## **CPSC 304 Project Cover Page**

Milestone #: 1

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Group Number: 20

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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

1. A completed cover page (template on Canvas)

This is completed, first page of this pdf.

- 2. A brief project description answering these questions:
  - 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 group will create an application focusing on the domain of Health and wellness, specializing in nutrition and dietary management. This application is related to this domain due to its inclusion of things such as meal planning and nutrition tracking to help users meet their health goals.

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.

Looking more closely at the database, it models a variety of aspects associated with the health and wellness domain identified earlier. The goal is to ensure the persistence and addition of user progress data such as user information and personal profiles, including dietary preferences and health goals. Where the database would also then include recipes with more detailed nutritional information through viewing nutritional information available for easy ingredients, and additionally possess a list of processed foods products as well. Users can log their daily food intake and track important nutritional components such as proteins, fats, and carbs, among others. It also tracks users' eating activities to help them achieve their health goals. Furthermore, by viewing the logs and streak system, users can reflect on their goals and past habits to gain a better understanding of themselves and take control of their diets.

There are also real-life applications which can be immediately seen through this type of application: a user wanting to ensure that they properly keep track of their consumption to effectively meet weight goals, a patient using an application to maintain dietary and nutritional restrictions for a condition like diabetes, and many others.

- 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.

Through viewing and understanding the previous two parts of the deliverable, we can find that the database will provide a truly comprehensive functionality for managing user profiles, recipes, and nutritional information. The users have the ability to create and manage personal profiles for their different goals, browse, select, and save recipes, and track their daily nutritional intake, including proteins, fats, and carbs, to ensure their meals meet dietary restrictions and preferences. They can log activities related to meal planning and dietary habits, view previous personalized plans based on their dietary goals, and can also utilize streak/goal implementation to take control of their nutritional and dietary needs. Additionally, users can view nutritional values for each ingredient, recipe, and processed food they consume, ensuring they have a further clear understanding of what they consume to refine or restrict these aspects to meet their goal.

- 4. Description of the application platform: (2-3 sentences)
  - a. What database will your project use (department provided Oracle, MySQL, etc.)? See the "Project Platforms" section of this document for more information.

For this project, we will be using the department-provided Oracle as the database management system (DBMS). This means we will utilize Oracle SQL to accomplish the database operations for the project.

- b. What is your expected application technology stack (i.e., what programming languages and libraries do you want to use)? See the "Project Platforms" section of this document for more information.
  - i. You can change/adjust your tech stack later as you learn more about how to get started for the project via latter tutorials.

Currently, our primary programming language that will be used is Javascript, and with that, we will be using Node.js for server-side development. 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. You can use software to draw your diagram (e.g., draw.io, GoogleDraw, Microsoft Visio, Powerpoint, Gliffy, etc.) The result should be a legible PDF or PNG document. Note that your ER diagram must use the conventions from the textbook and the lectures. For example, do not use crow's feet notation or notation from other textbooks). a. Please limit your diagram to a letter size page (8.5 x 11 inches). If you require additional space, talk to your project mentor beforehand as this might mean that your project is a bit more complicated than what we expect.

The ER diagram has been completed with these expectations in mind, located on page 5.

6. Your E/R diagram should adhere to the expectations listed above.

The ER diagram is on page 5.

7. Other comments, as appropriate, to explain your project.

The nutrition planner has been designed to be highly extendable. We can implement specific tracking features to enhance user experience, synchronize data with other native apps on Apple and Android devices, and create a community forum for users to share results, trends, and favorite recipes. Additionally, aspects such as cost, delivery options, and more can be integrated within the application beyond what we learned even in this course to provide a comprehensive solution for any user's nutritional goals through this application.

Also, while creating the ER diagram we recognized that the project needs to mature further before we can make a better design decision.

