

Exploring Different Spots and Venues in Jaipur, Rajasthan, India

by

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1. Introduction

1.1 Background

Whenever a person searches for a venue in a new city, they're highly interested in the best places that the city has to offer. The person might want to know how good a given hotel or restaurant is or the price range it falls under. This extra information would help decide which venue to choose amongst the many venues in the city. Consolidating the area of the different venues in the city with their cost and rating data would doubtlessly help visitors in a city settle on better-informed choices about the spots they should visit.

Jaipur is composed of a number of sectors spread across a total area of 486 sq Km. There are many venues (especially restaurants, hotels and cafes) which can be explored. This project explores various venues in Jaipur and attributes the data based on user ratings and average price. To explore this information, this project involves data from both the Foursquare API and the Zomato API to fetch complete information of various venues (including name, address, category, rating, and price). Further, a map of the venues with different color attributes will be plotted to highlight their position, and information about these venues. Such plots assimilate plentiful data as their shaded portrayals and area on the guide. This empowers any visitor to take a quick look and choose what spot to visit.

1.2 Audience that can be interested

The target audience for such a project is of two types.

1. Any person who is visiting Jaipur, can use the plots and maps from this project to quickly select places that suit their budget and rating preferences.
2. Secondly, a company can use this information to create a website or a mobile application, which is updated on a regular basis, to allow individuals to the city or even expand same functionality to other places.
3. And this information can be useful for any entrepreneur to open a new hotel, restaurant, café, etc, by identifying the potential areas of growth of their business using these plots.

2. Data

2.1 Data Sources

To get location and other information about various venues and spots in Jaipur, I used two APIs and decided to combine the data from both of them together.

Using the Foursquare's explore API (which gives venues recommendations), I fetched venues up to a range of 6 kilometers from the center of Jaipur and collected their names, categories and locations (latitude and longitude).

Using the name, latitude and longitude values obtained from the FourSquare API, I used the Zomato search API to fetch venues from its database. This API allows to find venues based on search criteria (usually the name), latitude and longitude values and more. Given that the data from the two APIs did not align completely, I had to use data cleaning to combine the two datasets properly.

From Foursquare API (<https://foursquare.com/developers/api>), I retrieved the following information for each venue:

- Name: The name of the venue.
- Category: The category type as defined by the API.

- Latitude: The latitude value of the venue.
- Longitude: The longitude value of the venue.

From Zomato API (<https://developers.zomato.com/api>), I retrieved the following information for each venue:

- Name: The name of the venue.
- Address: The complete address of the venue.
- Rating: The ratings as provided by many users.
- Price range: The price range the venue belongs to as defined by Zomato.
- Price for two: The average cost for two people dining at the place. I later convert it to the average price per person by dividing it by 2.
- Latitude: The latitude value of the venue.
- Longitude: The longitude value of the venue.