University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 37

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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

Milestone 1 Proposal - Group 37

Project Description

Database Domain

The domain of the application is centered around culinary management and grocery planning. It combines aspects of food management, recipe exploration, and grocery logistics. The main goal is to help users streamline their cooking activities by discovering new recipes, keeping track of their household food supplies, and finding nearby grocery stores.

Aspects of the Domain Modeled by the Database

The database models several key aspects of the culinary management and grocery planning domain. Firstly, it manages recipes by allowing users to explore, curate, and share collections of recipes. Each recipe includes attributes such as preparation time, type of cuisine, with accompanying images, along with detailed step-by-step instructions and a list of ingredients. Additionally, users can interact with recipes by liking them, which helps in identifying popular recipes.

Additionally, the application provides pantry management features. Users can create and manage multiple pantries, keeping track of food items, their quantities, expiry dates, and other relevant information. This feature helps users monitor what they have at home and what might be needed soon. Users can also share PantryIDs with others, facilitating shared household management or collaborative cooking efforts among friends or family.

Ingredient tracking is another crucial aspect modeled by the database. Each ingredient within a recipe is tracked with attributes like its name, shelf life, calories, and food group, along with specific quantities. The dates they were added, along with their expiry dates, are also tracked so that users can keep tabs on what might need to be bought fresh again soon. This ensures detailed and precise tracking of logged food items in each user's pantries.

The application also models user locations and nearby grocery stores. Users can store different locations such as their home or workplace and find nearby grocery stores, complete with detailed addresses and distances. This feature helps users plan their shopping trips more efficiently.

Real-Life Application

A typical user might be someone who loves to cook and wants to explore new recipes regularly. They can save recipes they like, try them out, and keep a well-organized inventory of their pantry. For example, if a user finds a recipe they want to try, they can quickly check their pantry within the application to see if they have all the necessary ingredients or if anything is about to expire. If they are missing ingredients, the application helps them locate a nearby grocery store to search for what they might need.

Database Specifications
The database will provide functionality for users to manage, explore, and create new recipes, including detailed instructions, ingredients, and images. Users will be able to create and manage multiple pantries, tracking the quantities, shelf life, and expiry dates of their food items. Additionally, the database will allow users to store and share pantry information with others, and find nearby grocery stores based on their stored locations. This will help users organize their cooking activities, maintain their household food supplies, and plan their shopping trips efficiently.

Application Platform
We will be using the CS department's Oracle infrastructure. Oracle is robust and we expect that the department's infrastructure is more than capable of handling the small volumes of data and queries we plan to use in this project. Oracle databases are very comprehensively documented, so in the event that the teaching team doesn't have adequate answers for our questions we can always rely on support from the broader online community.

With respect to our technology stack, we plan to use Javascript and Node.js. These languages are widely favored for full-stack projects, giving us the flexibility to expand this database project into larger projects such as websites or applications if we so choose.