

Applied Data Science Capstone - Battle of Neighbourhoods

Cloud Kitchen in Toronto



1. A description of the problem and a discussion of the background

A client is interested in setting up cloud kitchen in the city of Toronto. A cloud kitchen is a restaurant that has no physical space and no dine-in or takeaway facility as it does not exist as a restaurant of any sort. It relies entirely on third-party integrations or home delivery orders placed on call through a website or an app. This format gives the restaurant the flexibility to more than one brand using the same kitchen infrastructure.

The restaurateur (client) currently owns an Iranian restaurant. He would also like to serve Lebanese and Egyptian cuisine to his customers under a different brand name. A cloud kitchen will enable this business quite perfectly and the client is looking for a perfect location in Toronto to start his cloud kitchen.

The target audience is the restaurant owner who is looking for a suitable location in the big city of Toronto. He is looking to leverage his existing business and expand through cloud kitchen. By providing recommendation for a suitable location, the client will be able to ideally build his cloud kitchen to expand his business.

2. A description of the data and how it will be used to solve the problem

- We will use the Notebook to build the code to scrape the following Wikipedia page, https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M, in order to obtain the data that is in the table of postal codes and to transform the data into a pandas dataframe.
- The dataframe will consist of three columns: Postal Code, Borough, and Neighborhood
- The data will then be divided into different boroughs which will be further divided into neighborhoods.
- Foursquare API will then be used to retrieve restaurant data of Toronto city.
- Using data analysis techniques that have been acquired over the last few months, three perfect locations to setup a cloud kitchen will be recommended to the client.
- The recommendation will be based on below criteria:
 - Number of competing restaurants in a particular neighborhood
 - Proximity to residential areas
 - Optimal location in terms of real estate cost (Additional data will be required for this criteria)
- Conclude three best location for a cloud kitchen in Toronto serving Iranian, Lebanese and Egyptian cuisine