**Capstone Project Final Assignment**

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**PROJECT DESCRIPTION**

A Newfoundlander who recently moved to Toronto, Ontario is contemplating starting a small business serving traditional Newfoundland food: fish and chips. She has decided that downtown Toronto would be an ideal location of this business venture but first must decide if there is a need for it. Using Foursquare location data she will to determine if this location is going to be as profitable as she hopes.

**INTRODUCTION**

Since the Newfoundlander is not from the Toronto area and has not lived there long, she does not have a lot of market research to base her business start-up on. This could pose as a problem if she does not do the research and compare market data. Using Foursquare data and loading that information into Python, will determine if downtown Toronto is a suitable location for another type of fast food and whether the Newfoundlander will be successful in the fast food industry.

**CONSIDERABLE DATA**

To conduct this research, Python was the sole resource for digesting, processing, and calculating the data. Sources of data were open source and obtained from Wikipedia, the Statistics Canada website – a website administered by the Government of Canada, and Foursquare – a service that collects geographic information regarding all sorts of locations, especially businesses, and user-generated information about the locations such as customer ratings and reviews.

Wikipedia provided a list of postal codes for the city of Toronto; this study hinged on postal codes as the link between the data. Statistics Canada provided population data for the different areas of Toronto, namely the postal codes. Incorporating population data into the postal code data identified the population distribution within the city.

A centroid calculation was run to determine, based on population, where to locate the shop. This was done independent of any information from Foursquare.

Then, Foursquare data was loaded into Python and applied to the problem. A Foursquare search for the term “Newfoundland” was conducted. There were no relevant results.