

# Development Plan

## Project Name: Course Buddy

### Team 5

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Chenwei Song, songc12  
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Table 1: Revision History

Date	Developer(s)	Change
2023/9/24	Jingyao Qin, Qianni Wang	Description of changes
Date2	Name(s)	Description of changes
...	...	...

The project is a time management tool designed to assist students in studying and completing coursework efficiently and in an organized manner.

## 1 Team Meeting Plan

Team meetings for Team 5 will occur at least three times a week, excluding SFWRENG 4G06 lectures and tutorials. Each meeting will be no longer than 50 minutes in length, with a preference for Microsoft Teams on-line meetings, and the rest of the meetings will take place off-line on the McMaster University campus, and will be held at the following times. The meeting time will be chosen from the following time slots that have been agreed upon by the entire team:

- Tuesday 5:30 p.m. to 8:00 p.m.
- Wednesday 2:30 p.m. to 5:00 p.m.
- Thursday 7:00 p.m. to 8:00 p.m.
- Friday 7:00 p.m. to 8:00 p.m.
- Saturday 12:00 p.m. to 5:00 p.m.
- Sunday 12:00 p.m. to 5:00 p.m.

Meeting Types:

- **Sprint Planning Meeting:** This type of meeting is held every two weeks and is primarily used to discuss breaking down work tasks, assigning issue owners, setting issue deadlines, establishing short-term goals and plans, as well as defining the completion criteria and expectations for tasks. Team supervisor will attend this type of meeting.
- **Stand-up Meeting:** This type of meeting takes place three times a week, on Tuesday, Thursday and Friday, typically lasting no more than half an hour. It is primarily used for each team member to report on their work for the week, provide updates on progress, outline their next steps, discuss whether they need assistance, and identify any obstacles.
- **General Meeting:** The frequency of this type of meeting is random, and sometimes not all team members need to participate. It may involve one-on-one discussions. The primary purpose of this meeting is to quickly address specific details or engage in in-depth discussions about a single issue. Attendees should coordinate whether it's necessary to communicate the key meeting content to the rest of the team.

## 2 Team Communication Plan

WeChat is a platform used by the team on a daily basis and this is the quickest way to connect with team members. WeChat is mainly used to discuss task assignments, meeting times, meeting locations and meeting durations, brainstorming about the project, and planning extracurricular team building activities.

To better track project progress and work distributions, we use GitHub to manage issue assignments and deadlines, use GitHub issues to record team meeting notes, and also use GitHub Pull requests to review, modify, and approve PR requests that make changes to the project repository.

## 3 Team Member Roles

Member Name	Roles	
Jingyao Qin	Team Lead, Expert on LaTeX and Team Management	Developer, Tester, Reviewer, PR Approver, Issue Creator, Team Meeting Host and Scribe.
Qianni Wang	Team Co-Lead, Expert on Git and Project Management	
Shuting Shi	Project Board Manager	
Chenwei Song	Document Manager, Expert on Documentation	
Qiang Gao	Coordinator, Data Engineer	

Table 2: Team Roles

### Team Member Responsibilities:

- **All Team Members:** Responsible for coding, conducting testing, reviewing pull requests, and approving them only after verifying and testing the modified documents.

Additionally, responsible for creating issues with the appropriate issue template and configuring project settings, assigning team members, and applying labels. Ensure the successful achievement of the project's goals by the end of the capstone course.

- **Roles Rotate within Team:** For every meeting, there will be a rotating host and scribe within the team, with the exception of sprint planning meetings.
- **Jingyao Qin:** responsible for liaising with supervisors, teaching assistants, and professors, scheduling team meetings, ensuring equitable distribution of work within the group, and tracking and ensuring that project milestones are within a reasonable process.
- **Qianni Wang:** Oversee GitHub repository management, ensure proper formatting and consistency of issues and pull requests, and maintain organization and structure within the project repository.
- **Shuting Shi:** responsible for hosting Sprint Planning meeting ensuring that all created issues are correctly labelled, assigned, and associated with the project, and ensuring that each issue is in the right status column on the project board view.
- **Chenwei Song:** for ensuring that all documents in the main branch of the GitHub project repository are updated to the latest version and free of typos and grammar issues.
- **Qiang Gao:** Responsible for assisting the team lead in coordinating project tasks, tracking project progress, facilitating internal team communication to ensure smooth and timely information flow, managing team financial management.

## 4 Work flow Plan

- How will you be using git, including branches, pull request, etc.?
- How will you be managing issues, including template issues, issue classification, etc.?

## 5 Proof of Concept Demonstration Plan

What is the main risk, or risks, for the success of your project? What will you demonstrate during your proof of concept demonstration to convince yourself that you will be able to overcome this risk?

## 6 Technology

- Specific programming language
- Specific linter tool (if appropriate)
- Specific unit testing framework
- Investigation of code coverage measuring tools

- Specific plans for Continuous Integration (CI), or an explanation that CI is not being done
- Specific performance measuring tools (like Valgrind), if appropriate
- Libraries you will likely be using?
- Tools you will likely be using?

## 7 Coding Standard

## 8 Project Scheduling

In this section, we encompass significant milestones and associated deadlines. The project will be partitioned into 6 phases, each marked by a specific collection of actions and deliverables.

### 8.1 Project Phases

The project will be divided into the following phases:

1. **Initiation Phase** (Duration: [September 5] - [September 25])
  - Team building and project selection.
  - Identify the project supervisor.
  - Create a GitHub project repository.
2. **Planning Phase** (Duration: [September 26] - [October 11])
  - Create a Development Plan.
  - Define the problem and scope of the project.
  - Identify stakeholders and investigate their needs.
  - Create SRS Documentation.
3. **First Implementation Phase** (Duration: [October 12] - [November 24])
  - Address the implementation challenges of the project.
  - Perform Hazard Analysis.
  - Create the Verification and Validation Plan.
  - Present Proof of Concept Demonstration.
4. **Second Implementation Phase** (Duration: [November 25] - [January 17])
  - Implement the main features of the project.
  - Perform testing.
  - Optimize the implementation details of the project.
  - Create the Design Document (Version 0).

5. **Evaluation Phase** (Duration: [January 18] - [March 6])

- Evaluate the achievement of project goals.
- Perform risk and security assessments.
- Conduct user end testing assessments.
- Demonstrate Revision 0.
- Prepare the Verification and Validation Report.

6. **Closure Phase** (Duration: [March 7] - [April 4])

- Conduct the final demonstration.
- Get ready for the Expo Demonstration.
- Complete all documentation.

## 8.2 Milestones and Deadlines

The following are milestones and their respective deadlines for this project:

- **Team Formed, Project Selected** - [September 18]
- **Problem Statement, POC Plan, Development Plan** - [October 4]
- **Requirement Document Revision 0** - [October 11]
- **Hazard Analysis 0** - [October 20]
- **Verification and Validation Plan Revision 0** - [November 3]
- **Proof of Concept Demonstration** - [November 13-24]
- **Design Document Revision 0** - [January 17]
- **Revision 0 Demonstration** - [February 5-16]
- **Verification and Validation Report Revision 0** - [March 6]
- **Final Demonstration (Revision 1)** - [March 18-29]
- **EXPO Demonstration** - [April TBD]
- **Final Documentation (Revision 1)** - [April 4]