FINAL SPRINT

Activity: 11.02 - 18.02

Sprint goal

- **calories calculator**
- **BMI and BMR calculator (updates)**
- **search bar**
- **meals list**

During this sprint, we successfully accomplished all the objectives outlined in our initial proposal. Additionally, significant **updates** were made to the **user profile feature**, enhancing its functionality and user experience.

Features and their functionalities

1. Calories Calculator

- accurately calculates calorie and macronutrient values based on a comprehensive food database
- enables users to save their meals, along with meal types, for future reference
- **functionalities**
    - numbered food items for easy selection
    - displayed food data with precision up to two decimal places

2. User Profile (updates)

- includes a meals list logger functionality for users to save and track their meals
- it has <u>now</u> enhanced data organization and sorting options to organize meals chronologically <u>and</u> comprehensive tables with personal data, fitness, and dietary information
- **functionalities**
    - introduced a calendar-based meal selection option for improved user experience

○ improved numerical data representation by rounding to two decimal places

In the development process (based on **CI/CD workflow**), in order to ensure the reliability of the application, we:

● implemented a pipeline to streamline dependency installation for both client and server components
● conducted thorough validation tests across different scenarios to ensure robustness

All members participated in the last sprint.

● **Asăvoaei Gabriela**
    ○ established the food database
    ○ contributed to the meals planner, including its historical tracking feature

● **Duluman Andrada**
    ○ implemented the search bar
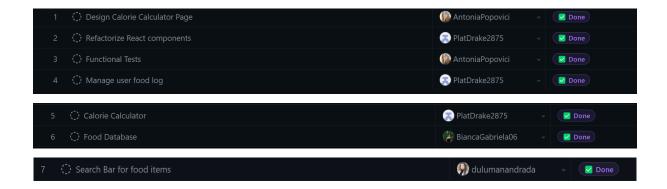   ○ contributed to the meals planner's historical tracking feature

● **Pătrașcu Adrian**
    ○ ensured the CI/CD workflow
    ○ updated the user profile page
    ○ implemented the calories calculator
    ○ reduced cognitive complexity of some React components and server controllers (*UserProfile, SidebarMenu, CalculatorCalories, auth.js*)

● **Popovici Antonia**
    ○ did the design for calories calculator page
    ○ wrote functional and performance tests

Backlog items

1	Design Calorie Calculator Page	AntoniaPopovici		✅ Done
2	Refactorize React components	PlatDrake2875		✅ Done
3	Functional Tests	AntoniaPopovici		✅ Done
4	Manage user food log	PlatDrake2875		✅ Done
5	Calorie Calculator	PlatDrake2875		✅ Done
6	Food Database	BiancaGabriela06		✅ Done
7	Search Bar for food items	dulumanandrada		✅ Done

User Stories

As a user managing weight loss, I want a feature to input and track my daily caloric intake and expenditure, so that I can monitor my progress towards achieving my weight loss goal.

Acceptance criteria:

- the feature should allow users to input their daily caloric intake accurately, including meals, snacks, and beverages consumed throughout the day
- users should be able to specify portion sizes or quantities for each item entered into the caloric intake tracker
- the caloric intake should be displayed clearly and prominently within the application
- users should have the ability to set and adjust their weight loss goal within the application settings
- the UI should be intuitive and user-friendly, guiding users through the process of inputting and tracking their caloric intake and expenditure efficiently

As a health-conscious user, I want the app to calculate and display my Body Mass Index (BMI) based on my profile information, so that I can better understand and monitor my overall body.

- the app should calculate the user's BMI accurately based on the provided profile information, including height and weight, supporting both imperial and metric units
- BMI calculation should follow the standard formula: $BMI = \dfrac{weight}{height^2}$ for <u>metric units</u> and $BMI = \dfrac{weight \times 703}{height^2}$ for <u>imperial units</u>

- the calculated BMI should be displayed clearly and prominently within the user's profile or a designated section of the application
- the application should provide context for the calculated BMI, such as categorizing it into underweight, normal weight, overweight, or obese based on standard BMI ranges
- users should have the option to update their profile information, including height and weight, to ensure accurate BMI calculations

Sprint Review

During this sprint, we held our sprint review to evaluate our progress and discuss how the production of the software has proceeded. Here are the key points discussed:

- we assessed our progress towards delivering the functionalities outlined in our initial proposal: we successfully achieved all the objectives set for this sprint, including the implementation of the **calories calculator**, **BMI and BMR calculator updates**, **search bar**, **meals list logger**
- we discussed how close we are to achieving our MVP: with the completion of the planned functionalities, we are nearing the completion of the MVP, which will provide users with essential features for managing their health and nutrition effectively
- while reviewing our progress, we acknowledged that there were no functionalities or objectives that we realized we couldn't achieve within this sprint; however, we did recognize an additional achievement in the successful implementation of the calendar-based meal selection option within the user profile, which enhances the overall user experience

Sprint Retrospective

Following the sprint review, we conducted a sprint retrospective to gather feedback on the development process and discuss what worked well, what didn't, and any unexpected challenges encountered. Here are the key points discussed:

- **feedback on development process**: we shared feedback on the development process, highlighting aspects that worked well and areas that could be improved; positive feedback was given for the effective collaboration and communication within the team

- **what works well**: we identified effective collaboration, clear task prioritization, and regular communication as aspects of the development process that worked well; the team's ability to adapt to changes and address challenges promptly was also recognized as a strength
- **what can be improved**: the team discussed challenges encountered during the sprint, such as managing time constraints and balancing priorities; these challenges provided valuable insights for improving our processes in future sprints