Milton, Ontario is one of the fastest growing cities in Canada. In terms of cities in Ontario, Milton is growing the fastest, with massive construction and infrastructure projects planned as the resident’s sprawl outwards from the Greater Toronto Area (GTA). With a current population of 132, 508 people and a five-year annualized growth rate of 5%, Milton is set to become a major population center in the province, and as such provides massive economic opportunity for businesses. In this project, neighbourhoods in Milton will be analyzed in order to determine the best location to open a new bar/nightclub. Milton is set to become home to two new University Campuses for Wilfrid Laurier University and Conestoga College, and this in tandem with young professionals and families looking to move out of the city of Toronto provides a high demand for beverages and entertainment.

In order to solve this problem, the foursquare API will be used to cluster venues in Milton based on neighbourhoods. These neighborhoods will be used as the index of a panda’s data frame, and their latitude and longitude will be stored in the first two columns. A map will be created and centered on Milton, and each neighborhood will be plotted on the map. Since Milton is a smaller city by geography as compared to Toronto or New York, when pulling nearby venues only venues within a 300m radius of each latitude and longitude will be considered. These venues will then be added to a data frame based on their name and category. There are two main factors which will be considered when determining the best location for the bar/nightclub. First, neighbourhoods with a high number of pubs, bars, and lounges will be looked at unfavorably, as competition in these areas is high for a new bar. Second, any neighborhood with a high number of fast food restaurants and access to transit such as bus stops or stations will be looked at favorably, as students in particular tend to utilize these amenities in tandem with bars and nightclubs. Finally, once a list of potential neighborhoods has been determined, their proximity will be plotted in comparison to the new planned University Campuses in order to best access the key demographic for this project. In order to simplify the data, once the venues are one hot encoded by neighbourhood, columns with no impact on the project such as trails, warehouse stores, video game stores, etc. will be dropped in order to reduce any potential impact they may have on the clustering of data.

Works Cited:

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