Capstone Project Report
Franchise Expansion
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1. Introduction

1.1 Background

Chatime is a bubble tea restaurant with a very profitable location in the Toronto neighborhood called Bay Street Corridor. The owners of Chatime would like to expand their franchise into the United States. The owners have selected Miami, FL as the city they would like to expand to. The profitability of their first location is due in large part to the consumer traffic that occurs in the Bay Street Corridor neighborhood. Therefore, they would like to identify a neighborhood in Miami, FL that is similar to the Bay Street Corridor neighborhood in Toronto.

1.2 Problem Data

Data that would be helpful to finding a similar neighborhood would be data on what type of venue categories occur most frequently, population density of the neighborhood and geographical location with respect to landmarks. This project aims to predict which neighborhood in Miami is most similar to the Bay Street Corridor neighborhood and thereby select a new location for a Chatime franchise.

1.3 Interest

The business owners of Chatime as well as other developers within Toronto or Miami neighborhoods.

2. Data acquisition and cleaning

2.1 Data sources

The Toronto neighborhood data listing the neighborhood names, and corresponding GPS data is sourced from https://open.toronto.ca/dataset/neighbourhoods/. The Toronto neighborhood population density data is sourced from https://open.toronto.ca/dataset/neighbourhood-profiles/.
The Miami neighborhood names, GPS coordinates and population density are sourced from url='https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Miami'
The data on venues located in each neighborhood is sourced from Foursquare API.

This data will be used to determine which venue categories occur most frequently in the Bay Street Corridor neighborhood. The Toronto neighborhood will then be clustered with all the Miami neighborhoods to determine which neighborhood has the most similar combination of venue categories. The clustered neighborhoods will then be sorted using population density. Finally the neighborhoods will be mapped to compare geographical landmarks near the neighborhood to determine if that increases the overall similarity of the neighborhoods. The Miami neighborhood falling into the same cluster as the Bay Street Corridor neighborhood and with a similar population density and geographical landmarks will be selected as the location for the next franchise.