

EC200/EC300 (2/2563)

Guidelines for the Final Team (Max 5 persons per group) Project report. (20 points)

Objective:

The goal of the final project is to gain practical experience with a particular ML task. Example tasks include topic Decision Tree, Regression with regularization, Naive Bayes classifier, Sentiment analysis, Logistic regression, KNN model, and text- based forecasting. You are free to choose any task as long as it involves some kind of predictive or exploratory analysis. You are highly encouraged to choose financial, business, economic areas that is interesting to you!

Overview:

At a high level, you are expected to: (1) select a particular machine learning task; (2) find or produce a dataset that can be used for experimentation; (3) design a program or use an existing toolkit to test one or more hypotheses; (4) do evaluation analysis; (5) report your findings. The goal is not for you to invent a new algorithm, but rather to apply existing techniques to a new application, or explore different feature representations on an existing task.

Guidelines:

Deliverables (The due date is on June 14, 2021 before mid-night):

Final report : Your final project report must be 10-15 pages, single spaced or 16-20 pages, double spaced. Your final report should address or have the following sections:

- **Introduction:** What ML application are you studying? Why is this an interesting problem? Why are your experiments interesting?
- **Approach:** What exactly is your approach? What are its inner workings?

- **Experimental methodology:** Describe your experiments and the metrics that you have used.
- **Results:** What do you observe?
- **Discussion:** From your results, you have to discuss the interesting

observations and to explain why something happened. If you found nothing interesting that is fine. But you must explain to me why you find nothing, Is it something to do with the data, methods, or anything else?

- **Conclusion:** Overall, what do you do, what do you find, and why is that important?

Submit:

1. Final Report
2. The Python codes and the data set.
