The City College of New York

CSc 44700 – Introduction to Machine Learning
Spring 2022
Erik K. Grimmelmann, Ph.D.

Final Project Description v1.0

During the final third of the semester, you will work on an individual project.

The project will include three components

1. **An in-class presentation with charts**. The presentation will be six to seven minutes long. Please rehearse your presentation so you don't run out of time. I will cut you off if you run over and we're running behind schedule.

2. **The charts for your presentation**. The charts can be in in PowerPoint, Google Slides, Apple Keynote, PDF, or whatever other format you prefer, as long as I can read it on my Windows PC. Please submit your charts via Blackboard and label your file as lastname_firstname.xxx where xxx will depend on the format of the charts.

3. **A written report (in PDF format)**. The report will be 10 to 15 pages in length (double spaced). If you have lots of tables and/or charts, you can include them in an appendix. Please submit your written report via Blackboard and name your file as lastname_firstname.pdf. If you have code, please submit it as an Jupyter notebook named lastname_firstname.ipynb.

Schedule

1. Your presentation will be on May 2nd ,4th, 9th, or 16th. May 16th has been added as a date for presentations; after I created the Syllabus, the class size increased, so I'm adding a fourth day for presentations. During Spring break I'll post a schedule of when you'll be presenting.

2. The charts from your presentation are due by midnight on Friday May 20.

3. Your written report is also due by midnight on Monday, May 23. No extensions will be granted since I've pushed this as late in the semester as I can.

Grading

The three components of your final project will be graded as follows:

1. Presentation	5% of your final grade
2. Presentation charts	5% of your final grade
3. Written report	25% of your final grade

Topics

The projects can be on almost any topic in Machine Learning.

- It can be a topic that we covered (or will be covering) in class
- It can be a topic that we didn't cover (or won't be covering) in class.

- You can cover a method in Machine Learning.
- You can apply a method (or methods) from Machine Learning to a dataset that you find interesting.

You must clear you project topic with me in advance via email. I want to make sure that your topic isn't too easy or isn't too hard or will take too long. If I don't respond to your email in a timely fashion, please email me again.

The project must be mathematical and/or quantitative in nature. For example, if your subject is the history of a method to solve a particular problem, you'll need to go through the equations and perhaps even develop and run some code. In short, it needs to be a computer science project and not (just) a history of computer science project.

The project can't just repeat material that we've covered in class. If you choose a topic that we covered, you must go further than we went in class or develop examples that go further than we did.

If you borrow ideas or code from anyone or any online (or offline) source, make sure to credit that source.