CS 109A / STAT 121A / AC 209A
GLICKMAN, PROTOPAPAS

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 (NOTE: some exceptions apply and they have already been granted.)

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 Friday, April 6) : 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. You may use simple visualizations at this point or just a verbal description.

3. **Milestone #3 (due Friday, April 20) : 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. You may use a visualization package of your choice.
- A revised project question based on the insights you gained through EDA.

4. **Milestone #4 (due Wednesday, 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