

# **COURSERA CAPSTONE**

## **IBM DATA SCIENCE PROFESSIONAL CAPSTONE**

Opening a New Shopping Mall in India

By

Praveen kumar

## Introduction

Recently, Machine Learning (ML) algorithms are widely used by the people . ML algorithms bring advantages because they offer solutions to problems related to the top questions. The ML algorithms are mainly used for the purpose of predicting the future and recommending the best solution to user. Here I am using the clustering

For many People , visiting shopping malls is a great way to relax and enjoy themselves during holidays. They can do shopping and they can eat in restaurants, shop at the various fashion outlets, watch movies and perform many more activities. Shopping malls are like a best destination for all types of shoppers. For retailers, the main location and the large crowd at the shopping malls provides a great distribution channel to market their products and services. Property developers are also taking advantage of this trend to build more shopping malls to cater to the demand. As a result, there are many shopping malls in india.

## Business Problem

The objective of this capstone project is to analyse and select the best locations india to open a new shopping mall. Using data science methodology and machine learning techniques like clustering, if a property developer is looking to open a new shopping mall, where would you recommend that they open it? This is the business problem. This project is particularly useful to property developers and investors looking to open or invest in new shopping malls in india. This project may help the investors to choose the best city to open a new shopping mall.

## Data

For this project the Foursquare API will be used. A list of shopping mall in india is downloaded and their respective location in longitude and latitude coordinates is obtained. The Latitude and longitude coordinates of those neighbourhoods. This is required in order to plot the map and also to get the venue data. The sources are the following

Shopping mall list : [https://en.wikipedia.org/wiki/List\\_of\\_shopping\\_malls\\_in\\_India](https://en.wikipedia.org/wiki/List_of_shopping_malls_in_India)

The above link the used as a dataset to find which city is best place to open a new shopping mall in india. The data set will be crawled with help of python beautifulsoup and created csv in pandas dataframe