

EXPLORING PLACES IN VIJAYAWADA, ANDHRAPRADESH, INDIA

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INTRODUCTION:

1. BACKGROUND:

Every time a person searches for a place in a new city they are not familiar with, they tend to see the places based on the ratings and their budget. This information basically helps them to sort out the things and choose one place over another. Combining the data about the ratings and their price will surely help people. Vijayawada is spread across 68.88 sq km. Containing many places to explore especially cafes, restaurants, hotels and many. In this project we will use 2 API'S named Foursquare and Zomato in order to fetch the maximum available details of a particular place. Then the whole analysed and cleaned data will be plotted on the map to make it easy for visitors to find the address more efficiently and quickly making decision about which place to visit.

2. INTERESTED AUDIENCE:

The target audience of this project are travellers, food bloggers or whoever the people are who is visiting the city for the first time. It is even for the people who are searching for good places to visit across the city.

DATA:

DATA COLLECTION:

We have obtained the data required from 2 API'S foursquare and zomato. But to access the data you must first create a developer account in the API'S (you can make upto 500 free calls per day in foursquare and 100 free calls in zomato per day without premium account).

Links for the API'S:

<https://foursquare.com/developers/apps/>

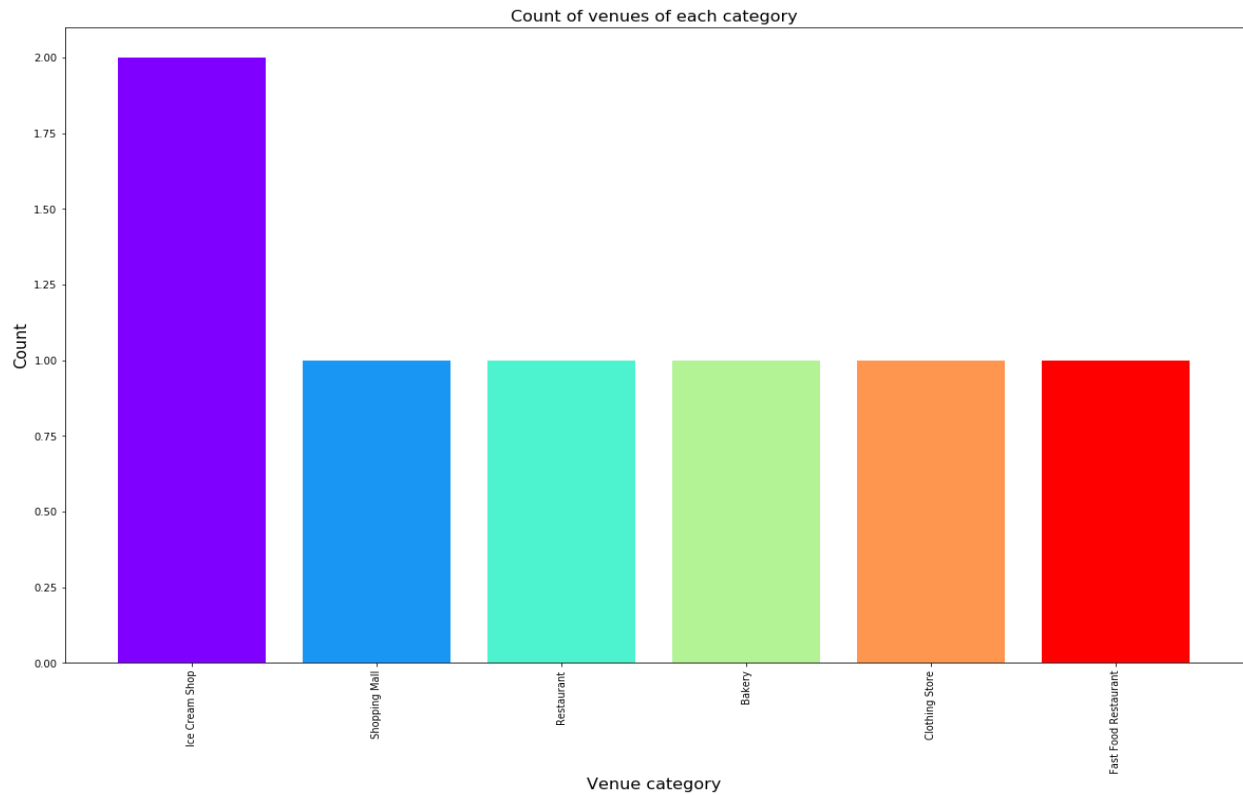
<https://developers.zomato.com/api>

From the api's I have gained data about latitude, longitude, address, ratings, price for 2, average price. I have taken the radius of 2 km from central vijayawada for data. I have also cleaned the available data removing the overlapping data from the 2 api's then i have also removed the data with 0 ratings from my dataset because it makes no sense to people who are searching based on the ratings.

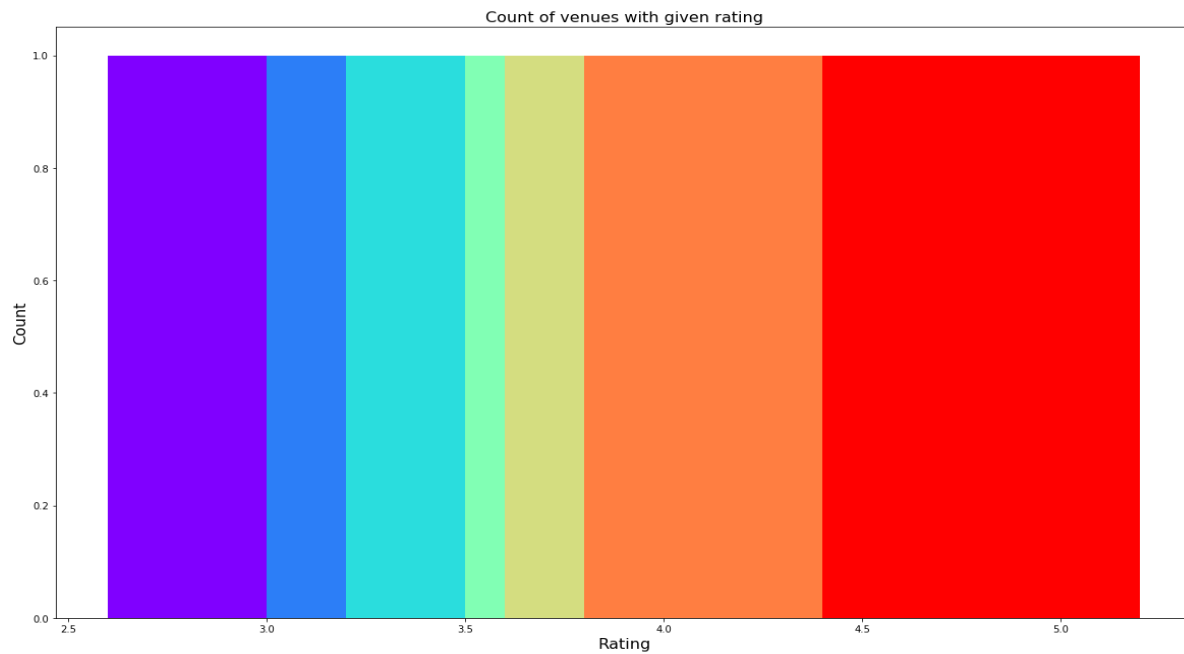
METHODOLOGY:

This project aims at identifying the places in Vijayawada based on their rating and average costs. This would enable any visitor to identify the places they want to visit based on their rating and cost preference. Firstly we retrieved the data from two API'S. We extract venue information from the center of Vijayawada, upto a distance of 2 Km. The latitude and longitude values are then used to fetch venue rating and price from the Zomato API (but first you must create a developer account). Secondly, we then explored the data retrieved from the two APIs and combined carefully on the map and identified the top category types. The final dataset would include the rating and price for each place appeared and places with 0 ratings were removed. Now, we will analyse the data that we created based on the ratings and price of each place. Finally, we will conclude by finding out which venues to be explored based on visitor requirement of rating and cost.

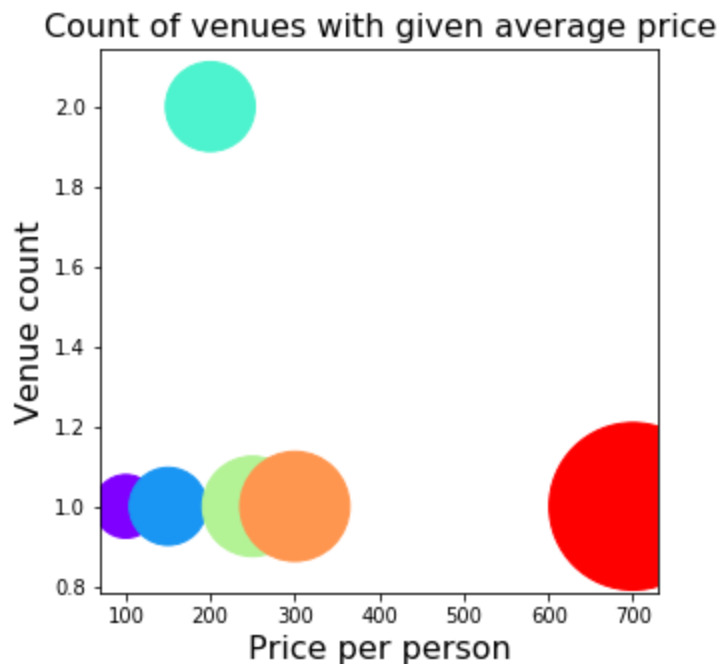
Firstly, I categorised the data based on the major place categories on the dataset.



Then I categorised the data again based on ratings on a scale of 1-5



And then based on price:



RESULTS AND DISCUSSION:

Based on our analysis , we can draw a number of conclusions that will be useful to aid any visitor visiting the city of Vijayawada. After collecting data from Foursquare and Zomato APIs, we got a list of different places. However, not all venues from the two APIs were identical. We had to give their latitude and longitude values as well as names to combine them and remove all the outliers. This resulted in a total place count of 7. While the complete range of ratings range from 1 to 5, the majority venues have ratings between 3 and 4. This means that most restaurants provide good quality food which is liked by the people of the city, thus giving them the good rating. We plotted every venue on the map such that it would be easy for visitors to get there. When we take a look at the price values of each place, we understand that many venues have prices which are in the range of Rs 100 to Rs 300 per person. However, the variation in prices is not very large, given

the complete range starts from Rs 100 and goes upto Rs 700. You now have a solution for

- If you're looking for cheap places with relatively high ratings.
- If you're looking for the best places, with the highest rating and a high price.
- If you're looking to explore the city and have no specific criteria to decide places you want to visit.

CONCLUSION:

The purpose of this project was to explore the places that a person visiting Vijayawada could probably visit. The venues have been picked using Foursquare and Zomato API and have been plotted on the map for easy accessing. The map reveals the major areas a person can visit based on ratings and prices. If someone could create an app like this it would be highly useful for travellers, food bloggers or even people on a vacation or a trip to know more about the city.