CAPSTONE PROJECT

Analyzing Locality of Goa, India to predict suitable location for Restaurant

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Introduction

In this project, we are trying to analyze the localities of Goa, so that appropriate recommendation for opening new restaurant to the stake holders can be made.

Goa is a tourism hotspot of India, It attracts tourists from across the India as well as abroad, thus the scope of Restaurant business is only increasing.

Now that Corona Vaccine is out and people are tired of lockdown, everyone is looking for International vacations and no doubt Goa will be one of the most preffered cities, This brings investment oppurtunity in the restaurant sector.

We have divided Goa into different cities and various locations in those cities were collected, then we filtered out all restaurants.

With the help of this analysis we will be in position to recommend location for someone who is planning to setup a new restaurant

Data

● List of cities in Goa can be found on this wikipedia page,
https://en.wikipedia.org/wiki/List_of_cities_and_towns_in_Goa

List of cities in Goa can be found on this wiki page, We have used requests library to download the html, and then with the help of BeautifulSoup library, the corresoponding table is selected and data is collected.

● Geocoder package is used to get the latitude and longitude of these cities

We have used Geocoder package to get the latitude and longitude of these cities by sending city name to the api, This helps us in plotting this cities over the map

● Folium Map is used to plot cities over the map

We have used folium maps library to plot the cities over the map, this helps in visuslization of the clusters of cities

● Foursquare API is used to find locations the neighborhood of these cities

We have used Foursquare API to find famous locations in each cities, which we can use to segment the cities

- KNN

  We have used KNN algorithm from sklearn package to do the clustering of the cities after onehot encoding the city neighbors based on the venues