

# Data Science Capstone Project

## *Battle of Neighbourhoods*

*A report by  
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### Introduction

In this project, the chosen city is New Delhi. One of the country's largest urban agglomerations, Delhi sits alongside the *Yamuna River*, the tributary of *Ganges River*, about 100 miles south of the *Great Himalayas*. Delhi is the administrative, legislative and judicial capital of India and surrounds the metropolitan region as well as surrounding rural regions.

It is of great historical significance as an important commercial, transport and cultural hub as well as the political centre of India. The whole Delhi is divided into Old Delhi and New Delhi. New Delhi is characterized by wide straight avenues, with trees in double rows on either side which connects various points of interest.

This is the main east-west axis; it divides New Delhi into two parts, with a large shopping and business district, Connaught Place, in the north and extensive residential areas in the south.

I have lived in Delhi since my birth and have travelled to different places in the city. It comprises people coming from various other states having different religions who live in harmony which is one of the great things about the city. Many people have migrated from rural areas and urban areas in search of livelihood and job opportunities. It has many landmarks from historical monuments like *Lal Quila (Red Fort)*, *Qutub Minar*, *India Gate*, *Purana Quila*, *Humayun's Tomb* to famous temples like *Lotus Temple*, *Akshardham Temple*, *ISKCON Temple* and various famous attractions like *Agrasen Ki Baoli*, *National Museum*, *National Zoological Park*, *National Rail Museum* etc.,.

The objective of this project is to choose the best neighbourhood where a Restaurant can be set up. The city has absorbed, over the centuries, settlers, and visitors from across the globe. The emperors, the nobles, the viceroys and the sahibs all provided generous patronage to the cuisine of Delhi and contributed the cultivation of fine taste. Exploring the melting pot of the city can be a fascinating and rewarding experience.

Delhi cuisine comprises all types of dishes. Centuries of global trade, colonization and conquest have made the city one of the most multicultural cities in the world. Connaught Place, popularly called CP, is the mecca of multicultural cuisine, from momos to samosas, fruit chats to bhelpuri, biryanis to pizzas and fine dining restaurants, CP has it all. Delhi is a hotspot for Continental, Thai, Mexican and Chinese food as well. Keeping all this in mind, the focus of this capstone project will be to choose a neighbourhood among the busiest ones popularity wise. And hence, the stakeholders who want to open a different cuisine restaurant such as Italian, Thai or Mexican around famous attractions of the city would be interested in the results of this project.

## Data

Based on the criteria above, the following data will be needed :

1. List of neighbourhoods in Delhi.

Source : [https://en.wikipedia.org/wiki/Neighbourhoods\\_of\\_Delhi](https://en.wikipedia.org/wiki/Neighbourhoods_of_Delhi)

2. Coordinates of all neighbourhoods and venues

Source : GeoPy Nominatim Geocoding

3. Number of restaurants and their type and location in every neighbourhood.

Source: Foursquare API <https://developer.foursquare.com/>