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Applications Programming CSC 3220

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Product Description

On a day-to-day basis, it is relatively difficult to track meals and calorie intake. This can be solved with a paper-and-pencil approach; however, this often results in writing repetitive meals and calorie counts and wishing you could simply copy-and-paste the meal into the slot for that day.

Our application aims to assist with tracking calories at specific mealtimes, and aggregating data that informs the user about their current diet. The application aims to allow the user to catalog their food intake, per meal, per day, and be able to quantitatively observe their eating habits.

For the average user, every day, at any given time, they can update the list of food they’ve consumed. The user can specify which food was consumed, at what meal, and the number of calories that food has. The user can also retroactively correct and change entries from previous days, in case of user error.

The application will also allow the user to specify several attributes of their data. The user can specify how long until entries are deleted, export the data to a text file, and view an overall graph of their caloric intake.

The backend server has three tables. One to manage mealtimes, one to manage the user’s calorie entries, and one to list common foods and their calories. The mealtimes table is the simplest, as it contains the name of the mealtime, and the mealtime’s ID. This table exists so that the user can enter custom mealtimes, if they have regular mealtimes that are outside the main three. The second table is also relatively simple, as it simply contains the name of the food, its ID, and the number of calories it contains. The user can add to this table, duplicate, or modify entries for food they commonly eat.

The last table is what the user will spend most of their time interacting with. This table contains the mealtime ID, the food ID, the caloric adjustment if it is a nonstandard item, the date of consumption, and the date and time that the entry was added. This serves as the primary table for the user to refer to, and where most statistics will be computed from. Using this, the application can calculate the user’s favorite food, their average calorie intake, their intake on a day-to-day basis and what meals the user consumes have the most calories.