## SENG 330: Object-Oriented Software Development

Fall 2015

## Project Phase #2

- Due: Friday, October 9<sup>th</sup> under Assignments in Connex.
- IMPORTANT: THE SUBMISSION SHOULD BE A SINGLE PDF FILE (marks will be deducted if that's not the case)
- Project phase #2 is to be completed as a group. Only one member needs to submit but make sure that you list all the members of your team in the report.
- You should extend what you wrote for Project Phase 1 and add the material for Project Phase 2
- In general as you go through the iterations you should keep updating a single document that eventually will become the final report.
- IMPORTANT: Throughout the process document change and the reasons behind it. For example if you start with an initial design for classes that for some reason does not work and then change it I don't want to just see the "new" design but also the old one and rationale for why the change was made. Self reflection and learning from failures are vital in most human activities but even more so in software engineering.

## **Objectives**

- To go through a complete iteration of UP
- To implement a pilot project.

**Grade Percentage:** The report for project phase 2 is worth 5% of the project grade.

The goal of project phase 2 is to go through approximately what would correspond to the inception and elaboration phase of the UP object-oriented design methodology. Use as a starting point the requirements, use cases, analysis and design that you did for your project in phase 1. Based on this information make decision about architecture, platform, programming language etc. Also think about the testing methodology. In this phase you will "break" ground in terms of actually writing some code and getting it to work. This will require sorting through the logistics of how to collaborate (version control, meetings etc) and technical details (compiler, IDE etc). The code will correspond to a pilot project, which is used to make sure you have the right tools, ability to execute as a team, and provide evidence to your client that you can achieve what you plan. The pilot project only needs to implement a subset of the full functionality therefore you will have to select which requirements, use cases, classes etc are necessary for its implementation. Therefore, conceptually you will only use "part" of the design that you have worked on in Phase 1.

Your deliverable should be an extension of the document you started in Phase 1 containing a summary description of the pilot project with specific information about what functionality is there and what is missing. In addition you should provide some code listings. Exercise common sense in terms of code. There is no point in including all your code unless it is no more than 1-2 pages but providing coding snippets highlighting how your design is expressed is very useful. Again try to focus on thinking of this document as something that you will be using rather than something that I will just look at and give you grade.

Describe how the relevant use cases (a subset of the ones you described in Phase 1) are expressed in your code either by code snippets or screenshots if you have a GUI. I expect that the description of the pilot project will be anywhere between 2-10 pages. Anything less is not helpful and more than 10 pages is too much. Another good way to think about the pilot project is to imagine that you know that after completing this work you will be transferred at another part of the company to work on a different project. Peer evaluation is important in the company so you want to make sure you do a good job of handing the project to the new team. As their primary source of information will be this document you want to make sure you really make it useful.

I intentionally don't want to over-specify what should go in the document as I think it is important to learn to critically think about how to write an actually useful document.,

If you are at all unclear as to the level of detail required for your submitted work in this assignment, then please check with the instructor or post your questions to the Chatroom.