

Food Recommendation Project

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Abstract— The growing data of food reviews across different platforms allows for the possibility of manipulating this data to recommend a food to a person. Our team will collect a variety of datasets from different food review spots (Yelp, Google, etc.) and categorize this information to be able to recommend different foods to people.

Keywords—food, data, recommend, people

I. OBJECTIVE

The objective is to obtain many datasets from a variety of food review places and use that data to recommend food to somebody based on their likes and dislikes. For example, if somebody likes burgers, then it would recommend them a burger place based on the highest reviews. Being able to categorize the data and food types is integral to the application. Using the data from different food review places, a list can be made of some of the best places to eat according to the person's taste.

II. MOTIVATION

For the motivation of this project, the idea came when I couldn't decide on what to eat for the day. I just needed to be shown a restaurant that has something I like. I just wished I was given a suggestion on where to eat with something I like. YouTube has an algorithm that suggests videos based on what you previously watched. I wanted to make something similar but less advance because YouTube's algorithm is a little too complex.

III. DATA TO BE USED

For the data of this project, we will obtain a variety of dataset in food review places. For example, Yelp has an available dataset that can be used to look at restaurants and their reviews. Using that as a reference, we would find a dataset that contains a review on any restaurant and what food that review contained. By using this data, we can categorize it and bookkeep what type of food each restaurant has.

IV. RESPONSIBILITIES

Each member will be responsible for roughly the same things. Since some of us are more experienced in data scraping, they could help a little more with structuring the code. We all have very similar coding skills so that we can contribute a little to the program.

A. Responsibilities of Each Member

David Nguyen

- 1) Issue tracking on GitHub
- 2) Assigning Issues
- 3) Implementing Code
- 4) Paperwork
- 5) Adhering to timeline

Hudson Doerr

- 1) Implementing Code
- 2) Issue Tracking on GitHub
- 3) Paperwork
- 4) Adhering to timeline

Catherine Fei

- 1) Implementing Code
- 2) Issue Tracking on GitHub
- 3) Paperwork
- 4) Adhering to timeline

Isaac Sikkema

- 1) Implementing Code
- 2) Issue Tracking on GitHub
- 3) Paperwork
- 4) Adhering to timeline

Spencer Harper

- 1) Implementing Code
- 2) Issue Tracking on GitHub
- 3) Paperwork
- 4) Adhering to timeline

B. Timeline

October 6th - Meet with team and figure out structure of code

October 8th - Test parsing of a dataset

October 13th - Make different food categories

October 15th - Test putting a dataset into the categories

October 20th - Store user's preferences

October 22nd - Parse the other datasets

October 27th - Parse the other datasets part 2

October 29th - Find the largest category and best restaurant in that category

November 3rd - Rest Day

November 5th - See if that category matches user preference

November 10th - Randomize best restaurants

November 12th - Finishing touches

November 17th - Finishing touches

November 19th - Finish

C. Expected Outcome

The expected outcome is to produce a program that recommends the user a restaurant based on what that user likes. The user's preferences will be recorded and used to match restaurants to those preferences. A random top restaurant in a random category will be given to the user to try out.