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, natural sciences, and commerce. You will work in groups of 2 to 4 students. If you are looking for project partners, we suggest you post a request on Piazza.

Students enrolled in 109 may form teams with students in 209 and/or DCE. Note: the grading policy for projects involving a 209b student, even if the other team members are not 209b, is that we expect a deeper analysis and methods that go beyond the methods used in class.

Milestones

1. **Milestone #1 (due Mar 2) : Group Creation and Project Selection** (2 points)

    - The purpose of this milestone is to make a group and indicate your first and second choice for a project topic. Follow the instructions in the assignment.
    - ONLY for teams that have custom projects and the project HAS BEEN approved by Pavlos: Upload a .zip file containing the .pdf of your project description and any data files. Use the template provided in

      https://github.com/cs109/2018-cs109b/tree/master/Projects

      The .tex file is provided along with the pdf for your convenience.

2. **Milestone #2 (due April 4) : Scope of Work that includes Literature Review and Preliminary EDA** (3 points)

    - Scope of Work form with the following information:
        - Literature review
        - 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. **Milestone #3 (due April 18) : 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.

4. **Milestone #4 (due May 2) : Project due** (80 points)

   - Submit your final project on Canvas. Your submission should include:
     - Jupyter notebook or .Rmd file with relevant code (25 points)
     - Written Report (40 points = 35 points content + 5 points for style) (50 points for DCE)
     - Poster presentation (10 points)
     - A peer evaluation of each team member (5 points)

   Guidelines and template for the report and posters will be posted on Canvas. DCE students do not have to do a poster presentation