## CS 411 Group 7 Project Pitches

### **Tweet sentiment playlists**

The goal of this project is to create a Spotify playlist based on detected sentiment scores of tweets, allowing users to obtain a customized playlist based on their most recent mood. We will use Spotify and Twitter APIs to pull the data from songs and tweets, and then use a sentiment analysis API to inspect and calculate specific sentiment scores. By comparing sentiment scores of tweets and songs, we will be able to match the song and users' mood. The front end will be composed of Javascript with REACT and HTML/CSS, while the back end will be in Python with Flask framework. The database we will utilize should store user information, recommended songs, and detected tweets, which can be done through MongoDB or MySQL. The public APIs we plan to use are Spotify API, Twitter API, and Google NLP. We will also implement third party authentication using OAuth.

### **Groceries finder**

The goal of this project is to create a web application to curate a list of ingredients and their prices from the nearest grocery stores for a certain meal or recipe picked by the user. The list of ingredients is sorted from lowest to highest price, but can also be customized by the user to be arranged by grocery store. The front end will be composed of Javascript with REACT and HTML/CSS, as well as Express.js framework. The back end will be in Python with Flask framework. Once creating an account, the user can enter information such as preferred grocery stores, food in their pantry, and allergies, which will be stored in a database through MySQL or MongoDB. The public APIs we plan to look into include: an API to find grocery stores near the user's location, an API to determine which food items or products of interest are being sold there, a recipe API to determine what other ingredients the user needs, and an API to see the costs of the produce/groceries we are looking for. We will also implement third party authentication using OAuth.