CAPSTONE PROJECT

Explore and Compare Hotspots in Bengaluru

ABSTRACT

Analysing 3 main hotspots in Bengaluru in terms of distribution of venues such as restaurants, cafes etc. based on rating and average cost to help understand and compare the trends and in each of these places.

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1. INTRODUCTION

1.1 BACKGROUND

The project is aimed at exploring 3 key venues in *Bengaluru, Karnataka, India* based on their rating and prices. In this project, we will be exploring various venues in 3 main hotspots in Bengaluru namely ***MG Road, Indiranagar*** *and* ***Koramangala***. We will be making use of **Foursquare API and Zomato API** to get the coordinates and details of the interested places. These 3 locations have some of the best restaurant, cafes, and pubs in various categories and also belong to the top revenue generating areas in Bengaluru.

The main aim of this project is to help the newbies, foodies, weekend wanderlusts, working professionals explore some of the most happening places in Bengaluru. Be it weekend or weekday, food is something which keeps our foodgasmic mind in place to explore. Also, the clustering details obtained will help the upcoming businesses to analyse the categories of venues in each location and setup business accordingly based on missing categories.

We explore the trends in each of these 3 places by analysing the distribution of each type of venues, the ratings of each place as well as the class of the places based on the average price for two.

These details will be helpful for individuals as well as business to **explore the trends and see which the right place is to invest or go out**. Various opportunities can be explored based on the **lack of any venue in any said hotspot locations**. These locations are frequented by each individual living here or new to the place.

1.2 A BRIEF INTRO TO THE SILICON VALLEY OF INDIA – BENGALURU

Bengaluru (Previously known as Bangalore) was initially the **capital of Mysore State** until Karnataka was formed in **1956**. Then Bangalore was declared as **Karnataka's capital**.

The city of Bangalore has a **population of over 10 million**, thus making it the third most populous city in India and a **megacity**. It is the second fastest-growing major city in India, owing to its diverse demographics.

The social and economic diversity in the city is clearly reflected in Bangalore food. This diversity goes in parallel with the cuisines served here too. You can find all sorts of cuisines here. Thanks to the great variety, it will not be wrong to call Bengaluru a foodie's paradise.

The city has various options for food win all categories of price ranges. We will explore the **Food Culture** in **Bengaluru**.

2. TARGET AUDIENCE

The target audience for this project is twofold. Firstly, any person who is visiting Bengaluru or living here can use the plots and maps from this project to quickly select places that suit their budget and rating preferences. Secondly, a company can utilize 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. Any individual or businesses will be benefited by the comparison data and geospatial plots to explore venues in quick and effortless manner.

3. DATA

The information pertaining to the venues explored were acquired using 2 API's (Application Programming Interface).

1. **Foursquare API:** (https://developer.foursquare.com/)
   This API will be used to collect information regarding the following details:

   a) The coordinates (Latitudes and Longitudes),
   b) Category of Venue
   c) Names of the venues.

   The data collected will be in the radius of 3Km from the 3 hotspot locations. Details of 100 venues will be collected. The final dataset will consist of details regarding 300 venues.

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

   The data collected using Foursquare API will be fed into Zomato API to get detailed information such as:

   a) The coordinates (Latitudes and Longitudes),
   b) Names of the venues,
   c) Address,
   d) Price for two,
   e) Price range,
   f) Rating.

The datasets collected from both the API's will be analysed and compared to remove the outliers and make accurate dataset.

The final dataset will be used for analysing the trends in each category of venues in the 3 locations. Also, the dataset will be used to find the distribution of the venues based on average price and rating.