

## **Capstone Project - The Battle of Neighborhoods**

### **Introduction-**

New Delhi, India's capital territory, is a massive metropolitan area in the country's north. It is the world's second-largest urban area according to the United Nations. New Delhi is one of the most visited cities of India by foreign tourists.

Delhi has no specific food culture. Food culture in Delhi is a mixture of North Indian food, Mughlai Cuisines, Punjabi food and mouthwatering street food. It also includes a variety of cuisines from different parts of India. Delhi is a hot spot for Continental, Thai, Mexican and Chinese food as well.

A group of foreigners from Italy are planning to visit New Delhi for Business purpose. As this place is new for them, they need to find best restaurants for their Italian cuisine. Also, they need to find solutions to following problems-

Which areas have large number of Italian Restaurant Market?

Which is the best place to stay if I prefer Italian Cuisine?

Which Restaurant has the highest rated Italian Cuisine in New Delhi city?

In this project we will use the **Foursquare API** to explore neighborhoods in New Delhi City. We will use the **explore** function to get the most common venue categories in each neighborhood, and then use this feature to group the neighborhoods into clusters. Also, we will use the *k*-means clustering algorithm to complete this task. Finally, we will use the Folium library to visualize the neighborhoods in New Delhi City and their emerging clusters.