Final Project Report

For sample projects, please see:
https://docs.google.com/document/d/1SO7MJpoW4B_4SjjZhc9eBxBGRPjff5Bv5eN4hrCf4g0

For data sets you might work with, see:
https://docs.google.com/document/d/1FuzEq25XgX4u0cY1nRSQzduBh0oANnVzXuQjr2cY_cE

Important Dates

10/09	Project Proposal (max 750 words max)
10/16	Proposal Feedback
11/04	Mid-Term Project Report (max 1500 words)
11/12	Mid-Term Project Feedback
12/11	Project Report Due
12/11	Poster Presentation

Project Grading (total: 50%):

5%	Proposal
10%	Mid-Term Report
25%	Final Project Report
10%	Poster Presentation and Demo

Project Proposal

The goal of the proposal is to give your team quick feedback about the general idea, scope, and if it is an acceptable topic for the class.

The project proposal should not be longer than 750 words (but you can use as many figures as you like) and address the following items:

- Project title
- Names and MIT/Athena emails of all team members
- Abstract: 1-2 paragraphs about your idea. What is the "big idea" behind your project?
- Intro: Why your project matters
  - Why is it interesting?
  - How does it compare to existing work?
  - How does it advance the state-of-the-art? Why is it needed?
  - What is your hypothesis?

- Methodology: How do you plan to approach the problem?
- Evaluation: How will you evaluate your project? What is your success metric?
- Data: Describe the data you are planning to use for the analysis and the evaluation of your system. If you don't have the data yet, how will you collect it? If you are not able to get access, what other datasets will you be able to use as a backup? How will you clean and integrate the data?
- Task-List: What are all the tasks you have to achieve for your project. Who is doing what? (a rough outline)
- Timeline: What do you plan to achieve by the Mid-Term Project report, Project Presentation day, and final project hand-in?
- Deliverables: By the end of the project, what are your planned deliverables?

Mid-Term Project Report

The goal of the mid-term project report is to make sure that you are on track for your final project. It can be up to 750 words and should include the following:
- Status of your project
    - What tasks are completed
    - What deliverables are already finished
    - What tasks/deliverables are still open
- Results: What results have you already achieved?
- Potential problems: what problems (if any) did you encounter and how do you plan to address them?
- (Updated) timeline with a justification about what and why things might have changed
- Who in the team did what so far and who is doing what for the remaining time
- Questions (if any) you have and would like to get feedback on

You can re-use parts from it for the final report.

The Final Report and Code

The final project submission consists of a (1) report, (2) your code, and potentially any additional products (visualizations, web-pages, etc).

Report

You should prepare a conference-style report with around 3000 words. Along with the report you
can hand in other material (e.g., a web-page you created, or a video of your work). In some cases, a web-page can also replace the traditional report (if you would like to do that, please talk to Prof. Madden or Prof. Kraska first).

Your report should introduce and motivate the problem your project addresses, describe related work in the area, discuss the elements of your solution, and present results that measure the behavior, performance, or functionality of your system (with comparisons to other related systems as appropriate.)

Because this report together with the final presentation are the primary deliverable upon which you will be graded, **do not treat it as an afterthought**. Plan to leave at least a week to do the writing, and make sure your proofread and edit carefully!

Code
As part of the final report submission should also submit your code. The code should contain a readme on how to run it. Furthermore, as part of the code submission you can also submit other documents (e.g., visualizations, demos, etc).

Details on how to submit the project report and code will follow soon.

Poster Presentation and Demo

On **December 11** all teams will present their projects in a poster session. For that you have to create a research poster.

When preparing a poster, it is important to remember that although your group has spent a lot of time and effort becoming familiar with the domain knowledge necessary to understand your results, many others in the class do not necessarily share this background. It is important to design your posters to communicate your results in a clear, concise way.

Making a good academic poster that quickly and effectively delivers the key points about your project takes careful planning. Here are some links about making a good academic poster that we found helpful:

- [This](#) slideshow from Cornell
- [This](#) link from NYU
- [This](#) comprehensive list of do's and don'ts

The focus of your poster should be on the most interesting aspect of your project. For many of you, this will be the results. You will not have time to explain your entire project to your colleagues who are looking at the posters, so you need to pick what to show, such that your process and results are mostly justifiable and you have a coherent story.

Requirements:
- Your poster should contain
    - The names of your group members and potentially a logo if you have one
    - Dataset information
    - Problem statement / hypothesis
    - Methodology
    - Challenges
    - Result & visualization

Again it is important that you tell a good story and focus on the most interesting aspects. However, we also suggest that you maybe dedicate a small corner of your poster on other things you did as part of your project. This helps us to better understand the full scope of your project.

Size:
We recommend A1 or at most 30" x 40" (the max printer width is 42"); alternatively you can print out individual (9 or 12) slides on 8.5"x11" paper and affix them to a poster board.

Printing:
You are responsible for printing out the poster in time. If you are a member of CSAIL you may be able to use the Mondrian printer on the 2nd floor but use the CHEAP paper. Here are the instructions for how to use it: https://tig.csail.mit.edu/print-copy-scan/poster-printer/. Alternatively simply prepare slides and print them on normal paper.

Presenting your poster: The poster session will be on **Wednesday 12/11 between 2:30pm - 4pm (normal class hours). We will announce the location next month. You are responsible to have your poster ready by then. We will provide easels and poster boards to hang your poster.**

At all times, one group members should stand next to the poster whereas the other members can freely move around and look at other posters. We highly encourage you to walk around and see what other people did and also engage them in discussions and question their methodology, hypothesis, etc - like in a real conference.

At the same while you are looking at posters, there will be also several judges going around. As in a conference, the judges will not spend a lot of time at your poster unless they are especially intrigued by something. Therefore, it is important that you **practice your poster pitch**. A good poster pitch takes only 2-3 min and should use the poster to underline your main points. Do not make the judge to simply read the poster. A good poster presentation is like telling a story and engages the listener. Again focus on the highlights and surprises. For example, focus on the highlights of your project which you would introduce with phrases like "To our surprise…",

"Unlike what we thought at first…", "A real unexpected challenge was…". At the same time do not overdo it. The judges usually have a good feeling about what is hard and easy.

Demos: If you build an application, web-service, interactive visualization site, you are highly encouraged to demo it. In this case you should have your personal notebook ready during the poster presentation. We can not guarantee that you have access to power. Therefore if you plan to demo something, make sure your notebook battery is full. However, even with a demo your pitch should not take longer than 2-3 min. If the judge gets interested in it, he can always spend more time and ask questions.