CPSC 304 Project Cover Page

Milestone #: 3

Date: 15th March 2024

Group Number: 10

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

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a. 1. A brief (~2-3 sentences) summary of your project. Many of your TAs are managing multiple projects so this will help them remember details about your project. You can reuse the summary from milestone 2.

The domain for our project is Software Engineering project management and tracking. We want to mainly focus on tracking the tasks, blockers, bugs, repositories, deadlines and versions for software engineering teams. Although we have a component related to tracking employees and departments, we do not intend to make it the main emphasis of our application.

The database models the following domains:

- 1. Project Management
- 2. Team collaboration and organization
- 3. Task tracking and team member assignments
- 4. Bug tracking
- Deadline and time tracking
- 6. Project version and release tracking
- 7. Project Repository

The aim of the application is to aggregate and store all this data in a single place and be able to query it efficiently. This can resolve situations where two disjoint teams are working on the same project and need to collaborate efficiently to distribute tasks and solve bugs or view changes in various software releases over the years and be able to contact the people who worked on a previous release.

2. Timeline and task breakdown/assignment: The breakdown should be at a level of detail that demonstrates that the group has spent time meaningfully considering what there is left to do. Note that we are not asking you to predict every single possible task that you will need to do. We want to see that the group understands the scope of what is left to do and is prepared to accomplish the remaining tasks in a reasonable manner. We warmly recommend reading the milestone descriptions and associated rubrics on Canvas now so you have an idea of what we expect and what your TAs will be looking for during grading. Each task should be specifically assigned to a group member (or combination of group members). It is in your best interest to be as explicit as possible about who will work on what. In the event that there is a dispute between group members, this is one of the first things the course staff will look at when evaluating the situation. If it is clear to us what has been agreed on, it will speed up the process of conflict resolution. Unless otherwise stated, it is assumed that all group members will work equally on the project. This does not mean that everyone needs to work on each task together. This means that the overall division of the work is equal. If this is not the case, state the work percentage breakdown for each member. This will serve as a written acknowledgement between all group members that there will be an uneven distribution of work. The member who does not do their fair share of work will have a penalty applied to their final project grade. While each member is not expected to know about every single line

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of code in the project, it is expected that all members can talk about the overall architecture of the project. The timeline should contain enough detail for your project mentor to determine that you understand that you need to produce a GUI for your full project. We strongly recommend reading through the description documents for milestones 4 and 5 along with the associated rubrics on Canvas so that you have a clear understanding of what is expected from you for the term project.

Back-end (Projected finish Date: 26 March 2024):

Members Responsible: Kanish Khanna, Yiquan Liu, Aaditya Suri

Our chosen tech stack for the backend will be Python with Flask and MySQL for the database.

- SQL scripts to create tables of all the entities and relations in accordance with our milestone 2.
 - Kanish Khanna
- The steps that we will take:
- Review our Entity-Relationship (ER) Diagram to ensure it accurately represents our model.
 - Take into consideration any feedback received and make necessary changes to the ER Diagram to reflect our project requirements.
 - o Aaditya Suri, Kanish Khanna, Yiquan Liu
- Create a detailed Relationship Schema for the project, outlining how the entities are related to each other
 - This schema will serve as a reference for designing the SQL tables and relationships.
 - o Aaditya Suri, Kanish Khanna, Yiquan Liu
- Design SQL Tables and Relationships.
 - o Aaditya Suri, Kanish Khanna, Yiquan Liu
- Write the SQL commands to create the tables as per our design.
 - Aaditya Suri, Yiquan Liu
- Develop the back-end functionality for managing tasks.
 - Aaditya Suri

Front-end (Projected Finish Date: 29 March 2024):

Member Responsible: Yiquan Liu, Aaditya Suri, Kanish Khanna

 We will be using HTML, CSS, and React.js for front-end: Plan: 4 pages total

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Home page:

- collection of all projects

Project page:

- include all project attributes and teams that work on the project
- for each team, we have a link that leads to the respective team page
- include tasks and their attributes
- for each task, we can have a drop down that shows the bugs associated with it (red if the task is being blocked by another task, yellow if ongoing, green if finished)
- include releases and their attributes
- include the repository link for each project, link on-click will lead to the Repository page

Team page:

- include all team attributes and team members
- display the ISA subclasses(QAs, Engineers, Managers, Designers) as boxes on the bottom; box on-click, drop down the names; names on-click, shows all attributes for the team member

Repository page:

- include all repository attributes
- include all files associated to the repository and their attributes

Linking Backend to Front-end (projected finish date: 1 April 2024):

Members Responsible: Kanish Khanna, Yiquan Liu, Aaditya Suri

- We are planning to meet twice a week to discuss progress, and any other details necessary.
- We will meet in person/via Zoom whichever is more convenient on the day.
- Everyone is expected to work on the project even on the days we don't meet.

PDF (projected finish Date: 4 April 2024):

Members Responsible: Kanish Khanna, Yiquan Liu, Aaditya Suri

- Short Description:
 - Kanish Khanna
- Description of Schema:
 - Yiquan Liu
- A copy of Schema and screenshots
 - Aaditya Suri
- List of all SQL Queries

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- Kanish Khanna
- Screenshots of Sample Output of the Queries
 - Yiquan Liu
- README file and potential add-ons
 - o Aaditya Suri

Timeline:

- Back-end:
 - o 26 March 2024
- Front-end:
 - o 29 March 2024
- Linking Back-end and front-end:
 - o 1 April 2024
- PDF Report for Milestone 4
 - o 4 April 2024