

Applied Data Science Capstone project: The Restaurant Battle of Neighborhoods

**Exploring venues in Pune, India using
Foursquare and Zomato API (Week 1)**

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Introduction/Business Problem: Pune has been ranked as "the most livable city in India" several times. It is second largest city in the Indian State of Maharashtra. It is also known as cultural capital of Maharashtra. Pune boasts several historical monuments and museums and hence attracts lots of tourists. Because of the best education system in Pune, it is also known as Oxford of the east and have students across the world here. Whenever a person searches for a venue in a new city, they're highly interested in the best and affordable places that the city has to offer. The person might want to know how good a given restaurant is with food options provided. Pune is lovely city of 331.3 km² area with many venues with variety of foods. The aim of project is to provide information to visitor about places with best restaurants with help of rating, price per person criteria which would surely help visitors in a city make better informed decisions about the places they should visit. For tourists, finding the right place to eat can be a challenge. But we can recommend visitors a good overview about what to eat where.

Target audience: Tourist as well as students basically the once who are visiting Pune city. Any company or Entrepreneurs interested in investing in the business of Food can use this information like maps, plots from project to choose best place according to rating and price 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.

Data Collection from APIs

Description of the data: For assignment we are asked to use foursquare data. Here to collect data of restaurants in Pune we are using two APIS one is Foursquare and other is Zomato data and will combine data together. We will provide latitude longitude directly. Using the Foursquare's explore API which gives venues recommendations, I fetched venues up to a range of 4 kilometers from the center of Pune and collected their names, categories and locations latitude and longitude. Using the name, latitude and longitude values, 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. We need to do analysis and further processing to find the solution so that we can recommend visitors the right place to eat.