Opening a Restaurant Ahmedabad City

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A. Introduction

A.1. Description & Discussion of the Background

Ahmedabad is the largest city and former capital of the Indian state of Gujarat. It is the administrative headquarters of the Ahmedabad district and the seat of the Gujarat High Court. Ahmedabad's population of 5,633,927 (as per 2011 population census) makes it the fifth-most populous city in India, and the encompassing urban agglomeration population estimated at 6,357,693 is the seventh-most populous in India. Ahmedabad is located on the banks of the Sabarmati River, 30 km from the state capital Gandhinagar, which is its twin city.

One of the most popular forms of meal in Ahmedabad is a typical Gujarati thali. It consists of roti (Chapati), dal, rice and shaak (cooked vegetables, sometimes with curry), with accompaniments of pickles and roasted papads. Sweet dishes include laddoo, mango, and vedhmi. Dhoklas, theplas and dhebras are also very popular dishes in Ahmedabad. Beverages include buttermilk and tea. Drinking alcohol is forbidden in Ahmedabad.

There are many restaurants, which serve a wide array of Indian and international cuisines. Most of the food outlets serve only vegetarian food, as a strong tradition of vegetarianism is maintained by the city's Jain and Hindu communities.The first all-vegetarian Pizza Hut in the world opened in Ahmedabad.KFC has a separate staff uniform for serving vegetarian items and prepares vegetarian food in a separate kitchen, as does McDonald's. Ahmedabad has quite a few restaurants serving typical Mughlai non-vegetarian food in older areas like Bhatiyar Gali, Kalupur and Jamalpur.

Manek Chowk is an open square near the centre of the city that functions as a vegetable market in the morning and a jewellery market in the afternoon. However, it is better known for its food stalls in the evening, which sell local street food.

As you can see from the figures, Ahmedabad is a city with a high population. Being such a crowded city and city where alcohol is forbidden, leads the owners of restaurants and cafes in the city where the population is dense. When we think of it by the investor, we expect from them to prefer the districts where there is a higher number of customers and are closer to socially famous places.

A.2 Problem

Given the location data of various types of restaurants in Ahmedabad, this project aims to predict which part of the city will be best suitable for opening a particular type of restaurant.

B. Data acquisition and cleaning

B.1 Data sources

There is no dataset available that contains the boroughs/localities of Ahmedabad city. So I searched for coordinates of 10 random boroughs of Ahmedabad and created a csv file for the same. Then I used the FourSquare API first to find restaurants in each borough. I set the limit as 50 radius of 1 km. This way I obtained my dataset consisting of Borough, Borough Latitude, Borough Longitude, Venue, Venue Latitude, Venue Longitude, Venue Category.

B.2 Data cleaning

There are several problems with the dataset. First, the names of the restaurants were not in a single case. Some restaurant names were in all capitals, some had some words of the name in capital etc. So I converted all the names into lower case, creating a uniformity throughout the dataset.

Second, many of the restaurants obtained through the FourSquare API have been permanently closed. So, I had to delete those restaurants from the dataset in order to obtain more accuracy.

Third, there were some restaurants that were in various neighbourhoods and had different name returned by the API. For example: 'Gwalia' restaurant was in 4 boroughs and in one of the boroughs it mentioned 'Gwalia Sweets'. So I had to make sure that everywhere in the dataset if restaurant name repeated then it had to be the same. This ensured consistency of the dataset.