**Capstone Project**

**Opening a Shopping mall in Hyderabad, India**

**Introduction:**

Shopping Malls are great places to have fun and pass time. They are like a one stop destination for all types of shoppers. Grocery shopping, Electronics, Personal items, restaurants, movie theatres are present in most of the shopping malls. Also, from a business perspective shopping mall are a great way to attract the customers as well as act as a source for new companies/ industries to advertise themselves. In Hyderabad city, there are many shopping malls at many different locations. Location is one of the most important things in establishing a shopping mall. This helps in the success or failure of the shopping malls.

The objective of this project is to select the best locations in Hyderabad to open a new shopping mall.

**Data:**

Here in this project, we are going to use the following as data:

* List of neighborhoods in Hyderabad, India.
* Geographical coordinates and data of the city Hyderabad and the surrounding neighborhoods.
* Venue data which is related to shopping malls.

We get the

List of neighborhoods data from (<https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Hyderabad,_India>). We use web scraping technique to extract the data from Wikipedia page in the form of text using python packages. We also will get the geographical data from Python Geocoder package. Once we get these data, we are ready to use Foursquare API to get the venue data of the neighborhoods. In this project we are using K-means Clustering algorithm for the analysis.