

Final Project Guidelines

Overview

The course project is your opportunity to work with the course instructors and TFs to explore a topic in depth. The list of applied includes sports, political science, finance, social science, and commerce. You will work in groups of 3 to 4 students. If you are looking for project partners, we suggest you post on Piazza.

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 (any mixture groups will be graded at the 209A level).

Milestones

1. **Wed, October 3: Group Creation and Project Selection** (2 points)

Make a group for your team (3 - 4 students) by choosing from pre-made Canvas Groups labeled 'Final - Group #', and select your team's first through third choice for a project topic in the 'Project - Milestone 1' survey on Canvas. If you do not have a group you still need to submit your preferred project topics individually in this Canvas survey, and we will assign you to a team.

2. **Tues, October 23: Scope of Work and Preliminary EDA** (3 points)

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

- 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 specifying your plans, so that team members can work individually on these tasks if need be.

3. **Wed, November 28: EDA and Revised Project Statement** (15 points)

On Canvas in the 'Project - Milestone 2' 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.

Feedback on this milestone will be given on December 3.

4. **Wed, December 12: Project due** (80 points)

Submit your final project on Canvas in the 'Project - Final Submission' assignment. You are required to submit the following:

- Jupyter notebook with relevant code (30 points),
- A link to the report presented on a website (45 points = 40 points content + 5 points for style), and
- A peer evaluation of each team member (5 points) in a separate Canvas quiz (submitted individually).

An example report and website will be provided.