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Final Project Write-Up

The theme of our project is about eating good, our project seeks to solve the problem of finding a good place to eat when in an unfamiliar area. While on vacation many people spend hours on yelp, google, and other review apps, trying to find a good place to eat. We seek to streamline this process by listing all the restaurants in an area around a geo location found on google, yelp, and zamato with their average ratings. To accomplish this we used the API’s that correspond to the apps mentioned before: [Google’s Places API](https://developers.google.com/places/web-service/intro), [Yelp’s Fusion API](https://www.yelp.com/developers/documentation/v3/get_started), and [Zomato’s API](https://developers.zomato.com/api). Each API is different in what they offer and have some limiting factors, Zomato only offers phone numbers to whitelisted businesses, google requires multiple queries to get the full information on a business and now only offers a paid API. Originally we had hoped to use the businesses’ phone number to join our tables but Zomato prevented that. Our Databases design revolved around that limitation. We chose to only store the data that the API’s had in common. We stored each API’s data in a separate table that contained the same columns with the name of the business being unique, and being the value we would join on for our results. This was not our first choice for the design of our databases. Besides wanting to use phone numbers, we originally wanted to have four tables one that would contain all the business data and a table for each API that held a foreign key to the business table. We decided not to go with this design because we would have had to forgo having name be unique to allow for duplicate restaurants(since each api could have the same restaurant). The design that we ended up with, a seperate table for each api, allows us to preserve the data from each api and to join all the tables together to get the results. This design also allows up to minimize duplication in our databases since the business name is unique. This design also allowed us to make use of the REPLACE mysql command to easily update business entries in the tables.

API Links

Google places api: <https://developers.google.com/places/web-service/intro>

Zomato api: <https://developers.zomato.com/api>

Yelp api: <https://www.yelp.com/developers/documentation/v3/get_started>