Opening up a new Indian Restaurant in Denver CO

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Author Note

This project is part of Applied Data Science course deliverable

Abstract

Indian food is one of the most famous dining items in the world and the folks around the world are usually in search of fine Indian Restaurant for enjoying Indian spicy taste.

Our project talks about the business problem of searching for the best place in Denver, CO to open up an Indian restaurant so that it should be a success

Keywords: Machine Learning, Coursera Capstone

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The project aims at analyzing the locations in Denver Colorado for opening up a new Indian restaurant. We will be using Foursquare APIs to get the location information and different attributes of various locations to understand the spread of Indian restaurants across the city. We will try to refine this data using machine learning techniques such as clustering and will try to find out the answer for: what would be the best place within Denver to open Indian restaurant so that it would be successful.

# Data Gathering

We will be looking for the sub urbs within Denver Co and operating Indian restaurants around the sub urbs within Denver.

Along with this dataset we will be needing the technical details like latitude and longitudes of the gathered restaurants data to visualize it. Also, Indian restaurant venues would be used to cluster the sub urbs to understand the concentration of Indian restaurants across the city so that the least competition spot could be understood

## Data Sources

We will be using Wikipedia page to get the sub urbs from Denver CO (<https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Denver> ) Web scrapping methods would be used to extract this data and convert it into relational dataset. Lat long for the sub urbs would be extracted from Grocoder library of Python. Indian Restaurant venues would be extracted using Foursquare APIs.

### Methodologies Used

The project aims to use Web Scrapping technique, data pull using APIs (Foursquare API) and machine learning technique such as K-means clustering to solve for the business problem. We will using Folium library to visualize the output obtained and based on this we will try to gather actionable insights