

Course Project Details and Milestones 1 & 2

The purpose of the project is to have the students apply the principles they learn in class on a software development project that is large enough to exercise the project management techniques being discussed while small enough to be feasible within a one term project.

- This is a group project in which you will learn about team dynamics, work distribution, etc. Team membership is assigned by the instructor.
- The project description has been posted and all teams will work on this project. Your instructor, Kirstie Hawkey is playing the role of the client.
- The project must be executed following a proper process and suitable documents should be produced using proper standards and formats. Examples of deliverables will be posted, but the actual formatting of the documents are up to you as long as your documents convey the required material.
- The outputs of the project will be reviewed by the TA. As well, the individual assignments will have your reviewing the outputs of other teams. This will train you in reviews.
- The project is designed so that it is of a manageable coding size for groups of 4-5 members. The challenge is not to code a large project, but to solve a problem using software and a proper software development technique.

During the course, you will prepare a number of work products. Specific details will be provided in milestone descriptions: **Each completed work product must be maintained on your group's content management site and be posted on your Group website and emailed to your TA before class on the date due.**

Each document must have a revisions section in which changes to the document are tracked and the author of the changes identified.

Project deliverables:

- Project charts
- SRS and Project Plan
- System Design and Detailed Design Documents
- Documented Code Base
- Test Plan
- Test Reports
- User Manual
- Deployment Guide
- Minutes of Project Meetings
- Weekly project reports

Each work product will be marked on the following basis:

- Completeness
- Consistency
- Level of specificity
- Clarity
- Organization

- Format, spelling, grammar
- Use of diagrams
- Software craft (see below)

Software craft:

All projects are expected to be conducted in a professional manner. Software craft will be a component of each group's marks. Marking of the final work products will consider at least the following:

- Code quality and organization
- Internal documentation
 - Doxygen (see schedule for links)
- Use of a version control system
- Use of a build system
- Use of a testing framework (Unit, Regression, UI monkey...)
- Use of a ticket tracking and release system
- Responsiveness to feedback provided

Milestone 1: Group website

Now that the project has been assigned and the groups have been formed, you need to set up your group's website and content management system.

1. SVN. Email cshelp@cs.dal.ca with the names of your group members and their CS IDs by Tuesday, May 10th. Make the subject line "3130 Subversion Account". They will set up a Subversion repository for class with individual groups within it. <http://tortoisesvn.net/downloads.html> is said to be a good SVN client for windows. <http://svnbook.red-bean.com/> is a good resource for learning to use Subversion.
2. The Group website should contain on its front page the following information:
 - Group Name
 - List of group members
 - Initial description (1 paragraph) of the project
 - Pointer to the Meeting Minutes and Weekly Project Reports
 - Anything else you think is important

Milestone 2: Project Charter

The project charter is usually the first project document produced. It authorizes the project and describes the Why, What, How, Who, and When. It is a concise high-level description of at least:

1. The customer (in this case, you can consider it a project commissioned by me)
2. A problem statement – what is the business problem to be solved
3. A project description – what is the approach to be taken
4. The goals, objectives, and design principles (How do you know if you are successful? What do you value?)
5. The project scope – what is specifically included and excluded
6. Critical success factors – what is key to success, what are key risks, what are the mitigation plans
7. Any assumptions and/or constraints
8. Project organization
9. Major milestones
10. Roles and responsibilities

The purpose of this document is to anchor a project and help the team avoid mid-project drift. Ordinarily these would be approved by the sponsor – for the purposes of this project, approval will be given through feedback on Milestone 2.

Examples of project charter templates :

- http://www.projectinitiation.com/process_assets/Project%20Charter%20Template.doc
- <http://www2.dir.state.tx.us/management/projectdelivery/projectframework/justification/Pages/ProjectCharter.aspx>

Weekly project status reports (first one due Thursday May 12, due each Thursday thereafter):

- The weekly project status reports are a way for your group and your TA and instructor to make sure that your group is on track and that individual team members are contributing as expected. If your weekly meeting minutes include all the below information, they may serve as your project status report. Otherwise, produce a separate document which contains:
 - Reports from each role
 - Overall team issues or concerns
 - Development status (tasks completed, in progress)
 - Planning status (new plans made, old plans adjusted)
 - Quality reports (results of reviews, testing, etc.)
 - Support status
 - Perceived risks and proposed mitigations
 - Any other significant items
 - Individual reports from each team member
 - Progress against previous goals
 - Hours worked
 - Any changes to the plan
 - Goals for the upcoming week