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

Important Information

It is especially important to submit this assignment before the deadline, Oct 14, 2:59 AM EDT, because it must be graded by others. If you submit late, there may not be enough classmates around to review your work. This makes it difficult - and in some cases, impossible - to produce a grade. Submit on time to avoid these risks.

1. Instructions

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. If you cannot think of an idea or a problem, here are some ideas to get you started:

- 1. In Module 3, we explored New York City and the city of Toronto and segmented and clustered their neighborhoods. Both cities are very diverse and are the financial capitals of their respective countries. One interesting idea would be to compare the neighborhoods of the two cities and determine how similar or dissimilar they are. Is New York City more like Toronto or Paris or some other multicultural city? I will leave it to you to refine this idea.
- 2. In a city of your choice, if someone is looking to open a restaurant, where would you recommend that they open it? Similarly, if a contractor is trying to start their own business, where would you recommend that they setup their office?

These are just a couple of many ideas and problems that can be solved using location data in addition to other datasets. No matter what you decide to do, make sure to provide sufficient justification of why you think what you want to do or solve is important and why would a client or a group of people be interested in your project.

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)

2. My submission

1) Clearly define a problem or an idea of your choice, where you would need to leverage the Foursquare location data to solve or execute. Remember that data science problems always target an audience and are meant to help a group of stakeholders solve a problem, so make sure that you explicitly describe your audience and why they would care about your problem.

This submission will eventually become your Introduction/Business Problem section in your final report. So I recommend that you push the report (having your Introduction/Business Problem section only for now) to your Github repository and submit a link to it.

2) Describe the data that you will be using to solve the problem or execute your idea. Remember that you will need to use the Foursquare location data to solve the problem or execute your idea. You can absolutely use other datasets in combination with the Foursquare location data. So make sure that you provide adequate explanation and discussion, with examples, of the data that you will be using, even if it is only Foursquare location data.

This submission will eventually become your **Data** section in your final report. So I recommend that you push the report (having your **Data** section) to your Github repository and submit a link to it.

Peer-graded Assignment: Capstone Project - The Battle of Neighborhoods (Week 2)

Important Information

It is especially important to submit this assignment before the deadline, Oct 21, 2:59 AM EDT, because it must be graded by others. If you submit late, there may not be enough classmates around to review your work. This makes it difficult - and in some cases, impossible - to produce a grade. Submit on time to avoid these risks.

1. Instructions

In this week, you will continue working on your capstone project. Please remember by the end of this week, you will need to submit the following:

- 1. 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.
- 2. A link to your Notebook on your Github repository pushed showing your code. (15 marks)
- 3. Your choice of a presentation or blogpost. (10 marks)

Here are examples of previous outstanding submissions that should give you an idea of what your report would look like, what your notebook would look like in terms of clean, clear, and well-commented code, and what your presentation would look like or your blogpost would look like:

- 1. Report: https://cocl.us/coursera_capstone_report
- 2. Notebook: https://cocl.us/coursera capstone notebook

- 3. Presentation: https://cocl.us/coursera capstone presentation
- 4. Blogpost: https://cocl.us/coursera_capstone_blogpost

2. My submission

Please submit a link to your Notebook.

Please submit a link to your report.

Please submit a link to either your presentation or blogpost.