

# Peer-graded Assignment: Capstone Project - The Battle of Neighborhoods (Week 1)

Now that you have been equipped with the skills and the tools to use location data to explore a geographical location, over the course of two weeks, you will have the opportunity to be as creative as you want and come up with an idea to leverage the Foursquare location data to explore or compare neighborhoods or cities of your choice or to come up with a problem that you can use the Foursquare location data to solve.

Review criteria

This capstone project will be graded by your peers. This capstone project is worth **70%** of your total grade. The project will be completed over the course of **2 weeks**. Week 1 submissions will be worth **30%** whereas week 2 submissions will be worth **40% of your total grade**.

For this week, you will required to submit the following:

1. A description of the problem and a discussion of the background. **(15 marks)**
2. A description of the data and how it will be used to solve the problem. **(15 marks)**

For the second week, the final deliverables of the project will be:

1. A link to your Notebook on your Github repository, showing your code. **(15 marks)**
2. A full report consisting of all of the following components **(15 marks)**:
  - Introduction where you discuss the business problem and who would be interested in this project.
  - Data where you describe the data that will be used to solve the problem and the source of the data.
  - Methodology section which represents the main component of the report where you discuss and describe any exploratory data analysis that you did, any inferential statistical testing that you performed, if any, and what machine learnings were used and why.
  - Results section where you discuss the results.
  - Discussion section where you discuss any observations you noted and any recommendations you can make based on the results.
  - Conclusion section where you conclude the report.
3. Your choice of a presentation or blogpost. **(10 marks)**

# Battle of the Neighborhoods – Week 1

- 1) We have been hired to do a full analysis for a client who wants to move to Canada alongside his family and start a business there. They have vast experience in the Food Industry so they want something related to it but not specific. They are not too familiarized with the commercial areas or how are they distributed but they would like something in Toronto, since they have some relatives there and would like to be near.
- 2) We have been gathering data from the Foursquare API about various venues, so we have some info to start with. Since this is going to be industry specific, its not going to be enough. We will need to reshape our searches to filter for food industry only venues, and from that, try to segment into areas according to density, so they have the option to be near the action and have enough info to see what may work based on what type of business are around.

Once we gather all the data we need, we should rank it for the top 5 type of Food Business in Toronto and cluster them into areas so we have a big picture of how the commercial areas are distributed along Toronto.