# **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 topics includes sports, social issues, medicine, and commerce. You will work in groups of 2 or 4 students. If you are looking for project partners, we suggest you post on Piazza.

Projects for 209 teams will be graded at a higher level. These projects must implement a method that was not discussed in class. Therefore, students enrolled in 109 should not form a team with students in 209.

## **Milestones**

## 1. Mon, Nov 13: Group Creation and Project Selection (2 points)

Make a group for your team (2 - 4 students) by choosing from pre-made Canvas Groups labeled [f] Final - Group #, and select your team's first and second choice for a project topic. If you do not have a group you still need to submit your preferred project topics, and we will assign you to a team. Students will not be assigned to pre-existing teams. Please be sure to indicate if you're taking the course for a letter grade or pass/fail.

#### 2. **Fri, Nov 17: Scope of Work** (3 points)

Submit the Scope of Work form on Canvas. 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 over the Thanksgiving week, and regroup the week after to finish the third milestone below.

#### 3. Tues, Nov 28: EDA and Revised Project Statement (15 points)

Submit a 2 - 3 page revised project statement and EDA to Canvas. Your 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.

Feedback on this milestone will be given on Nov 30.

# 4. Thurs, Dec 7: Project due (80 points)

Submit your final project on Canvas. Your submission includes

- Jupyter notebook with relevant code (30 points), and
- Report presented on a website (45 points = 40 points content + 5 points for style).
- A peer evaluation of each team member (5 points)

A template for the report will be posted on Canvas, and the last lab will be devoted to presentations on websites.