HealthMeUp
Individual Project
by
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Project Description

Meeting health goals is something that many people struggle with, especially with regards to dietary goals. Unfortunately, it difficult to know exactly what one should be eating in order to meet their dietary goals.

In order to know exactly what and how much one should be eating, various calculations must be made for accurate goal setting, which can be challenging. This is where the *HealthMeUp* application can come in handy.

The software will be able give the user estimations about how to achieve their health goals. By inputting their height, weight, age and gender, users will receive estimates about their Total Daily Energy Expenditure (TDEE), which measures how many calories that they burn during the day. Based upon the user's goals, the application will give recommendations about the amount of calories and nutrients that should be consumed throughout the day.

The main functionality of *HealthMeUp* is logging what you eat. By logging what you eat in a day, the application will be able to provide feedback based on the user's goals, which for example, could be losing five pounds. Users will be able to search a food database to find the items that they have eaten that day, and log them in a personal dietary journal.

Users must login, and account details will be stored in a database, so users will be able to access their information from any device.

System Requirements

Identifier	Priority (1-5)	Requirement
REQ1	5	The system shall have a database of the user profiles
REQ2	5	The system shall allow for new user registration
REQ3	5	The system shall have a database of food items, with nutrient amount
REQ4	5	The system shall allow users to log what they have eaten for the day
REQ5	4	The system should allow for users to input their own food items
REQ6	4	The system shall be able to calculate a user's TDEE, using age, weight, height and gender
REQ7	3	The system should allow users to search food database
REQ8	3	The system should be able to calculate estimated weight loss

User Stories

Identifier	User Story	Size
ST-1	As a user, I can create a new account to use the application	4 pts
ST-2	As a health conscious person, I can find my TDEE	4 pts
ST-3	As a health conscious person, I can log what I have eaten for the day to achieve my weight goals	9 pts
ST-4	As a health conscious person, I can calculate my estimated weight loss to achieve my weight goals	4 pts
ST-5	As a health conscious person, I can search the food database in order to learn about the nutritional facts about food items	6pts

	UC1	UC2	UC3	UC4
REQ1	X		X	
REQ2	X			
REQ3		X		X
REQ4		X		X
REQ5				X
REQ6			X	
REQ7		X		
REQ8				X

Use Case 1: Login/Create Account

Related Requirements: REQ1, REQ2

Initiating Actor: User

Actors Goal: To login or create an account to use with the system

Participating Actors:

Preconditions: If creating new user, none. Else, have a valid username and password

Flow of Events:

1. User logs on OR Creates new account
2. System authenticates username and password
3. User is now active user

Use Case 2: Log Food

Related Requirements: REQ3, REQ4

Initiating Actor: User

Actors Goal: To log food eaten for the day

Participating Actors:

Preconditions: Database has desired food in it, or user knows calorie amount, and user has logged on

Flow of Events:

1. User selects “Search Food OR Submit Food”
2. User searches for food item OR Creates new food item
3. User inputs food item

Use Case 3: Find TDEE

Related Requirements: REQ1, REQ6
Initiating Actor: User
Actors Goal: To find total amount of calories to be eaten for the day
Participating Actors: User
Preconditions: A valid user has logged in
Flow of Events:

1. User Logs On
2. User is shown TDEE

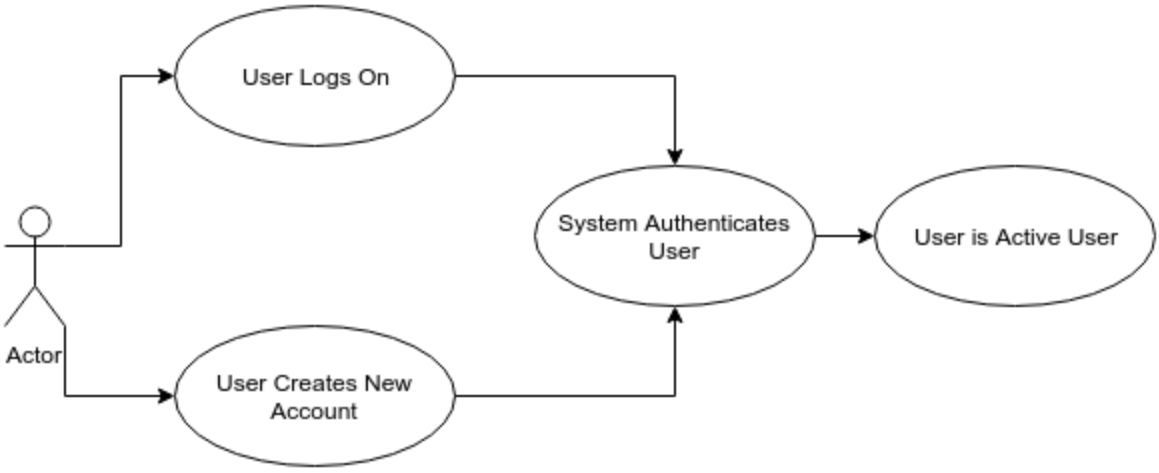
Use Case 4: Estimate Weight Goal

Related Requirements: REQ3, REQ4, REQ5, REQ8
Initiating Actor: User
Actors Goal: To estimate weight loss/gain
Participating Actors: User
Preconditions: A valid use has logged in
Flow of Events:

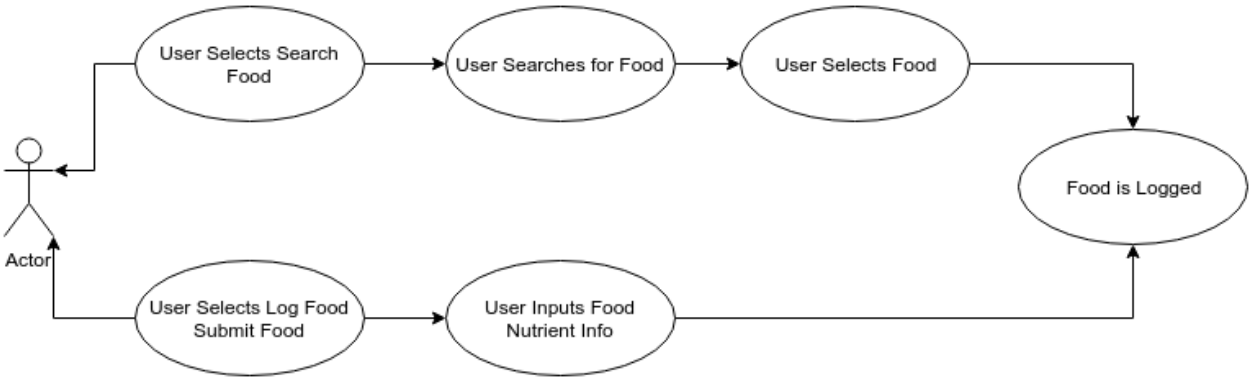
1. User selects “Weight goals”
2. User receives estimate of how long goal will take to reach AND how much they will have to eat in order to achieve goal

Diagrams

Use Case 1



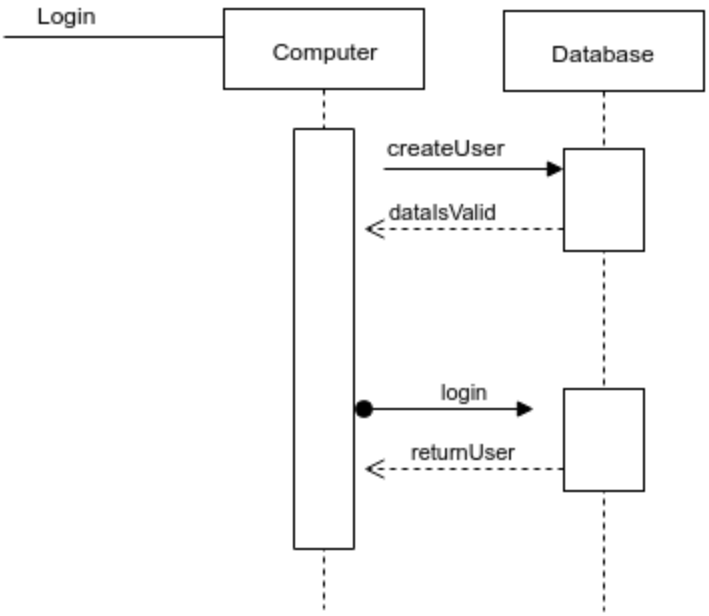
Use Case 2



Use Case 3

Use Case 4

Sequence 1



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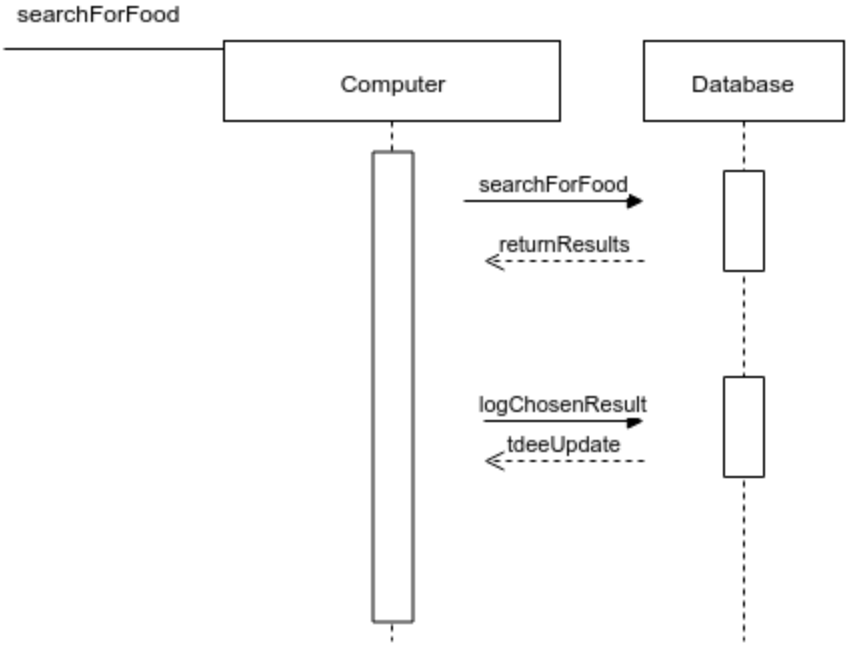

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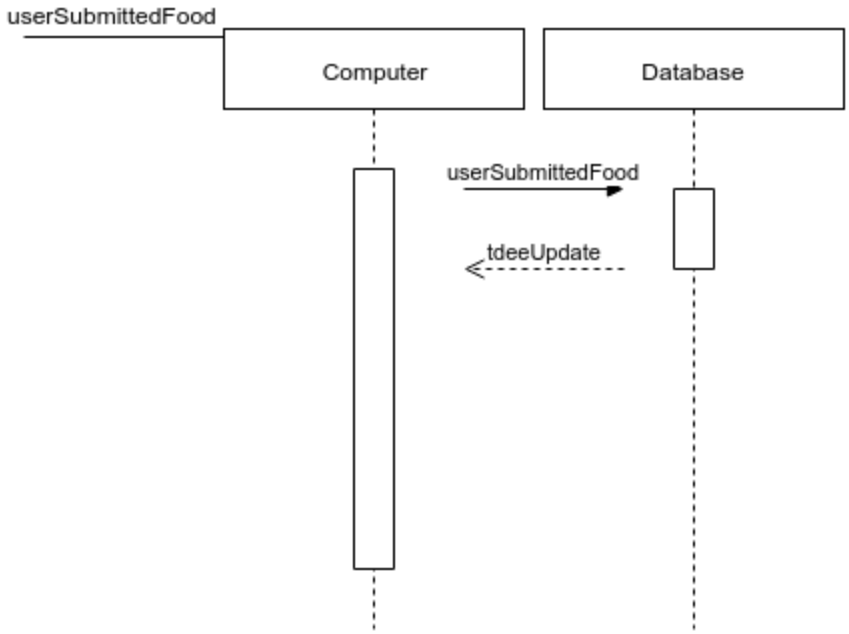

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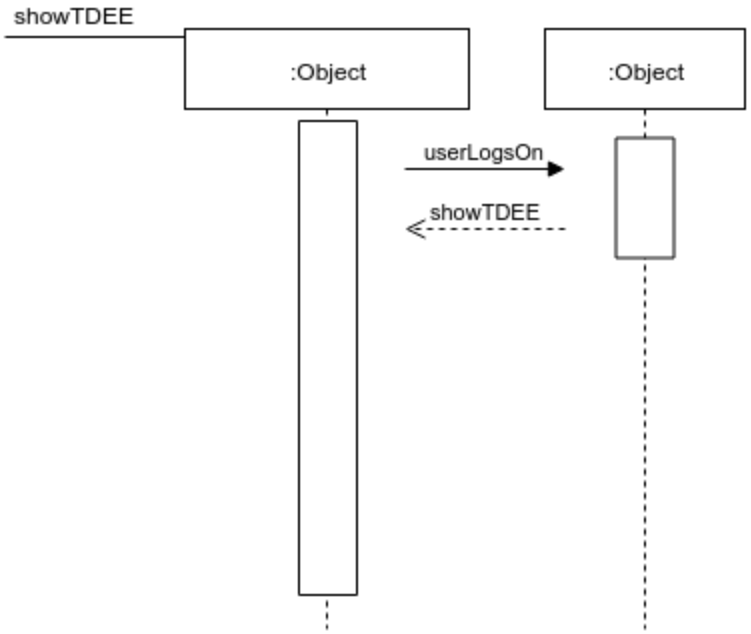

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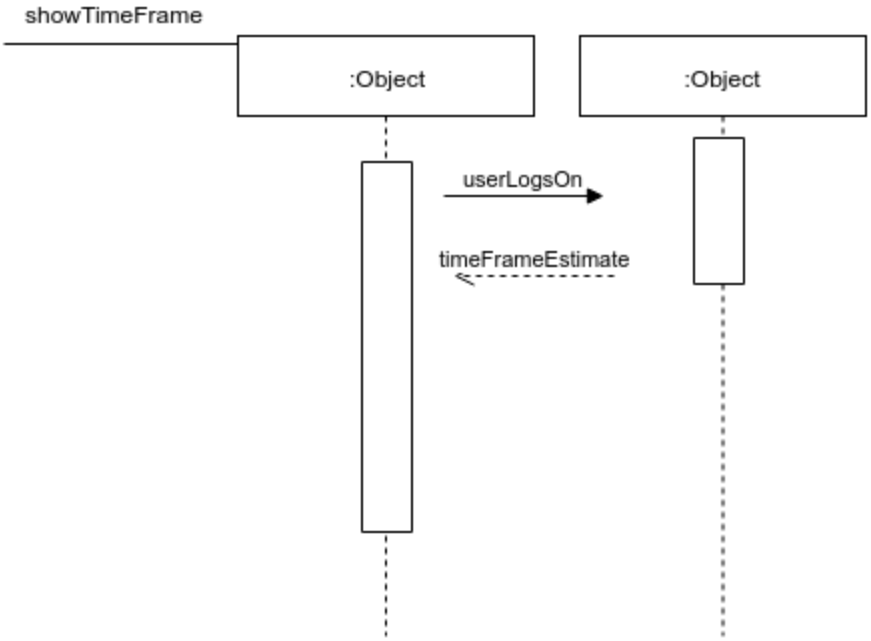
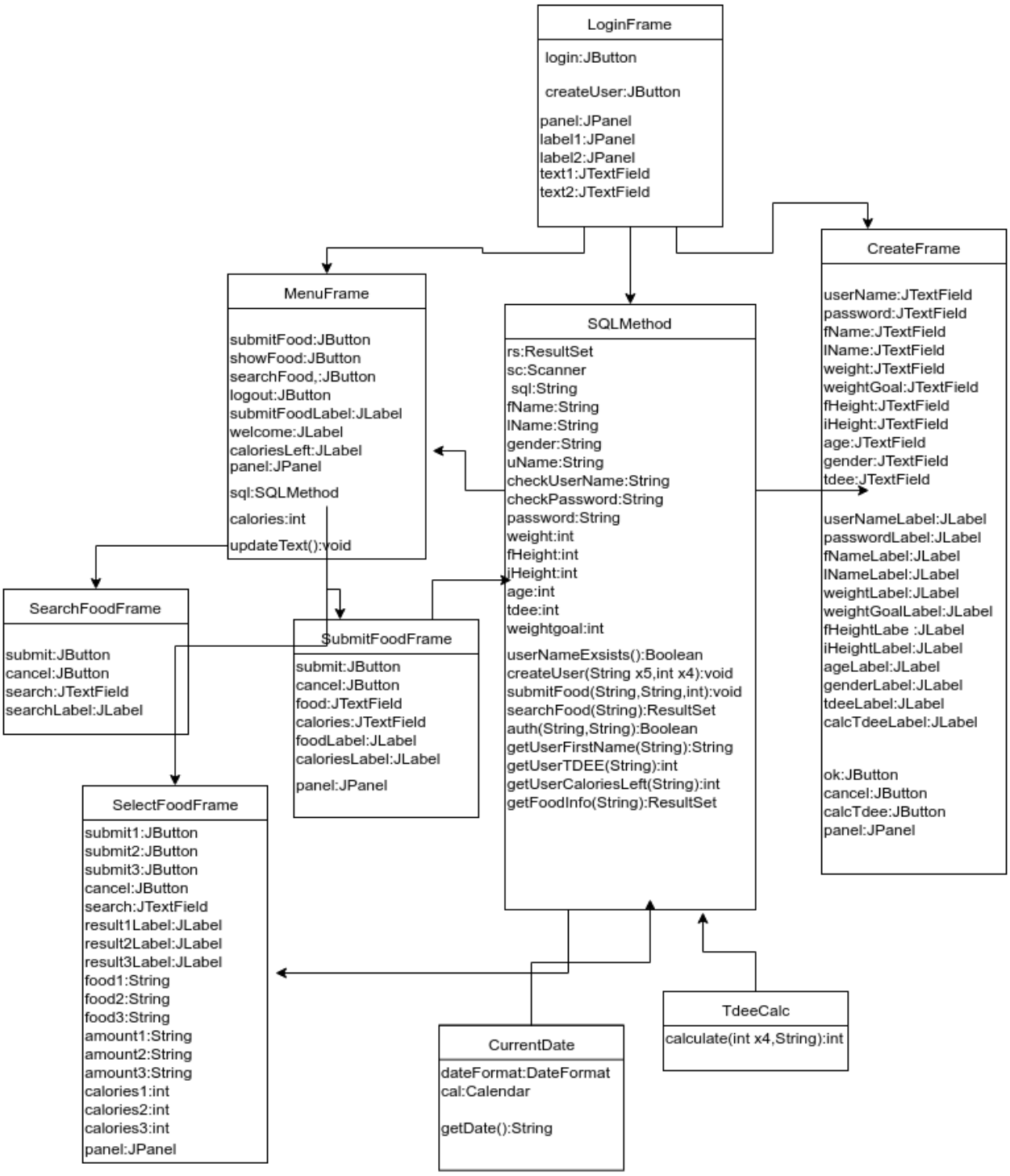
Class Diagram