CS 435 - Additional Project Information

A team project is a traditional, important component within a software engineering course. It is also traditional that this team project include a formal presentation/demonstration of the team's resulting project.

Note that several peer evaluations are required as part of this project. Your thoughtful participation in these is also part of your project grade. (Note, however, that I take several factors into account in determining your project participation grades, *not* just these peer evaluations.)

Minimum Project Requirements

Each team has a scenario, with a client.

As was announced in class, you completed Milestone 1, an initial list of user stories, by Friday, February 28, and completed Milestone 2, the Iteration 1 Plan, by Friday, March 7. You have been working on completing that first iteration, and proceeding to further iteration plans and then iterations, since then.

Important project goals include:

- maintaining your evolving collection of user stories, including appropriate consultation with the client (IF POSSIBLE)

- working together, as a team, to implement **at least three** (and possibly more) **working, deliverable iterations** of a system for this scenario that each implement a useful, operational subset of that scenario's current version of those user stories

  – the exact number of iterations should be determined in conjunction with the client (IF POSSIBLE), as should the timing of those releases, but at least three are required and expected -- shorter time periods between smaller releases is to be preferred over longer time periods between fewer/bigger releases

- a strong, concerted attempt at a **disciplined** approach to testing (at various levels)

- using Extreme Programming/agile practices as discussed in class

- using and practicing software engineering practices and considerations

Grade breakdown:

The total project grade is the sum of the following:

Max Pts Possible	Project part	Description
5	Milestone 1	Initial list of user stories
5	Milestone 2	Iteration 1 plan
10	Milestone 3	Completed Iteration 1
50	Milestone 4 - (n-2)	Iteration plans and completed iterations for Iterations 2, 3, 4, etc. (If 2 more iterations, (5, 15)+(5, 25); if 3 more, (5, 10)+(5, 10)+(5, 15); if 4 more, (2.5, 5)+(2.5, 5)+(2.5, 5)+(5, 17.5)
10	Milestone n-1	Formal presentation/demonstration to class and to other observers
5	Milestone n	Individual reflection paper
7.5	Participation 1	Based on 1st set of peer evaluations & instructor's evaluation of performance
7.5	Participation 2	Based on 2nd set of peer evaluations & instructor's evaluation of performance

The sum of the grades for the above project components will then be multiplied by 30% in computing the project portion of your CS 435 final semester grade.

The grades for the last three milestones above are individual grades, and may differ for each team member. Except for unusual circumstances, the grades for the other milestones will be the same for each member of a team (although I reserve the option of giving different members of a team different grades for *any* project part, if I feel this is appropriate).

Part of your Participation grade will be determined by your thoughtfully and thoroughly filling out several peer evaluations forms at times to be specified. I will consider your and your peers' comments on these forms, meeting minutes and other submitted files/documents/activities, and my own observations in determining each team member's Participation grade.

Participation 1 - First peer evaluations

Participation 2 - Final peer evaluations

Peer evaluation forms will be made available on the course Moodle site. You will be notified by e-mail when they are available, and you are expected to complete them by the deadline given in that e-mail. I will be the only one seeing these peer evaluations.

Your participation grades are based on these peer evaluations, on your thoughtful completion of these peer evaluations, on team meeting forms and other submitted files and documents, and on my observations of your performance.

Milestone n-1 - Formal presentation/demonstration

A formal team presentation/demonstration of your final iteration will be given in class on Thursday, May 8. Note that I plan to invite departmental faculty and the students in several junior- and senior-level computing classes -- if you would like to invite anyone, please feel encouraged to do so!

To be presented:

during class on Thursday, May 8

Presentation purpose:

The purpose of this presentation is to:

- Add to your experience in giving a formal team presentation, especially one demonstrating software

- Give a final report to the instructor (and to audience members) about your project final (and final) iteration

- Demonstrate your project final iteration in action -- to demonstrate its strengths, to show off its capabilities!

Turn in (BEFORE presenting):

- A typed outline of your team's presentation

- Print-outs of any slides, illustrations, etc. used in your presentation to the class that are not directly from the running final iteration
  – Black-and-white printouts with 4-6 slides per page are fine for meeting this requirement

Presentation guidelines:

- **Everyone** on the team should participate significantly and roughly equally in this presentation!

- The presentation should take 20-25 minutes (before the question-answer period).
  – It is expected that you will have planned, organized, practiced, etc. enough so that your presentation will be no shorter than 20 minutes, and no longer than 25 minutes.
  – At 25 minutes, your presentation will be stopped, so that there is time for all three presentations.
  – If the presentation does take less than 20 minutes, or if it has to be stopped at 25 minutes because you have not yet finished, then there will be a **time penalty**.
  – A question-and-answer period of 5 minutes will follow the presentation.

- A formal **overview** bulleted-list of the presentation's main parts should **start** the presentation, and it should be both **displayed** and **verbally summarized** at the presentation's beginning.

- I hope that there will be guests from outside of the class at this final presentation; for them, as well as for formality, then, you should briefly introduce/describe your project, and then briefly discuss its "history";
  – You should briefly discuss interesting problems encountered, how you dealt with them, etc.
  – Discussions of general group-project issues your group encountered are also encouraged --- in fact, it would be remiss to omit them at this stage.
  – And, ties you have seen/experienced to general software engineering topics from class discussions and readings are encouraged.
  – You should definitely display and briefly discuss the Component and Connector architecture diagram of your final iteration as well as the UML diagram you chose to create related to your final iteration.
  – BUT **be careful not to take too long for this part**, because:

- ...Don't forget that the **MOST IMPORTANT purpose** of this presentation is to **demonstrate** your project final iteration "**LIVE**", actually showing it in operation; **this should be the HEART and the MAIN FOCUS of your presentation.**
  – Demonstrate its strengths -- show off its capabilities!

- You are expected to demonstrate features "live" rather than to simply talk about them.

- It is expected that you will carefully **plan** how you will demonstrate your project's capabilities (you know the order of demonstration of the different features, for example, and you have sample inputs/data already planned and ready to demonstrate;

  - ...you are **not** discussing within the team what to present next during the presentation, or what sample inputs/data to use!)

- After your live demonstration, you should include a **brief discussion of "future work"** -- what would you work on next, in the next iteration and/or in future iterations, if you had more time?

- Finally, be careful to close with a **definite conclusion**, briefly summarizing your accomplishments and/or lessons learned -- end with a positive note, not an apology!

  - It should be clear to the audience that you have concluded your formal presentation -- (that is, I shouldn't have to guess whether you have finished or not... your presentation should not vaguely trail off, while you discuss: "Is that it? Yeah, that's it...")

- As implied above, it is expected that you will carefully plan, organize, and practice your presentation. For example:

  - Each presenter should avoid reading directly from notes and instead make eye contact with the audience (each should have practiced his/her part so that he/she can just glance at notes while presenting rather than reading them word-for-word)

  - The "segues" between team members need to be smooth and polished as well -- each member should introduce the next speaker and topic explicitly: "And now Sally will demonstrate the widget-adjusting portion of our application..."

  - One team member should operate (or "drive") the computer while another actually speaks/presents. This does require coordination and practice on the part of the team -- but the result looks more polished and professional.

    It should be planned in advance which team member is serving as "driver" when, and this "driver" should also know what to do next at any given point.

  - Each presenter should know what he/she plans to do next at any given point, as should the overall team;

    - (Avoiding having to discuss, during the presentation, what should be shown next -- everyone should already know that from having planned and practiced the presentation beforehand)

- You will use the **SH 002** lab projector; a laptop CAN be connected to this projector, if you do not want to use the lab computer. It is the team's responsibility to make sure in advance that they can successfully project what they need to for this presentation; if you need to make special arrangements, do so well in advance of the presentation!

Milestone n - Individual reflection paper

Due:

Beginning of final exam period

Turn in:

Individually-written papers including:

- description of your favorite feature/aspect of your team's project final iteration

- description of something that you learned (in general) from this project

- a description of tools/approaches your team used to communicate and collaborate on this project

  – include how well each tool/approach worked or did not work

  – how might you improve communication/collaboration on a future project that you work on?

- briefly discuss your experience using `git` on this project, also including whether or not you now feel comfortable using it or not

- a description of how your team partitioned the work in the project

  – include whether this approach worked well or not

  – how might you improve work partitioning on a future project that you work on?

- a description of your team's approach to testing in the project

  – include whether this approach worked well or not

  – how you might improve testing on a future project that you work on?

- any other points, pertinent to course discussion, that you would like to make

These papers do not need to be long, but they do need to be taken seriously, and they need to discuss all of the areas listed above. Note that grammar and spelling will be taken into account --- as seniors presumably about to graduate, you should be able to write a technical reflection paper with proper mechanics!

The primary purpose of this milestone is to provide you with an opportunity for some final reflection on your project as the semester comes to an end.