**University of British Columbia, Vancouver**
Department of Computer Science

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# CPSC 304 Project Cover Page

Milestone #: _____3_____

Date: _____2024-10-25_____

Group Number: _____70_____

| Name | Student Number | CS Alias (Userid) | Preferred E-mail Address |
|---|---|---|---|
| April Cao | 72028764 | g4q6w | aprilcao2002@gmail.com |
| Sherry He | 94345741 | r8k8g | sherryhe1107@gmail.com |
| Xinya Lu | 88957790 | e1e1a | xinyalu13@gmail.com |

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

2. 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.

This project offers users a list of information about mountain trails and hiking clubs, along with their activities and services. Users can join the hiking clubs that schedule hiking events and provide trekking poles and emergency services. Additionally, users can join carpools.

3. **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 particular group member. 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 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.

We will code from end-to-end, so each of us will do a bit of both the front and back end. We divide the list of queries, and each person is responsible for implementing their assigned queries and creating their bit of the GUI. The work breakdown and timeline are shown below:

SQL Script: - done by Nov 4th
- create all the tables and data in the database; DROP TABLE statements - Sherry
  - (mostly done in Milestone 2)

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==SQL Queries Implementation==: - overall done by Nov 22nd
inclusive may not be "hardcoded:" - done by Nov 8th

· INSERT - April
· UPDATE - April
· DELETE - Cynthia (Xinya)
· SELECTION - Cynthia
· PROJECTION - Sherry
· JOIN - Sherry

inclusive may not "hardcoded:" - done by Nov 22nd

· Aggregation with GROUP BY - April
· Aggregation with HAVING - Cynthia
· Nested aggregation with GROUP BY - Cynthia
· Division - Sherry

==Graphical User Interface (GUI)== - overall done by Nov 29th

The SQL queries GUI implementation (buttons, textboxes, user-friendliness, etc.) is expected to be done by Nov 22nd. The work breakdown is the same as above.

For each task above, the person responsible will also be responsible to ensure that the following functionalities (user-friendliness, etc.) work correctly in the GUI. - April, Cynthia, Sherry

The rest is expected to be done by Nov 29th.

- Provide user notifications to confirm successful or failed operations. – Cynthia
    o How to notify (just some ideas of how we would approach these tasks)
- Design User-Friendly GUI Interface – Sherry
    o What the page look like
    o How to notify
    o Where the buttons/textboxes should put
- Provide User-Friendly Query result – April
    o How to show the result
    o How can users interact with the result
- Simple sign-in system – Cynthia
    o Users should add/delete data

- Add sanitization mechanisms to prevent SQL injection and other input-related issues. – April
    o How to prevent
- Implement error handling for robust application performance. – Cynthia

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- o   What errors should handle
- Ensure that the system can drop, recreate, and reload tables when necessary. – Sherry
  - o   How to drop tables
  - o   How to recreate tables
  - o   How to reload tables
- Test for sufficient user data scenarios and ensure the system behaves correctly. – April
  - o   Users did not sign in
  - o   Users sign in with wrong password
  - o   Users click on the button for multiple times
  - o   Users close the window without data loss


6. In the milestone 3 assignment on Canvas, submit the URL to your group's repository.

https://github.students.cs.ubc.ca/CPSC304-2024W-T1/project_e1e1a_g4q6w_r8k8g