Final Project Guidelines

Overview

The course project is your opportunity to work with the course instructors and TFs to explore a topic in depth. If you are looking for project partners, we suggest you post on Ed.

Projects for 209A teams will be graded at a higher level. These projects must implement a method that was not discussed in class. Therefore, students enrolled in 109A should not form a team with students in 209A unless the are themselves comfortable with being graded at this higher level (any mixture groups will be graded at the 209A level).

Milestones

1. **Fri, October 2: Group Creation and Project Selection** (1 point)

   Make a group for your team (3 - 4 students) by choosing from pre-made Canvas Groups labeled 'Final Project #', and select your team's 1st, 2nd, and 3rd choice for a project topic in the 'Final Project - Milestone 1' assignment on Canvas. All team members should enter the group before submitting and only one member of your group should submit. If you do not have a group you still need to submit your preferred project topics individually in this Canvas assignment, and we will assign you to a team.

2. **Fri, October 16: Scope of Work** (4 points)

   Submit the Scope of Work form on Canvas in the 'Final Project - Milestone 2' assignment. The Scope of Work form will prompt you for the following information:

   - Preliminary project statement. The project goal in the posted project description is not fully formulated or tuned. Based on the project description and references, state a well-defined question that you'll address in the project.
   - Preliminary EDA. Explain your plans for preliminary data exploration. Please take care when delineating your plans, so that team members can work individually on these tasks if need be.

3. **Wed, November 18: EDA, Baseline Model(s), and Revised Project Statement** (15 points)

   On Canvas in the 'Final Project - Milestone 3' assignment, submit a 2 - 3 page revised project statement and EDA (can be created using Latex, word processing software, etc.) and an accompanying Jupyter notebook (that was used to create the visuals). Your 2 - 3 page submission should include:

   - A description of the data: what type of data are you dealing with? What methods have you used to explore the data (initial explorations, data cleaning and reconciliation, etc)?
   - Visualizations and captions that summarize the noteworthy findings of the EDA.

- A revised project question based on the insights you gained through EDA.
- A baseline model.

4. **Fri, December 11: Project due** (80 points)
   Submit your final project on Canvas in the 'Final Project - Final Submission' assignment. You are required to submit the following:

   - Jupyter notebook with relevant code (20 points),
   - A 6-10 page written report (can be created using Latex, word processing software, etc.) on the results, that can have the rough organization of a scientific paper (30 points).
   - A link to a 6-minute video (25 points) presenting your findings. Feel free to use slides, visuals, brief video clips from external source, etc. Have fun with it! More details to come.
   - A peer evaluation of each team member (5 points) submitted separately (individually).