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Food diary web app

Web Applications with C# project

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Tallinn 2024

Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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[13.02.2024]

Introduction

In an era characterized by fast-paced lifestyles, maintaining a healthy and balanced diet has become an increasingly challenging task. The goal of this project is to create a simple web application designed to empower users to make informed choices about their nutrition by tracking their daily meals and snacks.

The application will be based on Estonian national nutrition recommendations based on which the user can find out their daily calorie intake and start tracking their eating.

There is an dietary analysis program in Estonia that provides food and physical activity diary but this application will be focused on just the food diary.

1 Overview

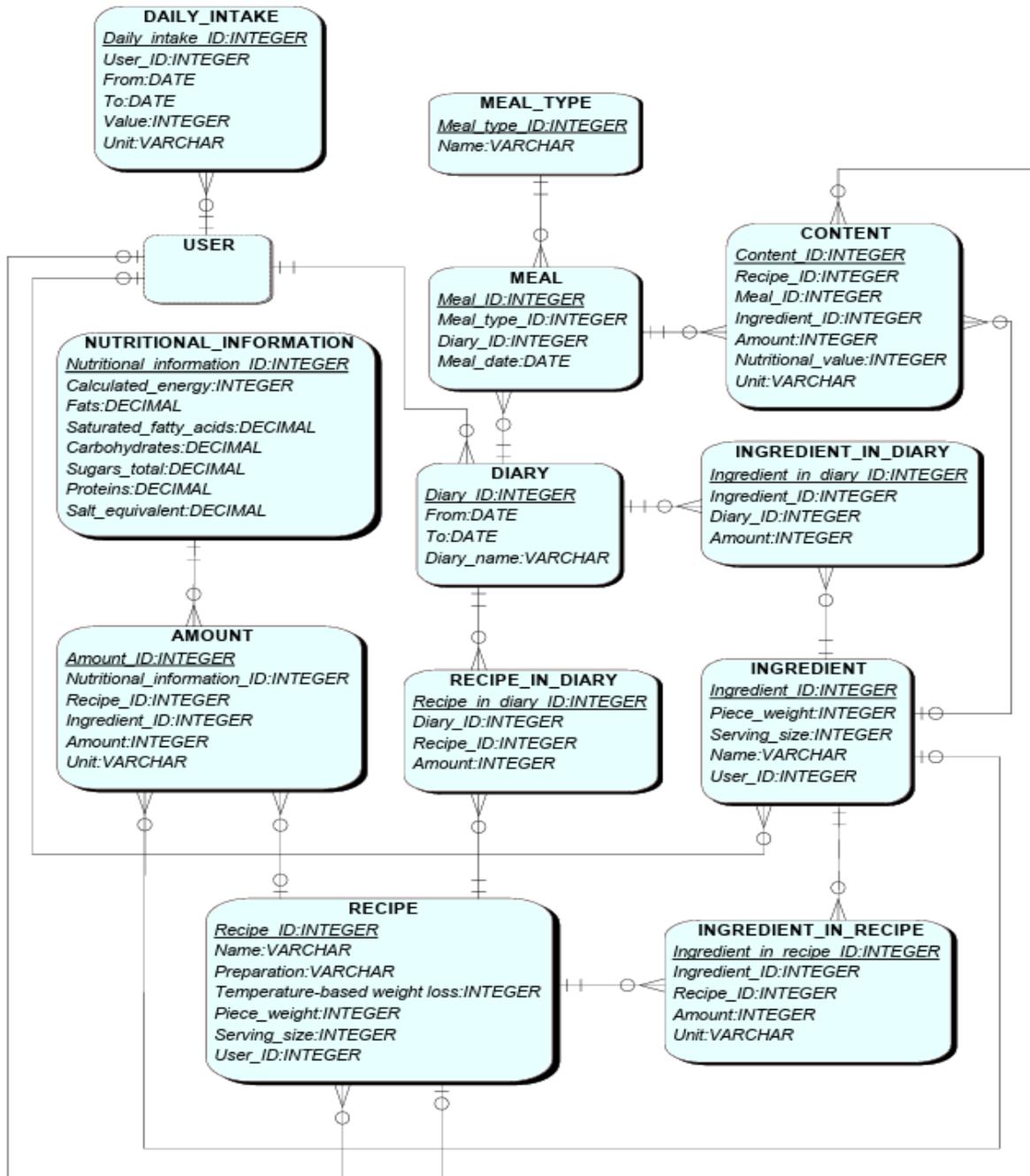
The food diary is designed for monitoring nutrition data, providing users with the ability to input and analyze their dietary information. To initiate their journey towards healthier living, users can register within the system by providing essential details such as their birthdate and gender. This simple yet crucial step sets the foundation for a personalized experience since by age and gender initial daily calorie intake can be calculated. After registering users can also say their height and weight which will make the daily calorie intake more accurate.

Users have the ability to create and delete their food diaries. In existing dietary analysis program in Estonia there is just one diary per user which also makes sense if a person wants to keep track of all the history but the author finds the ability to delete diaries and create new ones crucial for those who might have toxic history with food and don't want to see the history.

Users can log their daily meals and snacks, providing a comprehensive overview of their nutritional intake throughout the day. The diary comes equipped with a food database that includes pre-stored recipes and food items. Users can explore this database or alternatively, enrich it by adding their own recipes and food items. This flexibility ensures that the diary caters to diverse dietary preferences and habits. When adding a food item or a recipe, users can provide detailed information, including the name, nutritional content, food group, portion weight, and serving size ensuring an accurate representation of their meals.

The food diary has a dynamic calorie calculation feature. By inputting meals, users receive real-time feedback on the caloric content of each meal and the cumulative calorie intake for the day. This feature aids in fostering awareness and promoting a balanced approach to nutrition.

2 ERD Schema



3 User flow

3.1 Account creation

There will be an account creation page (username, password, etc.) and four pages with questions about the user, with the last two being voluntary.

3.1.1 Users credentials

Create your login information

3.1.2 Users age

When were you born?
 

3.1.3 Users sex

Please select which sex we should use to calculate your calorie needs.

Male Female

3.1.4 Users height

What's your height?

cm

Next

Skip

3.1.5 Users weight

This page will only appear if the height page wasn't skipped.

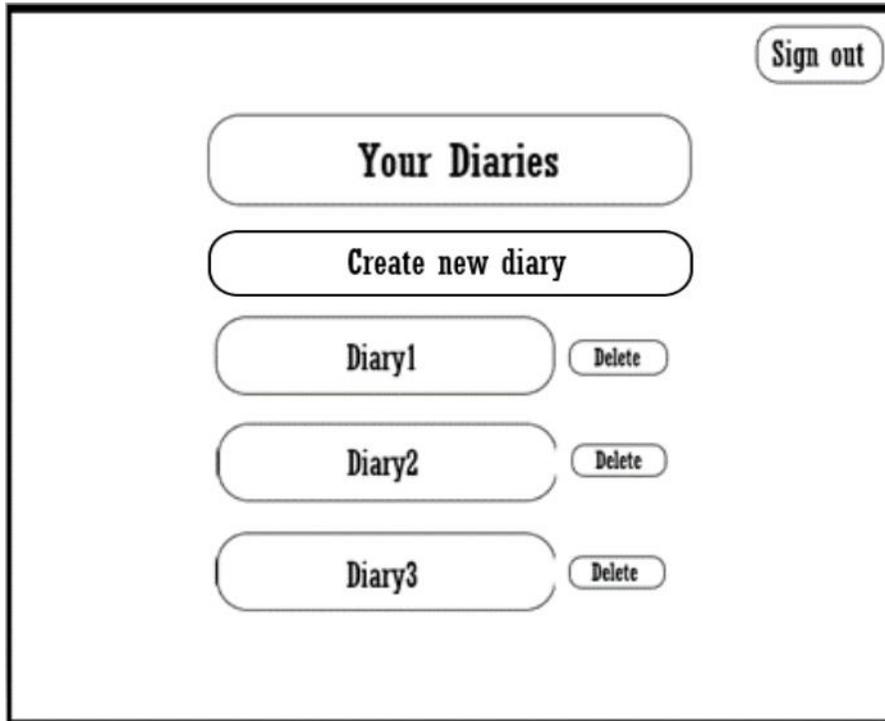
What's your current weight?

kg

Next

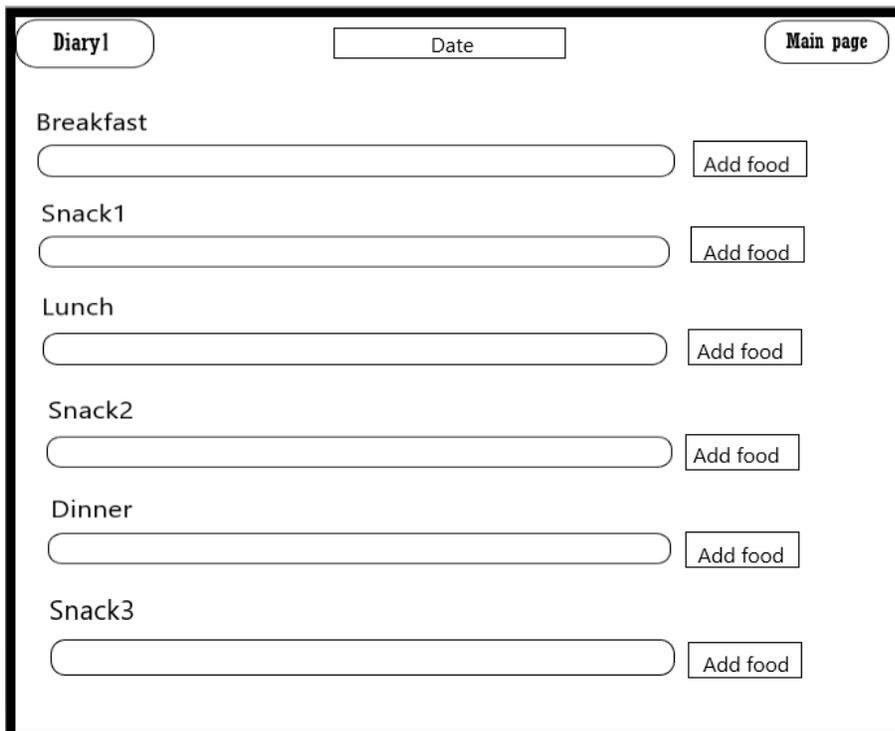
Skip

3.2 Main page



The main page UI features a 'Sign out' button in the top right corner. Below it is a large rounded rectangle containing the text 'Your Diaries'. Underneath this is a 'Create new diary' button. The page then lists three existing diaries: 'Diary1', 'Diary2', and 'Diary3'. Each diary name is enclosed in a rounded rectangle, and to its right is a smaller rounded rectangle labeled 'Delete'.

3.3 Diary view



The diary view UI includes a 'Diary1' button on the left and a 'Main page' button on the right. A 'Date' input field is positioned between them. The main content area is organized into seven sections, each with a label and an 'Add food' button: 'Breakfast', 'Snack1', 'Lunch', 'Snack2', 'Dinner', and 'Snack3'. Each section label is followed by a horizontal input field for food entry.