**Appropriate location for setting up a restaurant**

Brian Kirui

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1. **Introduction**
   1. **Background**

London is one of the greatest cities in the world with many restaurants. As such many people are looking for different types of cuisines from different restaurants. This leads to a multiple diversity of restaurants in the city.

There is still a huge room for growth of the number of restaurants due to the population.

* 1. **Problem**

London is a large city and as much as the room for the growth of restaurants in the area is evident, it is not a simple task identifying the best location to set up shop.

This project is aimed at helping potential business people with identifying the best location for the business based on the cuisines they intend to serve.

* 1. **Interest**

Any entrepreneur or business person aiming to make a profit in the food industry would definitely benefit from this.

1. **Data acquisition and cleaning**
   1. **Data sources**

For my project I will be using Four square data to get the location data for London.

* 1. **Data cleaning**

I used the coordinates of London and used the foursquare app to identify restaurants within a certain radius from the centre of the town.  
Once this was done, I clustered the restaurants into groups of restaurants with certain similarities such as the types of cuisines they provide, such as the Indian, Chinese and so on…

I then used this information to show all the locations of the restaurants on a map showing London first as a whole showing all the restaurants then each cluster to show where each is represented.

1. **DATA ANALYSIS**
   1. **Classification**

Since we are using data from the foursquare app only, there isn’t much data to work with except the available data from foursquare.

Since our project is not biased to any specific category among the restaurants, we took a general approach and decided to divide them based on certain similarities such as the cuisines they serve and the types of food served in others.

**3.2 Cuisines**

The restaurants based on the cuisines served include the Chinese, Indian, Italian and so on. This was more of a direct classification and didn’t require much research since these restaurants clearly indicate the type of cuisines they serve both in terms of the name of the restaurant clearly indicating the heritage and the menu which provides food based on the cuisine chosen.

**3.3 Other forms of classification**

Classification using the types of cuisines served was not enough thou, so I took a step further and classified the restaurant based on their designs and the food they served the most.

For instance some restaurants served mostly seafood others were more or less a wine based restaurant among other forms of classification.

This was to help classify the restaurants in a manner that clearly put every restaurant within our radius within their respective groups.

1. **PREDICTIVE MODELS**

Our aim in this project was to identify the best spots for setting up a restaurant within London city but since we took a more general approach in order to increase the audience that can use out data, we did a general all round restaurant search in the area

* 1. **Categories**

From our project we divided our restaurants into 16 groups which all had quite a number of restaurants in each groups.

Most restaurants didn’t fall under any specific cuisines thou, and I named them general restaurants.

* 1. **Location**

Most restaurants were located around the central part of the city which means the outskirts of our area of research still gives potential entrepreneurs a chance to invest in restaurants without having to endure stiff competition. Thou when it comes down to specific categories, some may not be located at the central area but still each group had tons of room for growth.

In this project we used maps to identify the locations of these restaurants and thus came up with the conclusions to our project.

1. **CONCLUSION**

The purpose of this project was to identify the optimal locations for setting up restaurants in the London. It was aimed at helping potential restaurant business people who plan to open up restaurants and also this includes other categories that have not been explored yet.