CS 422/522
How to Present Your Project in Class

This document summarizes how to do group presentations for CS 422 Software Methodologies.

Please come to class on presentation day prepared to present the following. You can pre-assign speakers for each topic, but every group member must present part of the project and be ready to comment on every topic. In other words, every group member should have learned every bit of knowledge the project contains.

Prepare visuals, which can be in the form of presentation slides or a word processing document that you just scroll through, as I do with my lecture notes. Please make sure the font size is visible while sharing the screen. I am more interested in the content than the formatting, especially content that is unique to your project and does more than restate general software engineering knowledge. For the last four topic areas below, please identify at least one interesting and important element your group learned.

Presentation Outline

There are seven main topic areas, as follows. Please try to spend roughly one minute per topic area:

A. Explain what you did

1. Provide a brief description of the system from the user's perspective. Present a summary of the ConOps (concept of operations.)
   If the concept of operations changed since the start of the project, briefly remind us of the original idea. Then, state how and why the concept of operations changed.
2. Present an architectural design diagram, UX and front-end design storyboards, database diagrams, etc. If you have some implementation, show a demo illustrating how a user would use the system to accomplish real-world tasks. Focus on the functionality necessary to perform real-world tasks.
3. Briefly describe the technologies used to build the system.

B. Explain how you did it.

1. Detail how you established the system requirements. List (a) existing systems (and technology) that you looked at and what you learned by looking at each, (b) who you interviewed, how you recruited your interviewees, and what you

learned from each interview, and (c) other sources that you used, other than your guesswork, to establish system requirements.
State at least one thing your group learned about requirements analysis and specification.

2. Explain how you translated the system requirements into a software design (not a user interface). Describe the process that you used to do this translation. This section must include a few diagrams that communicate the final software design, not from the user's perspective but from the programmer's perspective. If you can show early design ideas and explain how and why these early ideas evolved, that would be very good. Remember that you are not describing the user interface design but the software components and how they interact.
State at least one thing that your group learned about software design.
3. How did you integrate and test your system? What was the process? How did it go? What went well, and what did not go well? If you conducted any user observation studies, describe them briefly here.
State at least one thing that your group learned about software testing.
4. How was the team managed? How was the team experience? What went well, and what did not go well?
State at least three things your group learned about working on a team.

Though the questions above may seem long, I trust that the questions' specificity and detail make the preparation easier than if the questions were more open-ended.

Visual Materials

Use visual materials in a presentation to state the main points you want to make. Also, visuals must offer additional information that audience members can read and study if they choose, while you are speaking. Do not use your slides as bullet points to remind yourself of your topics. Instead, make complete statements and show additional details and diagrams, including ideas and figures you consider essential but may not have time to explain during your presentation.

Remember that your audience in this class is a group of highly skilled learners. The audience may decide to focus on what you are saying or the detailed visual information you are displaying; perhaps you will say something briefly that the audience can learn more about by studying the slide. To this end, do not give "TED" style talks in which you put just one phrase, photo, or idea on a slide. (Unless, for example, the image tells a vivid story of the topic you are presenting.) Do not use the build presentation style that reveals one bullet at a time unless there is a content-related reason to hide some information temporarily, e.g., you want the audience to consider a question before you present the answer.

Do not use clip art in your presentations. It is not scholarly, wastes space, and distracts from the relevant content.

Scale diagrams so that their text is about as large as the text you use throughout your presentation. Each figure should fill as much of the slide as necessary. If necessary, be shown on one slide in its entirety and then on multiple subsequent slides broken out into smaller pieces.

When you present a diagram or plot, state what it represents on the slide and verbally. Figures with an *x*-*y* plot must be introduced by "This plot shows <*x*> as a function of <*y*>." Remember that this is the first moment the audience will see these images, and they need to be oriented as soon as possible.

Do a Rehearsal

In advance of giving your presentation, organize a full rehearsal exactly as you would ultimately deliver the presentation. The rehearsal will help you get accustomed to the required pace to use time wisely, share the screen (if in Zoom), use a pointer, and use the technology used during the presentation. It also does wonders to calm your nerves on the performance day. Time your presentation and rehearse it until you can make it in the available time. Rehearsals help you avoid improvising, wandering around topics, and consuming time. High-stakes presentations and performances may fail when the performer does not do a full tech rehearsal.