CSCI 375 Project Overview

Document Overview

This document contains an overview of how the CSCI 375 project works. Please read it and familiarize yourself with its contents. Details about each specific deliverable will be found in their respective documents, but this is a good place to get started with understanding how the project works.

Project Overview

The team project is a fundamental part of CSCI 375 and will constitute a large portion of each student's grade.

Each student in the class will be assigned to a team. Please note that:

> All students will be required to fully participate in the completion of a team project. This includes:
> - attending *all* course labs
> - attending team meetings whenever possible
> - participating in *all* demonstrations and presentations for the client(s)
> - completing a fair share of *all* of the following work necessary for your team's project:
>   - planning
>   - analysis
>   - design
>   - development
>   - documentation
>
> Actively engaging with all parts of the project will enable you to learn the material and succeed in the course.

Figure 1: Participation policy for CSCI 375 Team Project

Working in a team is challenging, but also brings many advantages and opportunities to learn and grow. A core purpose of the team project in this course is to gain experience navigating the challenges of working in a team. This may include:
- personality clashes
- scheduling challenges
- differences in skill and knowledge
- differing objectives and motivation

These are the same kinds of challenges that you will likely face in the workplace, and so it is expected that students work within their team to overcome these challenges. However, if any problems are beyond your ability to handle, please bring them to your instructor to help resolve.

Project Teams and Project Selection

Team Formation

Each team will consist of 4 (3 if necessary due to enrolment numbers) students. Teams will be formed during the first lab.

Project Selection

Teams have until January 13 to come up with their preliminary project proposals. The project can be anything, so long as it meets the following restrictions:

- All files and software must be stored, developed, compiled, and run entirely on otter. **NO EXCEPTIONS.** Failure to follow this rule will result in failing the project. Each team will be provided with a git repository to use as their 'central' repository, and each team member is expected to maintain their own working copy in their own local repository.
- Your project should be something beneficial to the VIU community. Your clients for this project will be represented by the students in CSCI 375.
- The technical depth and breadth of the project must be appropriate for the project weight for 4 upper level students. The instructor has final say on whether or not your project is suitable.
- Your clients and course instructor will provide feedback on your proposals and project at various stages. Your project should evolve to reflect this feedback.

Team Evaluations

Working in a team can be challenging. In order to facilitate your team's ability to work productively, you will perform a number of activities to set ground rules and assess your performance and your team members' performance.

After you've formed your team, you will formulate a **team contract** outlining all team members' responsibilities and roles. This will be due with the proposal.

Midway through the project you will submit a **self-assessment** and **peer-assess** your team and its members. Your assessments of your team members will not be shared with them unless you choose to share it.

A **final assessment** will be done at the end of the project (after the final project is due and presented). You will again assess yourself, your peers, and your team.

Assessment

You and your team will receive prompt feedback on all submitted deliverables. Your submissions will be objectively evaluated based on their application of the skills learned in class, and the team's submission assessment mark will be based on this evaluation. Individual scores on these deliverables will be computed as described below. In addition, teams will receive formative feedback about their submission which should be fed back into the analysis and design process to improve the project. Teams will also receive formative feedback in the form of peer evaluation of each presentation. This feedback will be based on a provided rubric and will not impact the team's mark. Its purpose is to help teams improved their analysis and design process.

Deliverable Assessment

The project will make up 50% of your course grade. For non-presentation portions, each individual's portion of the team's mark will be adjusted based on their contributions. This adjustment will be based on peer-evaluations submitted with each week's submissions (by teammates) and on self-reported contributions. It is your responsibility to clearly document your contributions.

Late Submissions

There are 7 project phases. Each has a written deliverable (except the Project Demo) and team presentation. Any project materials submitted up to 24 hours late will be penalized 25%. **Any project materials submitted more than 24 hours late will receive a mark of 0.**

Missed Presentation

Mandatory presentations may be missed without loss of mark only for medical or personal emergencies. Appropriate communication with the instructor *at the earliest possible time* will be required. Any student that misses a presentation without an approved reason will receive a 0 on the presentation portion of that mark. If the entire team misses a presentation, a mark of 0 will be given, AND the presentation must be given at a later date at the convenience of the instructor. **Failure to make up a presentation may result in a failing grade for the entire project.**

Documents and Submissions

Each phase of the project has associated written documents. These documents are to be developed and maintained in your git repository (individual or team) and submitted by git pushes.

Written Documents

All submitted documents are to be **either .pdf or .txt.** Please submit the requested format using the requested file name. Failure to do so will result in a 0 on that submission.

All written documents are to be treated as formal submissions, and are expected to be:
- well written
- spell checked
- grammatically correct
- word processed
- complete with:
    - table of contents
    - page numbers
    - references and citations
- clear and concise
- follow any established team documentation standards

For more tips on how to create successful documents, please see Sarah's Tech Writing Tips (on the course page).

Use of git

In the first lab we will go over the use of git, including setting up a git repository on otter.

Every Monday/Wednesday (depending on lab section), each team must commit and push their team repository contents, and each student must push their individual contents. This must be done by midnight before the next lab section.

Individual assessment will be based largely on these git pushes. Failure to keep the repository up to date will result in a lower mark on your individual marks.

We will go over best practices in the first lab.

Weekly Timesheets

Each team member is required to track the time they spend on the project, as well as the specific activity and deliverable that time is dedicated to.

Your timesheets must be kept up to date in your individual csci 375 project repository and pushed on a weekly basis, as follows:
- Your repository must include a directory named *TimeSheets*, containing a single file that is updated weekly
- The file should be named TimeSheets.txt
- By Monday/Wednesday 23:59 of each week you must update and push the timesheet for the preceding week. For example, on or before Monday January 9th you must update and push the timesheet
- The timesheet file is simply a text file (edit it with the editor of your choice).

The format to use when recording the time spent working on the project is described below.

Each line in the file represents one working session, with the following components:
- the date, e.g. Jan. 2
- the start time, using a 24-hour clock, e.g. 16:30 represents 4:30pm
- the total time spend on the project, e.g. 3:15 would be three hours and 15 minutes
- a short description of what you were working on

```
Date      Start   Duration    Activity
Jan. 9  10:00   0:30        Team meeting to discuss roles and responsibilities
Jan. 11 22:30   0:30        Wrote my contribution to strengths and weaknesses
Jan. 13 10:00   1:15        Team meeting put together document for submission
```

Figure 2: Sample Timesheet

Round time estimates to the nearest 15 minutes. All time spend on the project should be recorded, including lab time and team meetings.

Contribution Summaries

Each team member is expected to keep *all* their work on the project in their own repository (again, details to be discussed in lab 1) and, prior to the start of their lab session, to push their repository the day each project phase is due.

Your repository must contain a *Contributions* directory, containing a separate file for each project phase, in which you provide:

- a precise list of what you have contributed to the project that week
- how the team's contribution points should be distributed for all *other* members

Each week, you have 40 *contribution points* to distribute to the other members of your team. The more you think a member contributed, the more you should give to them. Some rules about contribution points:

- you must distribute them all
- you may not give any to yourself
- you may *not* distribute them evenly

How contribution points are used:

- your contribution to each deliverable will be weighted based on the sum of points your team members give to you. Marks will be scaled based on relative contributions. Your instructor will also compare these points to what you claim to have contributed and any discrepancies will be addressed either in lab or in person privately.
- contributing significantly more than your teammates will result in a higher mark than the awarded team mark*
- contributing significantly less than your teammates will result in a lower mark than the awarded team mark
- You will receive your contribution score each week with your feedback from the instructor so that you can aim to improve how you work with your team

*doing more that your share, however, in such a way that is robs your teammates of the chance to work on a deliverable should not be done, and may result in a reduced contribution score
Example:

```
Contribution Notes:
I wrote paragraphs x and y for the Team Formation document.
I edited the content submitted by Sam (with the help of Belinda).
At the weekly meeting, I took the minutes, and sent reminders to all team
members of their action items.

Contribution Points:
Johnny      16
Belinda     19
Sam         5
```

Figure 3: Sample Contributions File

Name your contribution files based on the deliverable that is due (e.g., TeamFormation.txt).

As with the *TimeSheets* directory, the initial individual repositories you clone will contain a *Contributions* directory and collection of empty text files for the contributions.
Note:

- If you don't note your work in your contributions, you won't get marked for it!

- there is no fixed format for the contributions notes, as there is a tremendous degree of variation in what might constitute a "contribution" and how to best describe it.

Meeting Minutes

Each team is required to hold regular meetings to discuss the project and make any relevant decisions.

Each team is *required* to take careful notes (aka minutes) on each meeting, and to store those minutes in the team project repository.

The details to be recorded are as follows:
- The date, start time, and duration of the meeting
- Which team members were present at the meeting
- The name of the team member taking the meeting minutes
- Action items
- Agenda
- Meeting notes, including:
    - decisions made
    - tasks assigned (including team member and task)

As with the individual time sheets and contribution summaries, the team project repository must contain a *Meetings* directory, with a separate file for each meeting. The name of the file should be the date and approximate start time of the meeting, e.g. Jan2_10am.txt, or Jan2_10am.pdf.

Meeting minutes should be entered into the team repository as soon as possible during or following the meeting, but no later than 24 hours after the end of the meeting. The person responsible for taking the meeting minutes is also responsible for ensuring the file is added to the team repository and an appropriate git add/commit is performed.

Full list of project deliverables:

Details for each of these deliverables will be found in their respective document.

0. Team Formation and Preliminary Proposal
1. Project Plan and Risk Analysis
2. Requirements
3. Analysis Models
4. Design Models
5. Project Demo
6. Closeout and Final Presentation