Analysis OF Mumbai

Introduction

The project is intended to submit to Coursera-IBM as a Final Capstone project
In this data analysis exercise, we are going to analyse the city of Mumbai, Maharashtra. It is basically for all the tourist to come to visit India. Mumbai is located in the western part of India and is known as the Island City . It has many places to explore and is one of the important tourist destinations of the country. Hence, analysing the data of Mumbai using foursquare api will be highly helpful for new people who are migrating to Mumbai or comming to visit the city for a short span of time. Mumbai is also famous for being the Heart of Bollywood.

Problem Statement

Mumbai usually sees more than a lakh of visitors or tourists per year. Mumbai is not a small city but rather a world itself. A person who is visiting the place for the first time might not be much aware about the places or maybe trouble trying to hunt for them. So this is just an attempt to help the tourists with good resturants , hotels along with nearby medical shopes,hospitals and a few places to visit.

Target Audience

The people who visit Mumbai for holidays or work purpose, or those who are planning to start a new life in Mumbai.

K-Means – Algorithm

➔ **Why**

▪ The K-means clustering algorithm is used to find groups which have not been explicitly la belled in the data. This can be used to confirm business assumptions about what types of group s exist or to identify unknown groups in complex data sets

▪ As we are using data source which has to clustered using unlabelled data, k-means is a bette r algorithm as fit- to purpose.

Importing Libraries

```
import pandas as pd

import requests

import json

from pandas.io.json import json_normalize

!pip install geopy

from geopy.geocoders import Nominatim

print ("Importing Libraries Completed !")


import numpy as np

import pandas as pd

import matplotlib.cm as cm

import matplotlib.colors as colors

from sklearn.cluster import KMeans

print("Imported")


!pip install folium

import folium
```