Executive Summary - LetsEat

Overview

Our product, LetsEat, is a restaurant recommendation application that aims to provide personalized recommendations to users based on food preferences and various questions about the occasion on which the user is going to eat. By using a machine learning model, this recommendation system will provide users with restaurants that have been good matches for similar users in the past. In short, users will receive the best possible restaurant recommendation given their preferences and circumstances. Instead of scrolling through a seemingly endless supply of restaurants on Yelp or OpenTable, this application will give a single restaurant that best fits the situation and group of people.

The Problem

When a person or group of people want to go out to dinner together, it can be cumbersome and confusing to accommodate everyone's preferences when picking a restaurant. Additionally, the vast amount of options when living in urban areas can make it intimidating and difficult to pick a single location. Certain restaurants may be a good choice for dates, but could turn out to be a bad experience for a group dinner. The amount of factors a person has to consider when choosing a restaurant can become too much and oftentimes the choice that is made is far from the best one.

Potential Customers

Currently, our focus for potential customers is on residents of urban areas. Specifically, Washington DC will be where we launch and test our product due to the proximity and amount of restaurants available. Additionally, young people will be a primary focus as it is very common for students and new graduates to go out to dinner together in groups or on dates. Therefore, LetsEat would be a valuable resource for these younger customers. An edge case that would include older users would be for family dinners, as that is another common scenario that requires compromise amongst multiple people. All of these potential customers have a need for a quick, easy recommender that provides them with an optimal restaurant within minutes, instead of scrolling through Yelp or OpenTable for lengthy amounts of time.

Value Proposition

The key differentiators for LetsEat would be the simplicity of the application, the quickness of the recommendation, and the personalized results. Unlike other restaurant apps that allow for basic filtering, this application takes into account the more human element of user and restaurant pairings that can't be captured through simple cuisine preferences. We hope to capture and relate the atmosphere of restaurants to the particular circumstances of each use case.

Innovation

The innovative aspects of LetsEat lie in the single recommendation provided to the user as opposed to the list of restaurants in arbitrary order seen in current applications. The use of machine learning further separates LetsEat from the current market solutions as it will grow smarter over time as more user data is gathered, which in turn will lead to even better recommendations. Essentially, the application can only grow smarter, better, and more personalized as time passes. The use of sentiment analysis on existing reviews of restaurants will allow the application to build profiles on both users and restaurants, further strengthening the underlying data and allowing for more sophisticated pairings that don't just rely on static data like cuisine, location, and price.

Broader Societal Impact

In terms of societal impact, our goal is to improve the way that people go out to eat by reducing disagreements among groups. Overall, LetsEat should save people time and hopefully will become their goto application for choosing a restaurant.