# CS 520
# Final project: Mid-point deliverables

Final projects will be completed in teams of 3 or 4 students. Each team is responsible for a single project. You should select a team and a project by **Tuesday, March 21, 2023, 11:59 PM (a little before midnight)**. Your mid-point presentation will be due **Thursday, April 20, 12:00 PM (noon)** and will take place **Thursday, April 20, 4 PM**.

The final project presentation will be **Tuesday, May 16, 2023, 4:00 PM**. The final project deliverables will be due about a week later.

The first section provides more details about what needs to be included in the mid-point writeup of your final project and the second section describes what needs to be included in the mid-point presentation for it.

On Piazza, each group needs to submit their writeup as well as the presentation slides (as PDF) along with a recording of the talk.

## Writeup

Each writeup should be about 3 to 4 pages single spaced. This should include the following:

- title and authors

- text descriptions

- figures

- references

### Research or experimental evaluation

Each research or experimental evaluation writeup should have the following sections:

- Introduction: Problem, research question(s), approach

- Approach

- Methodology such as datasets, algorithms/tools, evaluation criteria

- Related work

For an experimental evaluation writeup, the evaluation criteria often includes a manual review of the tool(s).

### Development

Each development writeup should have the following sections:

- Software Requirements Specification (SRS)

- Design

- Evaluation plan

The SRS section should cover the following:

- Overview: Proposed idea and stakeholders

- List of features

- Functional requirements

- Non-functional requirements

The design document should cover the following:

- Architecture

- Tech stack with justification

- If a web application, a UI design mockup and data model

The evaluation plan needs to document the following:

- How to check if the functional requirements are satisfied (often plan to do one or more unit test suites, alpha/beta testing, ...)

- How to check if the non-functional requirements are satisfied // For a web application often usability by planning to do alpha/beta testing and/or usability surveys

# Presentation

Each group will do a 5-minute presentation and describe your final project. The time limit is strict.
    You will be expected to tell us four elements of your project:

1. The Problem. Tell us what you are going to build. If you are doing a research-focused project, tell us the research question(s) you will answer. If you are building a system, show us a prototype or describe the basic functionality and where your work will focus. Keep it focused. One slide. No more than 2 minutes total. Practice what you will say. Put a one-sentence summary on the slide.

2. The Design. Tell us how you will build what you are building. If you are building a system, tell us what technology you will use and show us the high–level architecture. If you are doing a research-focused project, tell us the design of your experiment(s). Again, no more than 2 minutes total. Practice what you will say. They key is to convince the audience you will succeed.

3. The Evaluation. Tell us how you will know you succeeded. If you are doing a research-focused project, tell us what data you will use, how you will know that your results make sense, what statistical tests you'll apply, etc. If you are building a system, tell us your testing plan and how you will execute it. Again, no more than 2 minutes.

4. The Plan. Tell us (really quickly) what your planned timeline is and each group member's responsibilities. Do not go into details; just show that you have a plan.