CPSC 304 Project Cover Page

Milestone #: ___1_____

Date: _2024-02-09_

Group Number: 13

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Khang Huynh	24789109	v8e4k	huynhvinhgiakhang@gmail.com
Enzo Tanyen	25244880	q9t1y	enzotanyen@gmail.com
David Zhu	85020485	e4n2e	junjiezhu1388@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

University of British Columbia, Vancouver
Department of Computer Science

___

Project description:

a. What is the domain of the application? Describe it. The domain of an application refers to the area of knowledge your application resides in. For example, if I am making an application for a hospital, the domain would be something like healthcare/patient management/logistics (it would depend on what the application is trying to do).

The domain of our application includes personal well-being and emotional awareness. The website is an emotion-tracking diary platform designed to provide users with a personalized space for recording and reflecting on their daily experiences, emotions, and activities.

b. What aspects of the domain are modeled by the database? In answering this question, you will want to talk about what your project is trying to address and how it fits within the domain. It is likely that in the process of answering these questions, you will bring up examples of a real-life situation that the application could be applied to.

The database models a user (with their personal information) who has a group of friends as other users. The user has a series of menus of different themes, goals, and an overall emotion-tracking calendar-format report. Within each menu, there would be several diaries and reports with appropriate subtheme generated by the users. Both main users and their friends are users, however, each main user would have a list of friends.

The diary entries are modelled as entities with content, date, and dependent activities. The activities would be weak entities that depend on the entry entity. The emotion-tracking calendar-format report records the overall emotions for different dates over time and issues that exist if any. It is linked to an emotion board that lists out different types of emotions and an issues table that lists different issues.

An example use would be a typical user having different menus with different themes and goals (e.g. a sports menu with the user's goal of being 1-2 cm taller). Each menu has many user-chosen sub-themed diaries (e.g. watersports, dance sports diaries) which have many diary entries recording the relevant user activities (e.g. entry on July 10 with 2 activities where activity 1 being swimming (activity name) at the beach (activity description), and activity 2 being surfing (activity name) at the beach (activity description).

The emotion-tracking report would also be based on subthemes and summarize the overall emotions of the users for each day of the year of the calendar. This would be updated automatically through each user entry. Then, if the back-end system identified any emotional issues as seen from the pattern over the past, there would be issues reported for a specific day in the calendar.

3. Database specifications: (3-5 sentences)

a. What functionality will the database provide? I.e., what kinds of things will people using the database be able to do?

Following the CRUD (create, read, update, and delete) format, the database will operate as a persistent storage that will create user accounts to store user information securely and assign a unique identifier to each of them. It creates diary entries that allow users to write entries about a specific date, text content, mood, and any associated activities or media as well. It then reads the diary entries, retrieving and displaying entries for a specific user while providing options to view entries based on date ranges, moods, or activities, also allowing issues to be found from the emotions board. The database will allow users to edit the content, mood, or associated details of an existing diary entry and enable them to update their profile information and preferences. At last, the database will provide users with the option to delete specific diary entries or even their account as a whole, including all associated diary entries and personal information.

4. Description of the application platform: (2-3 sentences)

The final project will be on the Oracle DBMS provided by the department. The technology stack used to construct the application would consist of React.js, Flask (Python) and Department provided Oracle. Oracle would be the DBMS, React would be for the front end, and Flask would be the back end.

5. An ER diagram for the database that your application will use. It is OK to hand-draw it but if it is illegible or messy or confusing, marks will be taken off.