CPSC 304 Project Cover Page

Milestone # 1

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Group Number: 28

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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.

Deliverable 1

Cover page (please see above)

Deliverable 2

- Project Topic: Kitchen management app

- A brief project description
  - The domain of the application:
    - **Management of Food Items in Homeowners Kitchen:**
      The domain of our application would be a homeowner that has a kitchen, particularly the application deals with organizing a kitchen's ingredients and a user's recipes. The user can see based on a few factors if they can complete a recipe. This allows them to cater meals to different crowds based on allergy ingredients and ensure they prioritize cooking perishable items, and if they can or cannot complete a recipe (that they or someone else created) based on if they have all of the ingredients.

  - The aspects of the domain modeled by the database:
    - **Kitchen Ingredients Management:**
      Our users will need to track the ingredients in their kitchen to ensure they have enough portion size and of the certain item to make the meals they would like to cook.

    - **Recipes:**
      Our users will be able to create and follow recipes by adding the necessary ingredients, steps and optional category tags. This will allow the user to recreate the recipe in the future by following the steps they (or another user) created.

    - **Recipe Lists:**
      Our users would like to store previous meals or their favorite recipes so that meals will become easier to replicate in the future. They can store recipes within lists of recipes. Additionally, depending on the crowd the user is trying to serve, they can cook meals to navigate dietary or allergy restrictions. Users will also be able to look at other users' lists to find new recipes to try out. Recipes will have optional Category tags to allow for users to filter through them. For example, a possible category tag could be 'Vegetarian.'

    - **Perishable Item Tracking:**

Our users will have many ingredients on hand which can lead them to be unsure which ones are expiring first. They can combat this by storing an expiry date of each grocery item so they can prioritize cooking the most perishable items first before they expire. The application will also send a notification to a user before an item expires to remind them to utilize the ingredient.

- The key distinctions between this project idea and those listed on the blacklist
  - **Domain Difference**:
    While most ideas on the blacklist focus on services offered by public organizations, government entities, or corporations, this project is a home kitchen management application designed to assist individuals in the daily tasks of managing food ingredients, cooking, and meal preparation.

  - **Feature Difference**:
    This application offers a range of features, including kitchen ingredient management, recipe creation, storage, and expiration date tracking, aimed at optimizing meal planning, cooking, and ingredient usage. In contrast, each idea on the blacklist typically focuses on a single feature.

Deliverable 3

Database specifications: What functionality will the database provide? i.e., what kinds of things will people using the database be able to do.

- **User Management**
  - CRUD Functionality:
    Users can create an account with their personal information and subsequently read, update, and delete their account details. Based on the account information stored in the database, the application manages activities such as adding ingredients and creating recipes.

- **Ingredient Management**
  - CRUD Functionality:
    Users can input and save details of an ingredient such as its name, quantity, and best-before date. They can then read, update, and delete those ingredients as needed.

  - Expiring Ingredient Lookup:

Users can select a value for N to view a list of ingredients that will expire within the next N days, calculated as the difference between the system date and the best-before date of each ingredient. The user will also be able to set notification reminders to notify them X days before ingredients expire informing them of the upcoming date.

- **Recipe Management**
  - CRUD Functionality:
  Users can input and save ingredient information, cooking instructions for each recipe. They can then read, update, and delete the saved recipes, and read recipes that others have created.

  - Recipe Display Functionality:
  When following a saved recipe, the application displays the cooking instructions step by step. Additionally, users will be able to filter recipes to only display ones they have the ingredients for, based on their allergy requirements, in addition to specific categories that can be optionally assigned to recipes.

Deliverable 4

- Application Platform / Technical stack
  - This application will be deployed on a web server.
  - This application follows the technical stack that is supported by CPSC 304 course staff.
    - Language: JavaScript
    - DBMS: Oracle
    - DB access: SQL *Plus
    - Front-end: HTML/CSS
    - Back-end: Node.js, Express

Deliverable 5

- ER Diagram
  - Both of the IsA relationships have **Disjoint** overlap constraints and **Total** covering constraints