**CAPSTONE PROJECT:**

**Opening a new office in Los Angeles**

**1. Introduction**

Whenever a company is expanding its Branches to new Cities it requires to open a new Office in that City. Opening a new Office requires a lot of serious consideration and is lot more complicated than it seems. Particularly, the location of the Office is one of the most important decision that will determine the productivity of Employees.

**1.1 Business Problem**

The Objective of this Capstone Project is to analyse and select the best locations in the City of Los Angeles, California to open a new Office. Using data science methodology and ML techniques like clustering, this project aims to provide the solution to answer the Business question: If a Company is looking to open a new Office in City of Los Angeles, California, Where would you recommend to open it?

**1.2 Target Audience**

A lot of stakeholders can be helped with this project such as:

i. Companies looking for Expanding their business in City of Los Angeles.

ii. Construction Companies looking to open (or) rent a new Office for their new project in the city of Los Angeles

iii. Newly Opened Business looking to open (or) rent a new office in the city of Los Angeles

**2. Data Description**

**2.1 Required Dataset**

To solve the Problem following data will be Required:

* List of Neighbourhoods in the city of Los Angeles.
* Latitude and Longitude of all Neighbourhoods.
* Venue Data, data related to different Venues in that Neighbourhood

**2.2 Solving the Problem Using above data**

For solving the problem we will begin with the Neighbourhoods data in the City of Los Angeles, then those neighbourhoods will be used to extract the Venus from foursquare location data after that the Venues data will be used be used to cluster the different Neighbourhoods in the city of Neighbourhoods.

**2.3 Sources of Data:**

Below are the sources of data used in this project:

* List of Neighbourhoods in the city of Los Angeles- <https://usc.data.socrata.com/dataset/Los-Angeles-Neighborhood-Map/r8qd-yxsr>
* Latitude and Longitude of all Neighbourhoods- <https://usc.data.socrata.com/dataset/Los-Angeles-Neighborhood-Map/r8qd-yxsr>
* Venue Data, data related to different Venues in that Neighbourhood- <https://foursquare.com>