**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 now enhanced data organization and sorting options to organize meals chronologicallyand 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

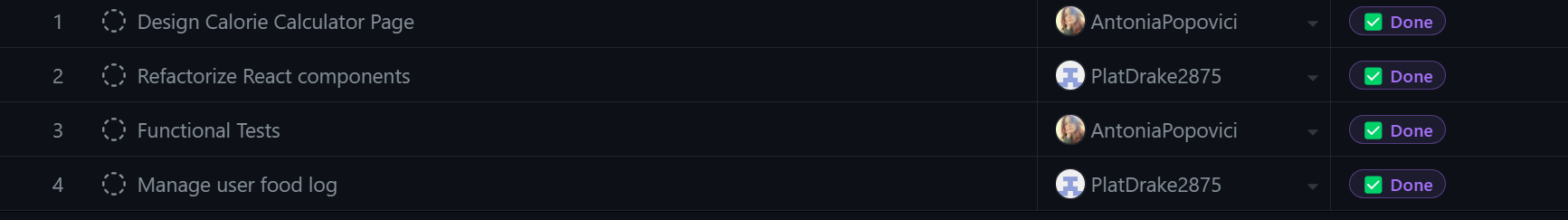
In the development process (based on **CI/CD workflow**), in order to ensure the reliability of the application, we:

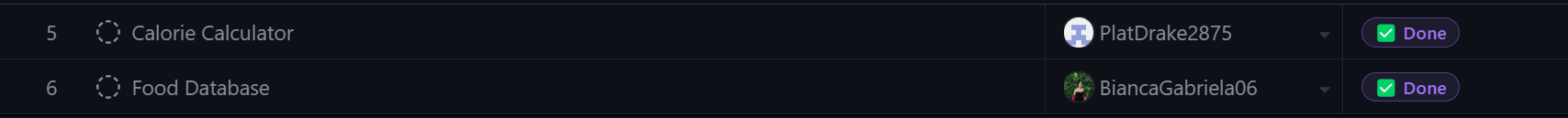
* implemented a pipeline to streamline dependency installation for both client and server components
* conducted thorough validation tests across different scenarios to ensure robustness

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**

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**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: for metric units and for imperial units
* 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