**UNDERSTADING FOOD INTERESTS IN INDIAN CITIES**

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1. **Introduction**

Indian cities are known for a variety of food interests since very olden days. We have a wide range of food recipes, cuisines, and interests which are available to be explored at the touch of the button with the inception of the on-demand food delivery services like Zomato. In a City there are a lot of different types of venues, here we try to find how the neighborhoods correlate with the restaurants and food habits. We will try to understand what type of restaurant can be opened in a neighborhood by comparing it to a neighborhood where the zomato already has a presence.

Bangalore is a cosmopolitan city where people have varied interests in cuisines. We will here try to cluster all the restaurant available on the zomato listing. To explore this information, we will be using the Foursquare API and the Zomato API. This will be visualized on a map with the venues clustered together by specific color by to highlight their position, and information about these venues. This will let any visitor to quickly know about what cuisine or food is famously known in that place. This will also enable to understand what types of restaurants can be opened and successfully run in similar neighborhoods in other cities.

1. **Data Description**
   1. **Data Sources**

To get location and other information about various venues in Bangalore, we use two APIs and combine the data.

Using the Foursquare’s explore API (which gives venues recommendations), I fetch venues up to a range of 10 kilometers from the center of Bangalore 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 use data cleaning methods to combine the two datasets properly.

**Foursquare API:** (<https://developers.zomato.com/api>)

I will retrieve the following 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.

**Zomato API**: (<https://developers.zomato.com/api>)

I will retrieve the following 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.
* Cuisines: The cuisines that the restaurant offers.
* Price for two: The average cost for two people dining at the place. I later convert the same to average price per person by dividing by 2.
* Latitude: The latitude value of the venue.
* Longitude: The longitude value of the venue.