NEIGHBORHOODS IN CHENNAI, INDIA TO OPEN A RESTAURENT

FOR COURSERA APPLIED DATA SCIENCE CAPSTONE PROJECT

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INTRODUCTION

Chennai is one of the metropolitan cities of India and is one of the most densely populated cities in the world. It lies on the east coast of India and attracts heavy tourism from all over the globe every year. Personally, I have been brought up in Chennai and have loved the city from the bottom of my heart. It is one of the major hubs of the world and is extremely diverse with people from various ethnicities residing here. It has a rich diversity of food and people are crazy about having authentic foods during festivals and celebrations.

The multi-cultural nature of the city of Chennai has brought along with it numerous cuisines from all over the world. The people of India generally love food and I personally love to try different cuisines and experience different flavors. Thus, the aim of this project is to study the neighborhoods in Chennai to determine possible locations for starting a restaurant. This project can be useful for business owners and entrepreneurs who are looking to invest in a restaurant in Chennai. The main objective of this project is to carefully analyze appropriate data and find recommendations for the stakeholders

DATA COLLECTION

The data required for this project is as follows has been collected from multiple sources. The following data is required for the project:

- Neighborhood data of Chennai
- Geographical coordinates of Chennai and all neighborhoods in Chennai
- Venue data for neighborhoods in Chennai

Neighborhoods Data

The data of the neighborhoods in Chennai was scraped from 'https://en.wikipedia.org/wiki/List_of_neighbourhoods_of_Chennai'. The data is read into a pandas data frame using the read_html() method. The main reason for doing so is that the Wikipedia page provides a comprehensive and detailed table of the data which can easily be scraped using the read_html() method of pandas.

Geographical Coordinates

The geographical coordinates for Chennai data has been obtained from the GeoPy library in python. This data is relevant for plotting the map of Chennai using the Folium library in python. The geocoder library in python has been used to obtain latitude and longitude data for various neighborhoods in Chennai. The coordinates of all

neighborhoods in Chennai are used to check the accuracy of coordinates given on Wikipedia and replace them in our data frame if the absolute difference is more than 0.001. These coordinates are then further used for plotting using the Folium library in python.

Venue Data

The venue data has been extracted using the Foursquare API. This data contains venue recommendations for all neighborhoods in Chennai and is used to study the popular venues of different neighborhood.