Central Washington University
College of the Sciences
Department of Computer Science

CS-380 Intro Software Engineering Spring 2016

CS-380 PROJECTS

This document describes what you have to do to succesfully finish the project part for your evaluation in this course.

As stated in the syllabus, the project is a *project of your preference*. But, of course, there are necessaryly restrictions which are outlined here. There might be other restrictions; those will be stated as the course develops.

Rules for Projects

Projects consist of groups of 5 (6) persons. Rather than having random groups, there will be voluntary leaders. If there are too many, the instructor will decide.

To be a leader, you must apply for it, with a brief printed letter and an area for the project. 4 leaders will be selected among the applicants.

The leaders may have more weight as to problem definition, and directions; they will be also resposible for handing the reports; as well as more weight during peer evaluations. They will also have *some* choice in the selection of team. Teams should be fully formed at end of first week.

Topics for Projects

Leaders and their team are *free to choose their project*. Thus, if you have an idea, consider seriously being a leader. The project must have at the very least two of the following characteristics,

- a scientific problem/visualization
- accessing realistic data
- mobile applications
- real-time interaction/robotics.
- algorithms and/or data structures
- graphical interfaces

Leaders may start with ideas on projects, with input from all the members in the team. The project should not be too large. If you thought up of something, make it two thirds as big!.

Presentations
There will be 4 presentations, each corresponding to an "iteration" in the software development process. The presentation must be about 20 minutes long, with a 5 five minute summary at the beginning. If everything goes smooth, each one must address the following points (at least):

Presentation 1
- Team member and duties
- Problem Definintion/Motivation
- Sources

Presentation 2
- Design
- Algorithms/Data Structures
- Software used

Presentation 3
- A prototype
- Preliminary testing
- Performance

Presentation 4
- The product
- Final testing

At any time, there must be two team member presenting. Everybody should be involved in the final presentation (4). So including the final, everybody must present at least twice.

Reports
The day before the presentation, the team leader must provide.

- *Minutes* of the required meetings (see below).
- *A Progress Report*, addressing the expectations (as above). It also may describe contingencies or deviations in the development.

Except for the final one, none of the above should be too long, The final report must address all rubrics in the presentation. Source code should be made available upon request.

Meetings
In the two weeks or so between presentations, the team must meet *at least two times* outside class, with the assigned TA. In addition, teams may use lab time to discuss project related issues, with the assistance of the instructor or TA.

Useful Tips

1. You will be surprised how many issues are going come up in your own problem definition.
2. Each member is responsible for the project as a whole, and should be able to answer questions about it.
3. Many potential difficulties will not be technical, but of logistics and coordination. Please anticipate such type of problems.