Introduction

Google Maps usually presents restaurants based on proximity. However, this may be irrelevant because the closest restaurant could be pricey or have low quality food. Instead, more people would want the highest quality food for the best price.

Methods

To accomplish this, we used the Google Maps API. This program will get places and their information requested from Google servers based around the user's current position. We filtered this information to display only restaurants within the radius specified by the user. We are ranking them based on a score we invented. This score is calculated by multiplying the star rating times the number of reviews divided by the price level plus one. We used the formula to rank the restaurants where the higher the number, the better the restaurant. This program helps people find the best food for a proportionally reasonable price. The plus one is there because the price level can be anywhere from zero to four, and we had to ensure there would be no divide by zero issues. Also, when the price level was missing, we set it to five to rank it lower.

Results

Overall, the program worked to all of its desired specifications. However, one thing we learned was the Google Maps API would not give us more than sixty results regardless. We even had some extra time to add a new feature that helped the user find free food. However, by running the program, it was realized the presence of free food was *extremely* rare.

Foodr

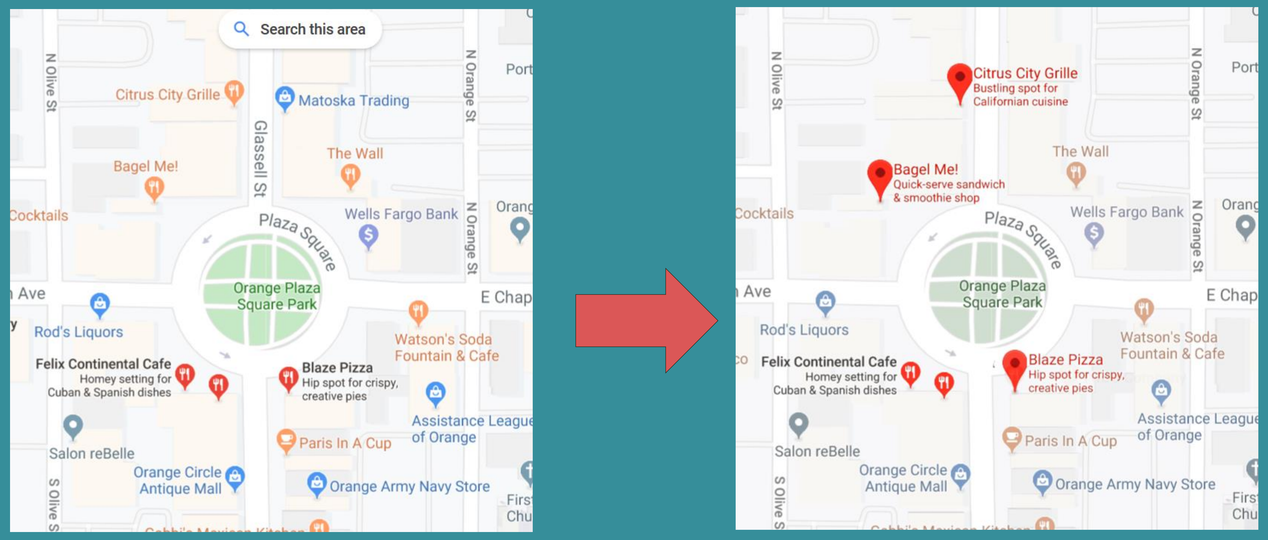
When choosing a place to eat, many search the restaurant and base their decisions on the rating and reviews it receives.

The purpose of **Foodr** is to do that for you!
It finds the closest restaurants and picks the best option according to a **Smart Score.** Those which do not fit within the radius around the user, are expensive, or have low ratings are ranked lower. Only restaurants that are open will be shown.

This Smart score is calculated by considering the following:

- Price
- Number of Reviews
- Rating
- Distance

Smart score = (rating*number of reviews)/(price level + 1)



Not an actual sample image. Just a visual representation

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API's:

- Google Places
- GeoLocate

GitHub repository:
https://github.com/ulrik101/FoodApp

(also accessible by the QR code)

References:

- Youtube
- Stack Overflow
- Google's Github
- https://www.youtube.com/watch?v=qkSmuquMueA
- https://stackoverflow.com/questions/613183/how-do-i-sort-a-dictionary-by-value
- https://stackoverflow.com/questions/50704611/next-page-token-google-places
- https://developers.google.com/places/web-service/search