

# Coursera Capstone

Week-4 Report

***Opening a new shopping mall in Lahore, Pakistan***

By

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## **Business Problem:**

The main goal of this project is to analyze and find the best location for opening a shopping mall in the city called heart of Pakistan, Lahore. The location of the shopping mall should be decided on the basis of more demand in the region and low competition. By employing modern data science techniques and machine learning algorithms on the location data to learn and find an appropriate place, this project aims at the following business problem: if a developer wants to open a new Shopping mall in Lahore, Pakistan, where would you recommend they should open it?

## **Dataset :**

The data we used in this project has the following characteristics:

- Data is limited to the city of Lahore and neighbourhoods of Lahore which are easily accessible from the city. This defines the scope of the project.
- Geographical data i.e. Latitude and Longitude coordinates of various spots in Lahore city in order to plot map and retrieve venue data related to these spots.
- Information about these spots like Venue data especially related to shopping malls.

## **Data Source :**

List of neighborhoods of lahore will be obtained from this wikipedia page [https://en.wikipedia.org/wiki/List\\_of\\_towns\\_in\\_Lahore](https://en.wikipedia.org/wiki/List_of_towns_in_Lahore) . There are approximately 274 divisions in Lahore and around. After scraping the official names of these towns in Lahore, the names will be used as input to Python Geocoder library to get longitude and latitude data.

Foursquare API will be used to get venue information about these longitude and latitude coordinates. This APIS provides very rich information in Venues but we are interested in Shopping Mall only here. The remaining methodology will be discussed in the next week assignment.

