Coursera Capstone Project Week 4

PROJECT NAME: IDENITFYING LOCATION FOR A MALL IN THE SUBURBS OF NEW ZEALAND AS PART OF CAPSTONE PROJECT IBM DATA SCIENCE COURSE

BY

ANAND SUNDARESAN

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INTRODUCTION

Cities often have malls in the city center and this is a nice place for people to engage themselves in looking up various items of their interests. Malls are central to every aspect of a social life right from dining, clothing, beauty, movies and playing games and amusements for children to name a few. Hence malls are a favourite destination of choice for businessmen to open their businesses and market products where they gain with a vast array of customers who frequent the malls anytime of the day. The Malls are growing due to the popularity and based on location and frequency of customers we will determine using the data available employing data science methods to identify the pertinent location for creating a new mall in the most opportune location

BUSINESS PROBLEM

The key business question is to identify the location within the city most suited to setup a shopping mall. Based on exploratory methods employed using data science, techniques learnt within the data science and using geolocation and other APIs the aim of this project is to solve this business problem. Which is the best place to open the shopping mall?

Intended Audience

Data obtained from the data science techniques will aim to assist the following actors.

- Mall developers especially property development agencies
- Advertising agencies
- Business promoters
- Government councils and neighbourhood centres

TECHNOLOGY SOLUTION

DATA

Sources: https://en.wikipedia.org/wiki/Category:Suburbs_in_New_Zealand

Location Mapping Sources:

- Location identification using Latitude and Longitude coordinates using APIs
- Plotting the map of the area
- Getting Venues that will aid in neighbourhood identification employed with Clustering techniques

PROCESS

a. **Use the Wikipedia to get a list of suburbs from New Zealand as per the link shown above**
b. **WebScrape the data using the beautifulsoup and python libraries**
c. **Get geographical coordinates using Python packages to obtain latitude and longitude**
d. **Use API from Foursquare to get Venue data for the neighbourhoods identified in Step c**