

Strava+1 is an app that helps people train for endurance sports in a healthier and smarter way. Most apps just track things like distance, pace, and heart rate, but Strava+1 goes a step further by also giving advice on nutrition, hydration, and recovery, areas many athletes tend to overlook. The idea is to make training feel easier and safer by guiding you on when and what to eat or drink before, during, and after a workout. It's all about supporting good habits, preventing injuries, and encouraging an active lifestyle, which also ties in nicely with the UN's goal of promoting good health and well-being.



When most people decide to take up running or another endurance sport, they often just go out and try it without much guidance. For some, this works and they can stick with it, but many quickly quit because they don't see progress, feel too sore, or struggle with the physical and mental demands of training over time.

Existing fitness apps mostly focus on tracking numbers like pace and distance, but they don't provide advice on nutrition, hydration, and recovery, areas that are just as important for improvement and long-term motivation. This lack of support makes it harder for beginners to build healthy habits and enjoy endurance sports, leading to frustration and many eventually giving up. Strava+1 aims to fill this gap by giving beginners and athletes alike the right guidance to make training safer, easier, and more sustainable.

```

classDiagram
    class User {
        id: int
        name: string
        username: string
        email: string
        date_of_birth: date
        weight: float
        experience_level: string
    }
    class Food {
        id: int
        name: string
        default_unit: string
        kcal_per_100g: float
        kcal_per_100g: float
        carbs_per_100g: float
        fat_per_100g: float
    }
    class Meal {
        id: int
        user_id: int
        date: date
        type: string
    }
    class MealItem {
        id: int
        meal_id: int
        food_id: int
        quantity: float
        calories: float
        protein: float
        carbs: float
        fat: float
    }
    class Friendship {
        id: int
        user_id: int
        status: string
    }
    class Sleep {
        id: int
        user_id: int
        date: date
        duration: float
        deep_sleep: float
        rem_sleep: float
        awakenings: int
    }
    class Chat {
        id: int
        user_id: int
        type: string
    }
    class Message {
        id: int
        user_id: int
        chat_id: int
        sender_id: int
        content: string
        timestamp: datetime
    }
    class ActivityPost {
        id: int
        user_id: int
        workout_id: int
        content: string
        created_at: datetime
    }
    class Like {
        id: int
        user_id: int
        post_id: int
        created_at: datetime
    }
    class Comment {
        id: int
        post_id: int
        user_id: int
        content: string
        created_at: datetime
    }
    class NutritionSummary {
        id: int
        user_id: int
        date: date
        total_calories: float
        protein: float
        carbs: float
        fat: float
        water_int: int
    }
    class Workout {
        id: int
        user_id: int
        date: date
        duration: float
        distance: float
        avg_heart_rate: int
    }
    class Run {
        id: int
        workout_id: int
        environment: string
        pool_length: int
        avg_cadence: int
        power_output: float
    }
    class Cycle {
        id: int
        workout_id: int
        environment: string
        pool_length: int
        avg_cadence: int
        power_output: float
    }
    class Swim {
        id: int
        workout_id: int
        environment: string
        pool_length: int
        avg_cadence: int
        power_output: float
    }

    User --> Food : connects
    User --> Meal : loses
    User --> Sleep : participates in
    User --> NutritionSummary : posts
    User --> Workout : performs
    Food --> Meal : used_in
    Meal --> MealItem : contains
    Friendship --> Meal : contains
    Sleep --> Message : contains
    Chat --> Message : contains
    ActivityPost --> Like : liked by
    ActivityPost --> Comment : commented by
    NutritionSummary --> User : posts
    Workout --> Run : can be shared
    Workout --> Cycle : can be shared
    Workout --> Swim : can be shared
    
```

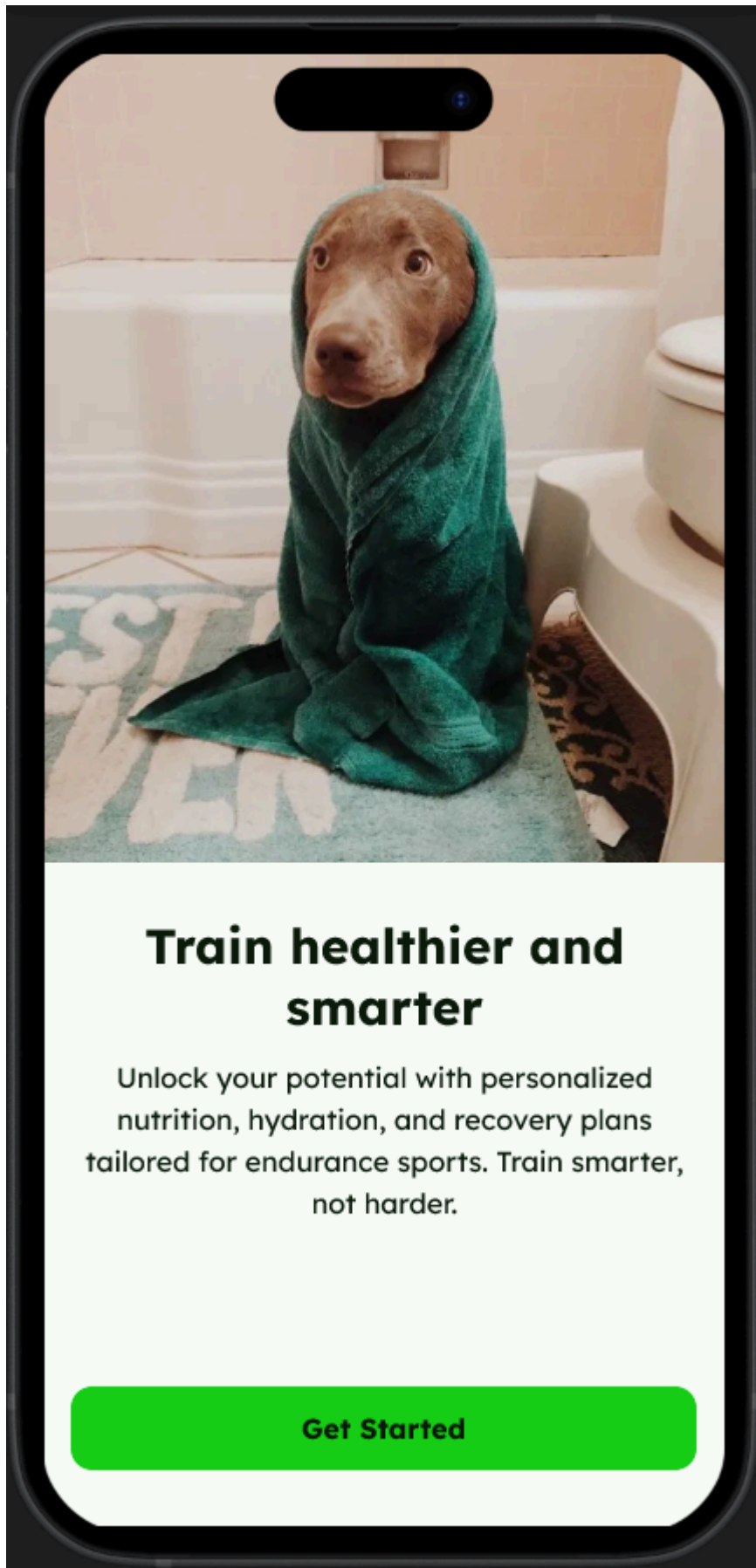
The diagram illustrates the relationships and attributes of various entities in a fitness application. Key entities include User, Food, Meal, MealItem, Friendship, Sleep, Chat, Message, ActivityPost, Like, Comment, NutritionSummary, Workout, Run, Cycle, and Swim. Relationships are defined by directed associations with labels such as 'connects', 'loses', 'participates in', 'posts', 'performs', 'used_in', 'contains', 'liked by', 'commented by', and 'can be shared'. Attributes for each entity are listed within their respective class boxes. Notes provide additional context: 'Daily totals are aggregated from MealItems + water intake.' (pointing to NutritionSummary), 'Social feed posts may include text and optional workout sharing. Likes and Comments support engagement.' (pointing to ActivityPost), and 'General workout metrics are stored in Workout. Run, Cycle, Swim extend with sport-specific fields.' (pointing to Run, Cycle, and Swim).

Link to the full prototype

<https://www.figma.com/proto/f6jB5vUjyB7yVAW8cT7QDW/Strava-1?node-id=16-252&p=f&t=vMX2EYy61Wszxy3y-1&scaling=scale-down&content-scaling=fixed&page-id=2%3A2&starting-point-node-id=16%3A252>

Get started page

This is the page the users will see when starting the app for the first time. They will be greeted by our friendly mascot!



Login page

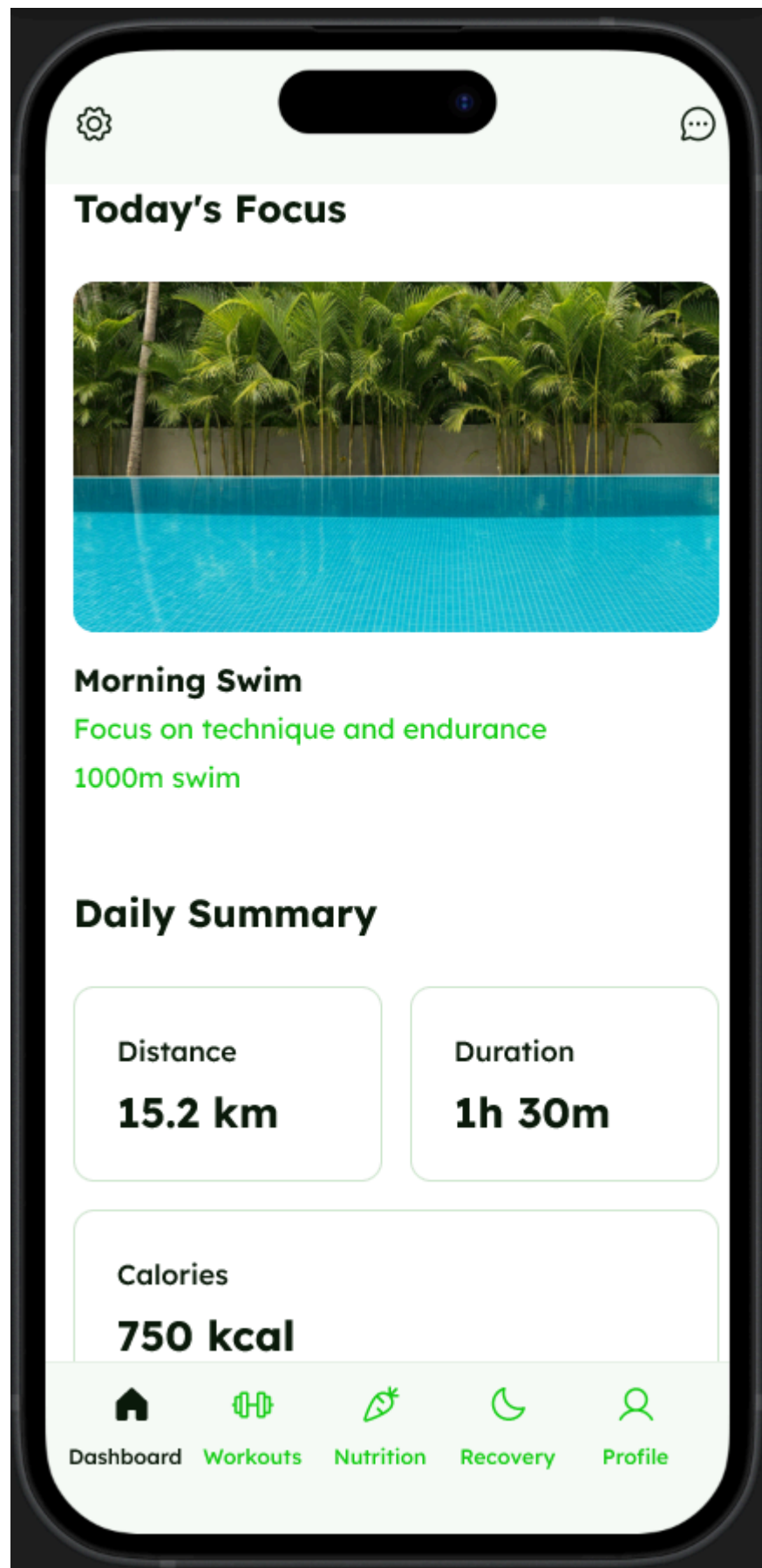
A simple form where users enter their email and password to access the app, with options for password reset, sign-up, or logging in with Google or Apple.

Create-account

A registration form where users enter their name, email/username, and password to create an account. Submitting the form creates the account and logs them in automatically.

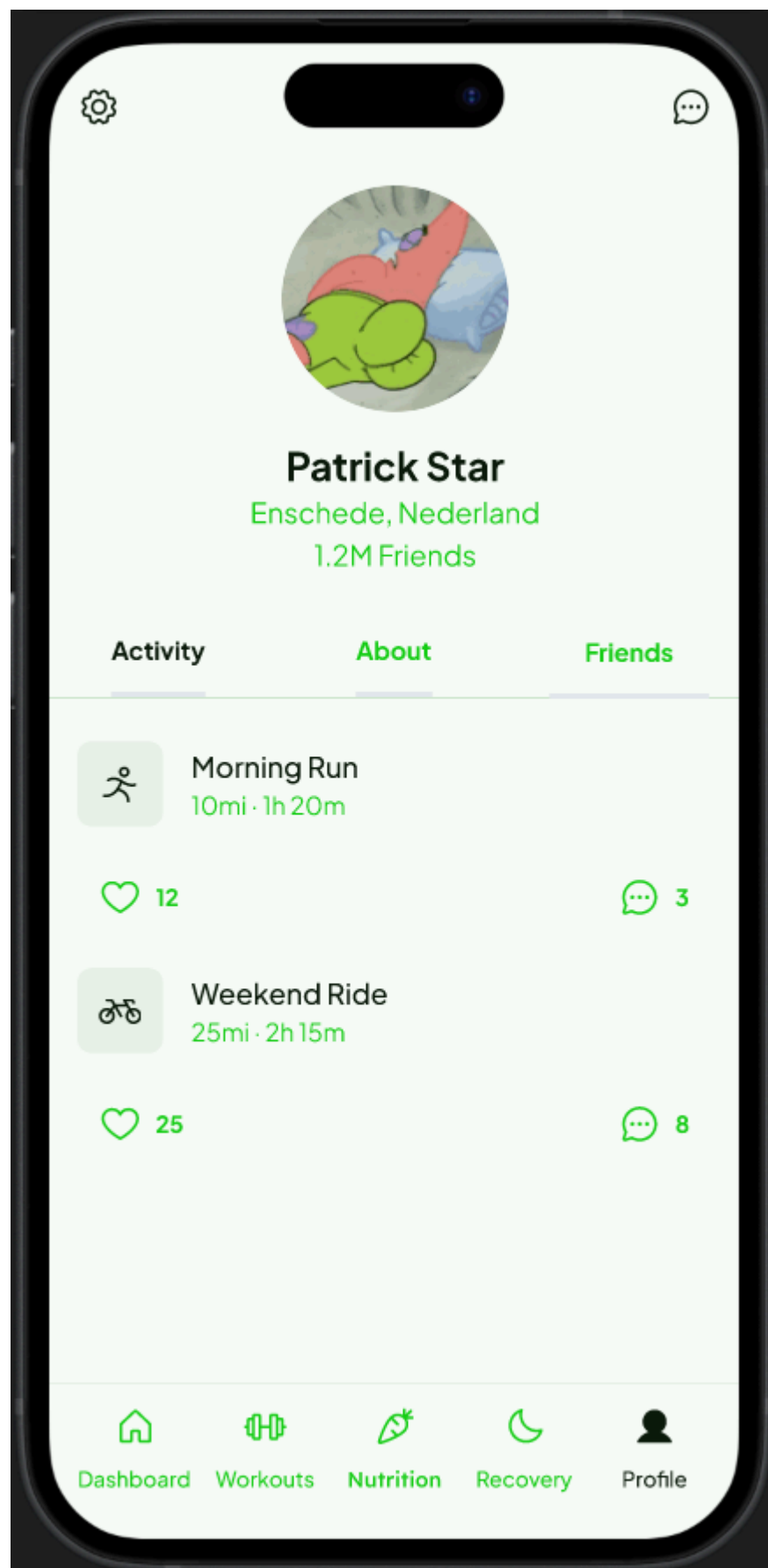
Dashboard

The main home screen that highlights the user's daily focus workout and shows a quick summary of distance, duration, and calories burned. Navigation at the bottom provides access to workouts, nutrition, recovery, and profile sections. Buttons on the top take you to the app settings and your chats. You can also scroll down for more information or tips on healthy exercise and nutrition as seen in the [dashboard.webm](#) video.



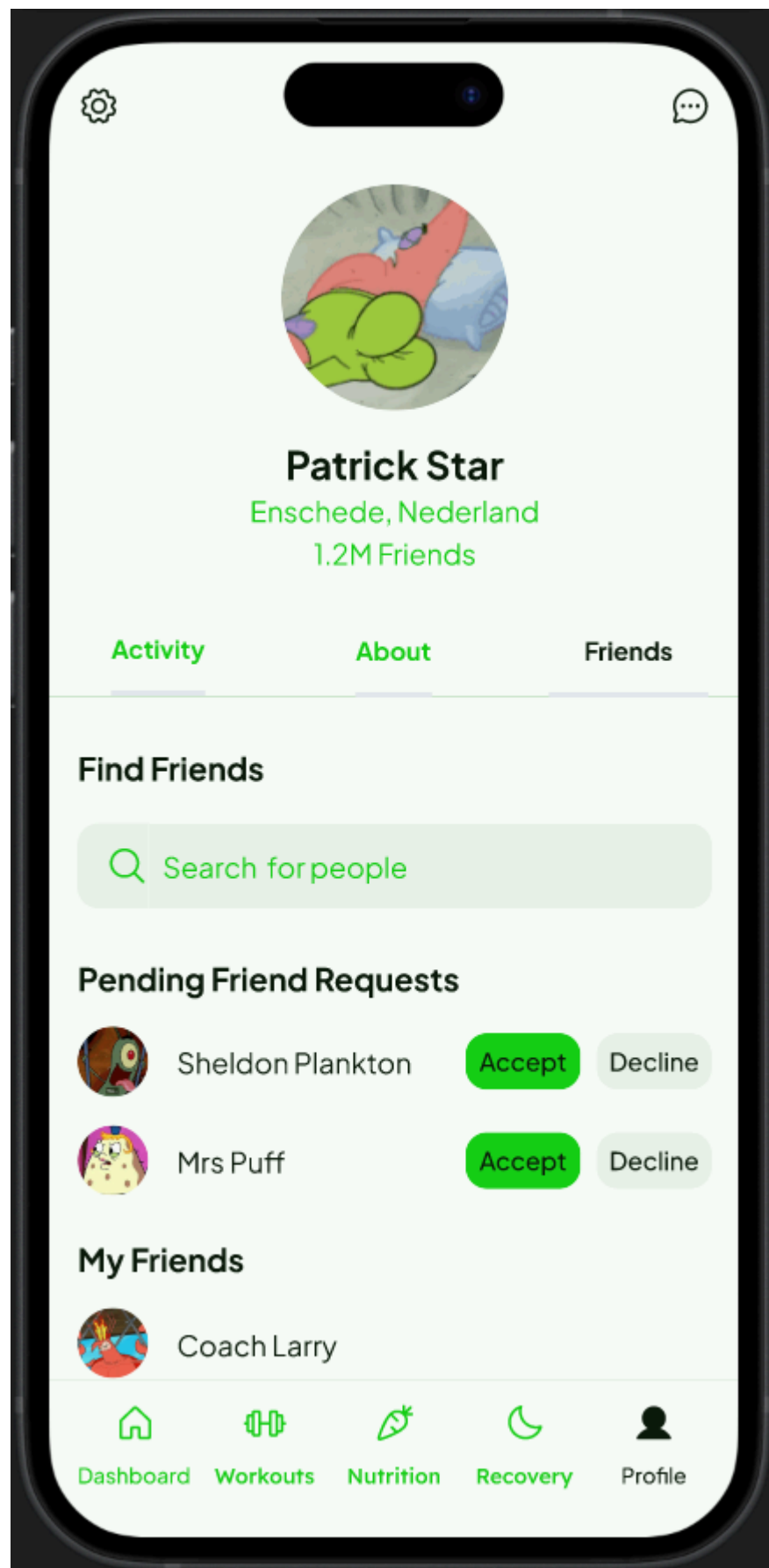
Profile - Activities

Displays the user's profile picture, name, location, and friend count, with tabs for activity, about, and friends. The activity tab shows recent workouts along with likes and comments, while the bottom navigation provides quick access to other app sections.



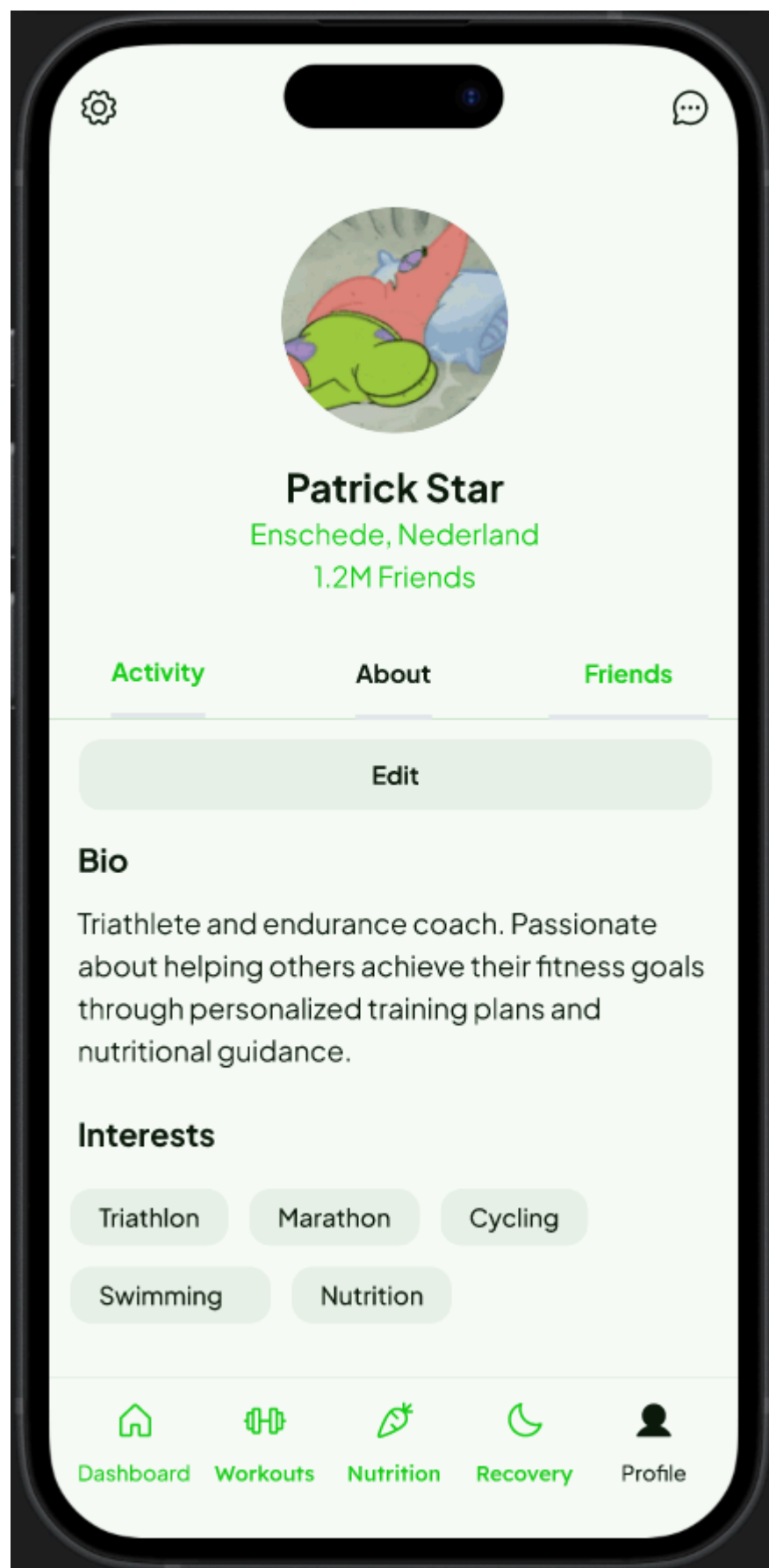
Profile - Friends

Lets users search for new friends, manage pending friend requests with accept/decline buttons, and view their current friends list, all within the profile section.



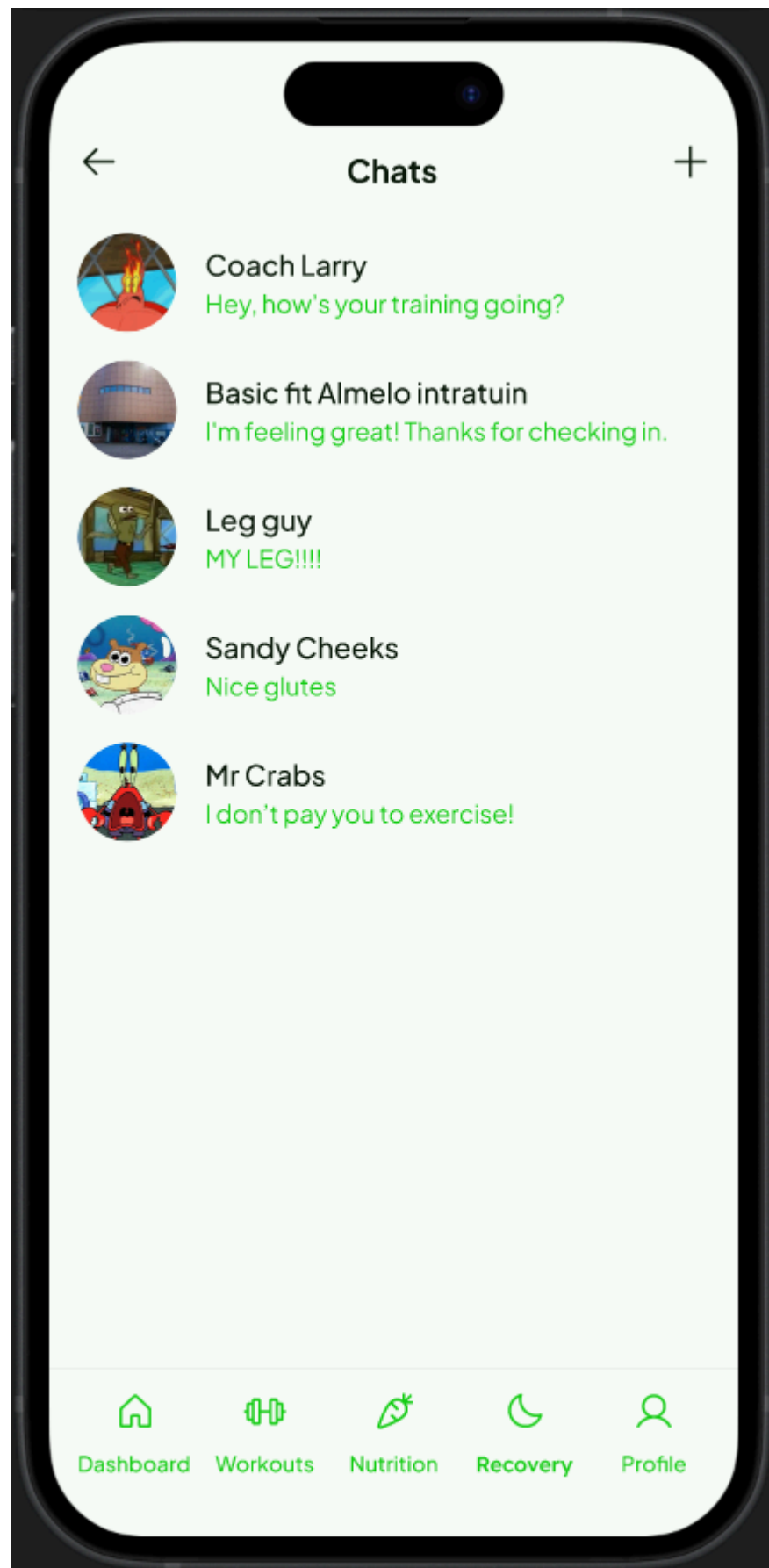
Profile - About

Shows the user's bio and interests, with an edit option for updating personal details and fitness focus areas.



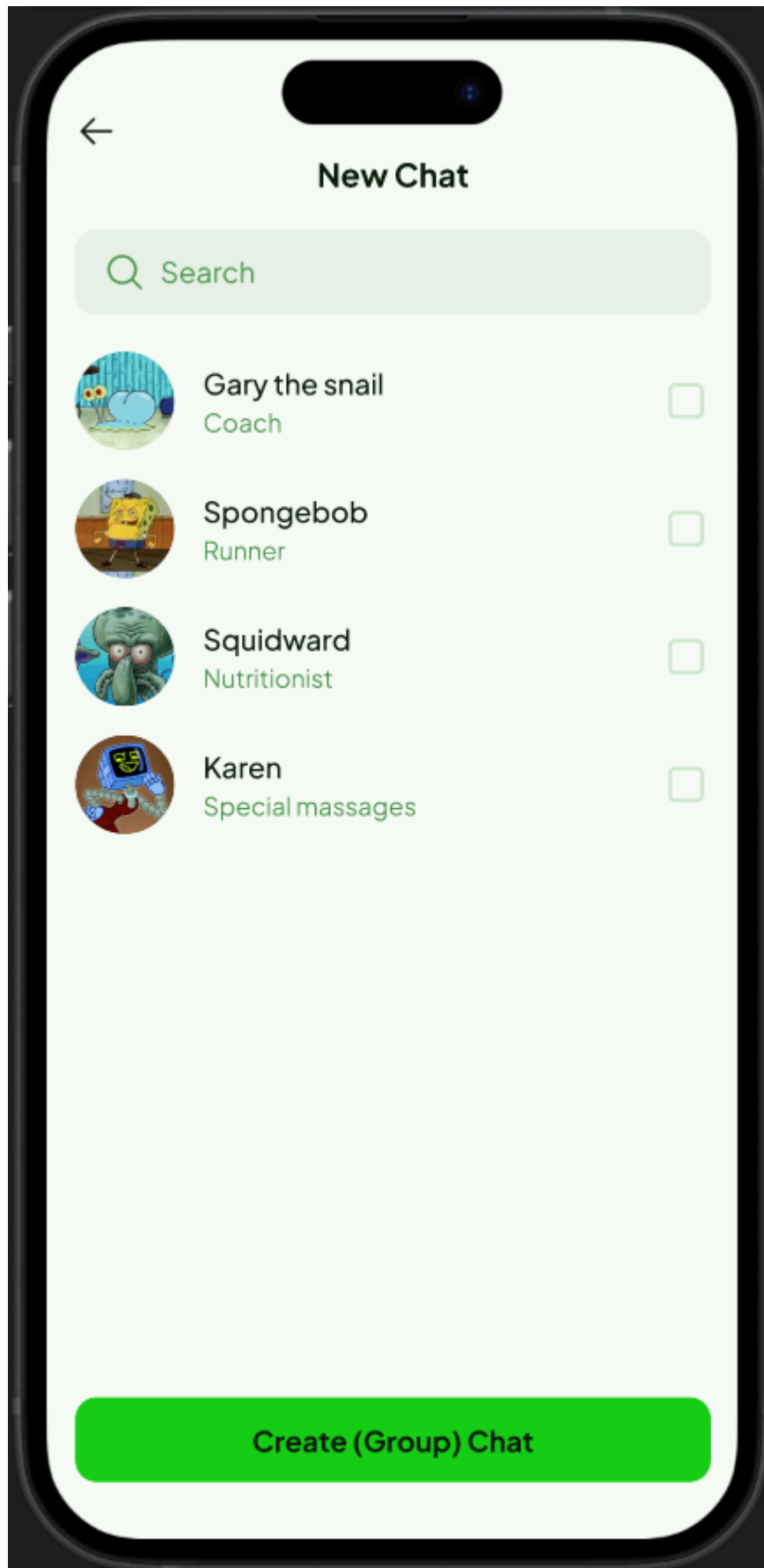
All chats

Displays a list of recent conversations with friends, coaches, or groups. Each chat entry shows the contact's profile picture, name, and a preview of the most recent message. A plus icon in the top-right corner lets users start a new chat. The bottom navigation allows access to the dashboard, workouts, nutrition, recovery, and profile sections.



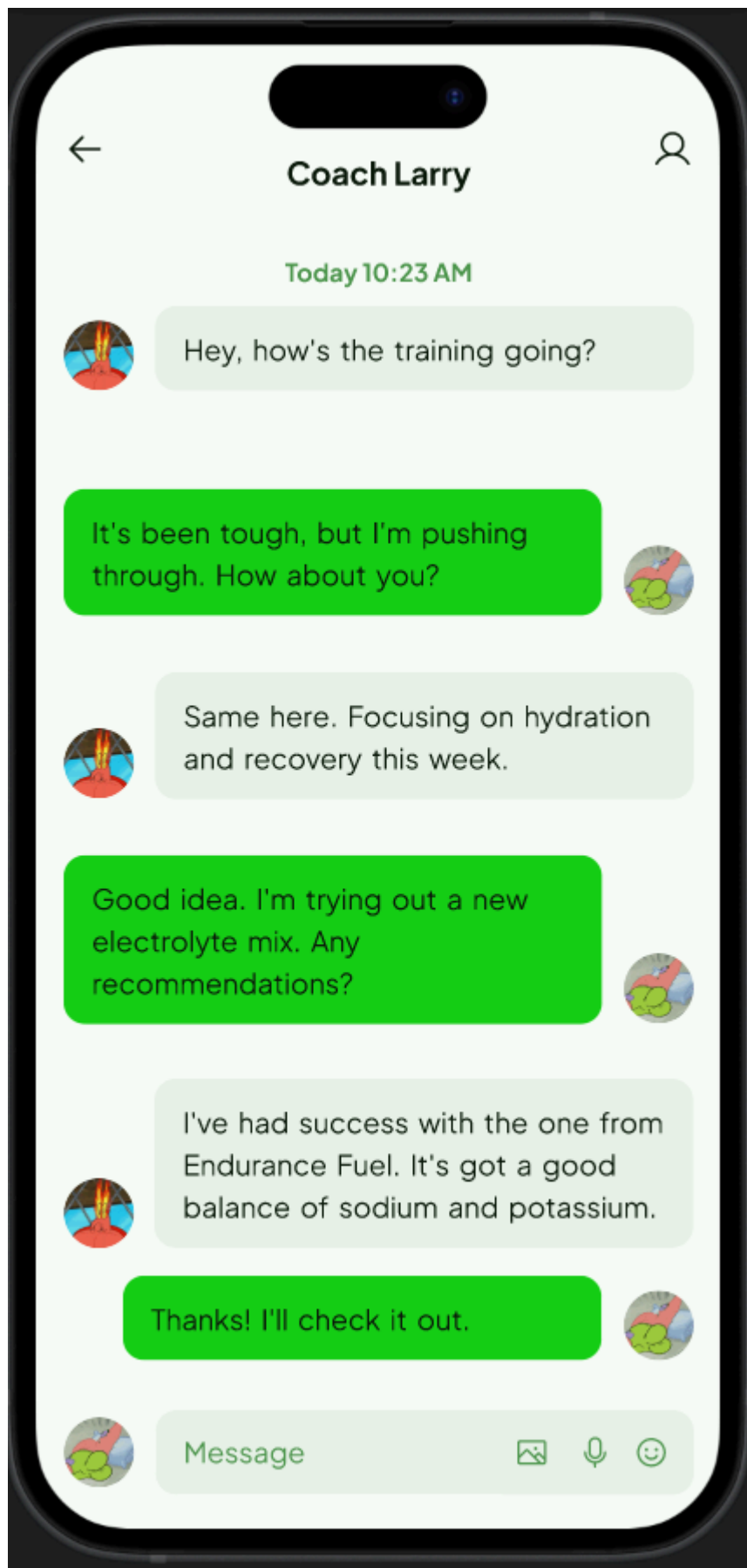
New chat

Lets users start a new one-on-one or group conversation by selecting contacts from a searchable list. Each contact is shown with a profile picture, name, and role (e.g., coach, runner, nutritionist). Users can select one or more contacts and tap the "Create (Group) Chat" button to begin messaging.



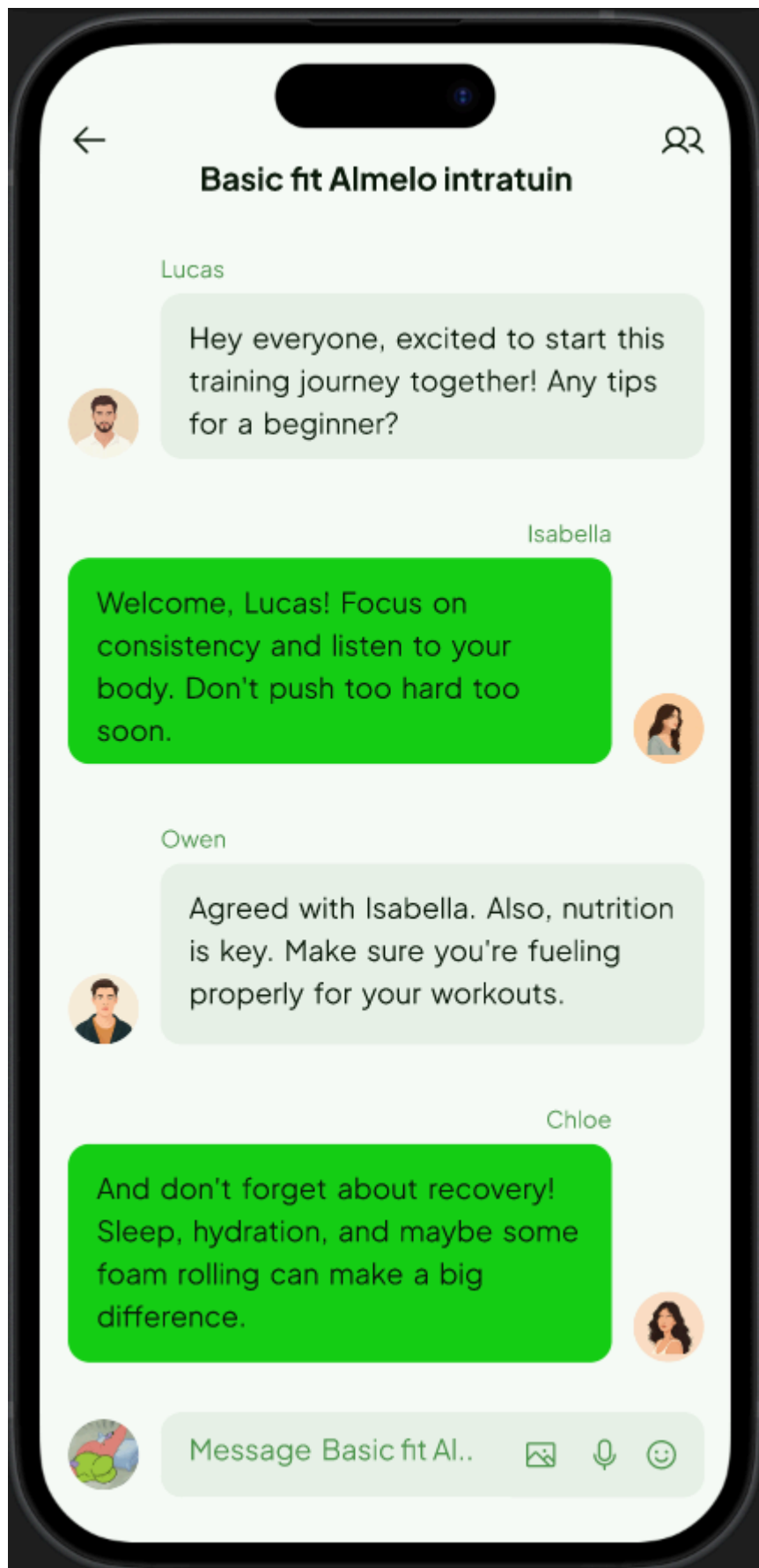
Chat

Shows a real-time conversation between the user and a selected contact. Messages are displayed in a chat bubble format with timestamps and profile icons for clarity. Users can type messages in the text field at the bottom. The screen also includes options for sending emojis, attachments or voice recordings. Clicking top right will lead to the other persons profile page.



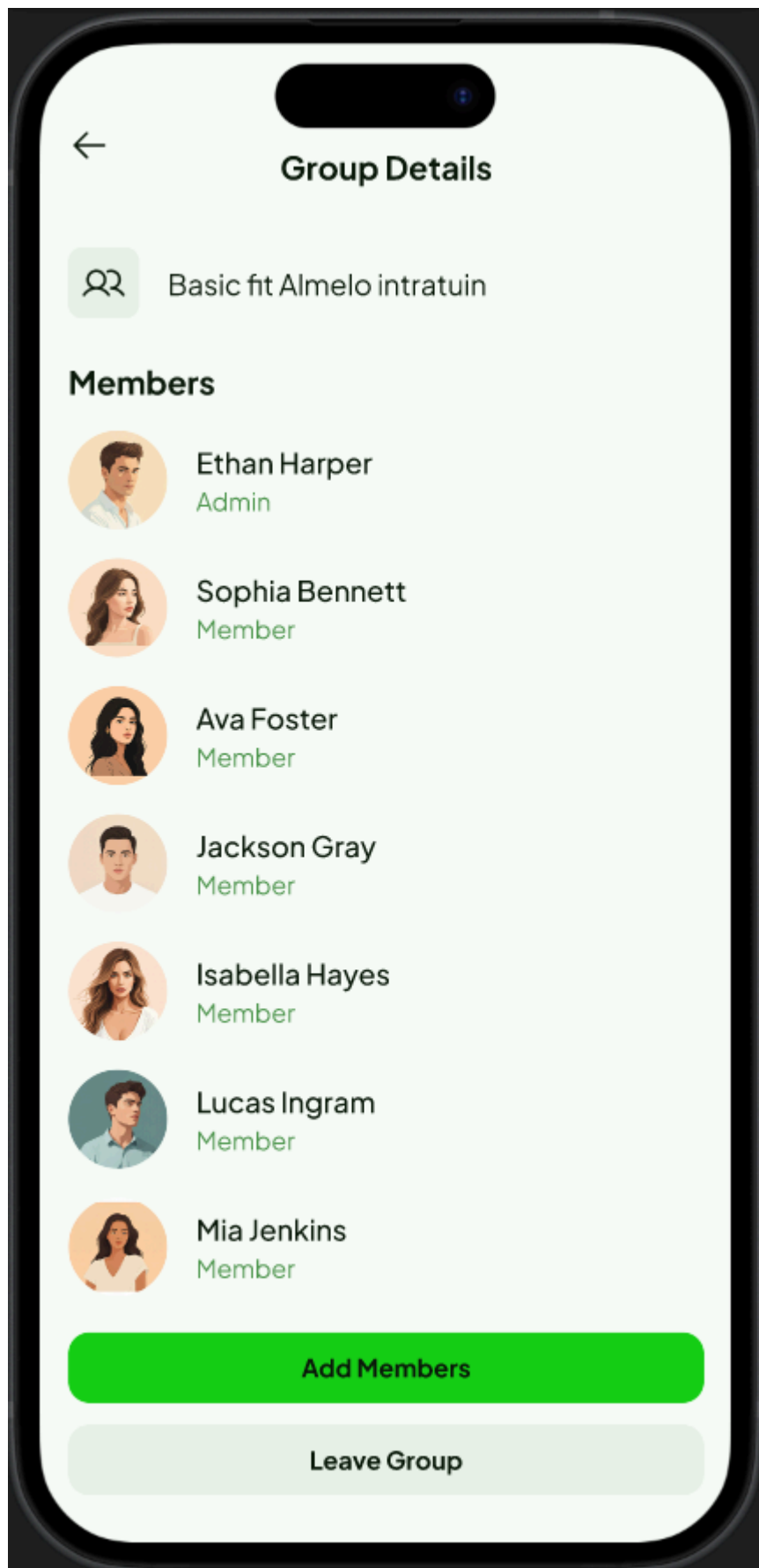
Group Chat

Lets members exchange messages in real time within the group. Users can type messages, add emojis, or attach media. Tapping the top-right icon opens the group details page to view or manage members.



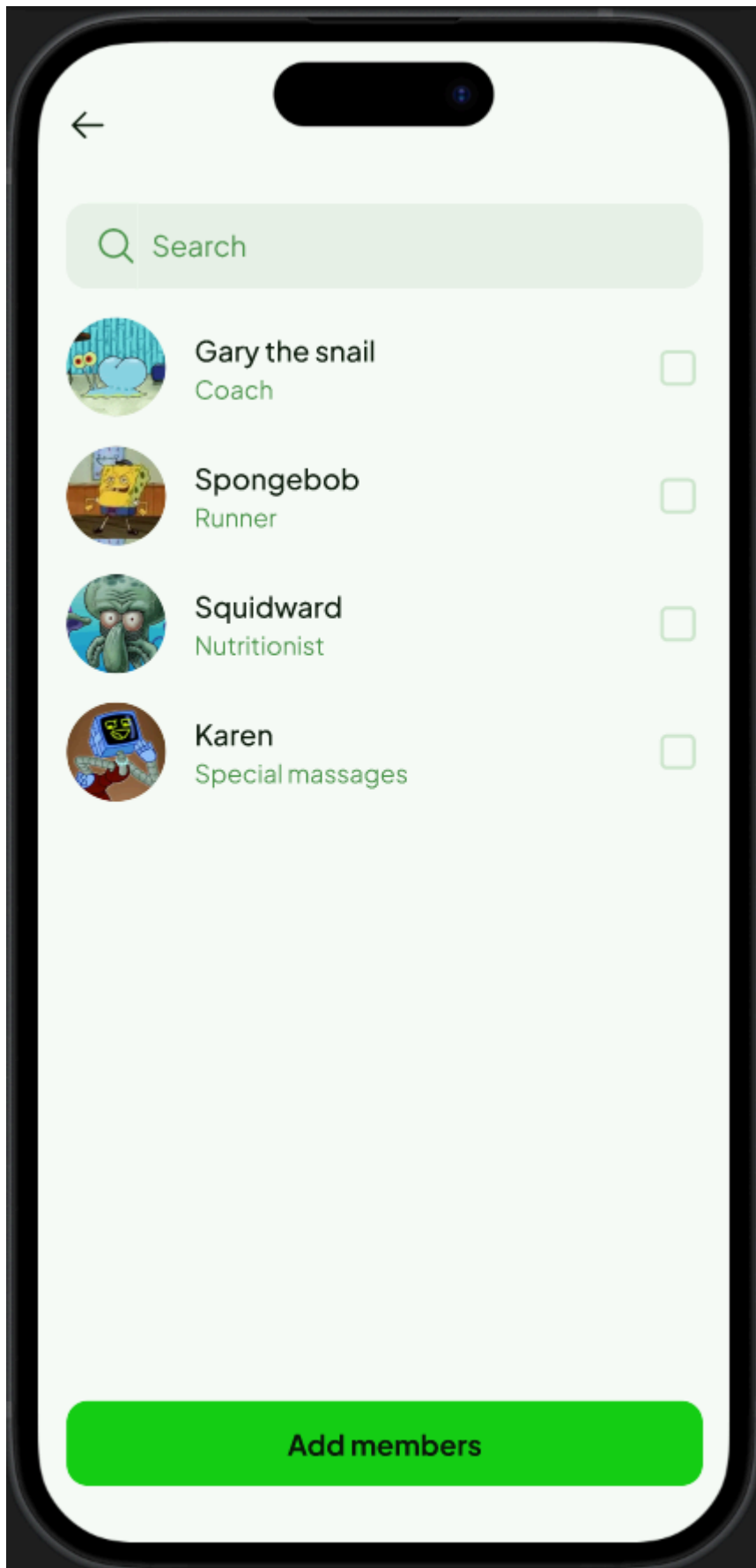
Group details

Displays the group name and a list of members, showing roles like admin or member. Users can add new members if permitted or leave the group with a single tap.



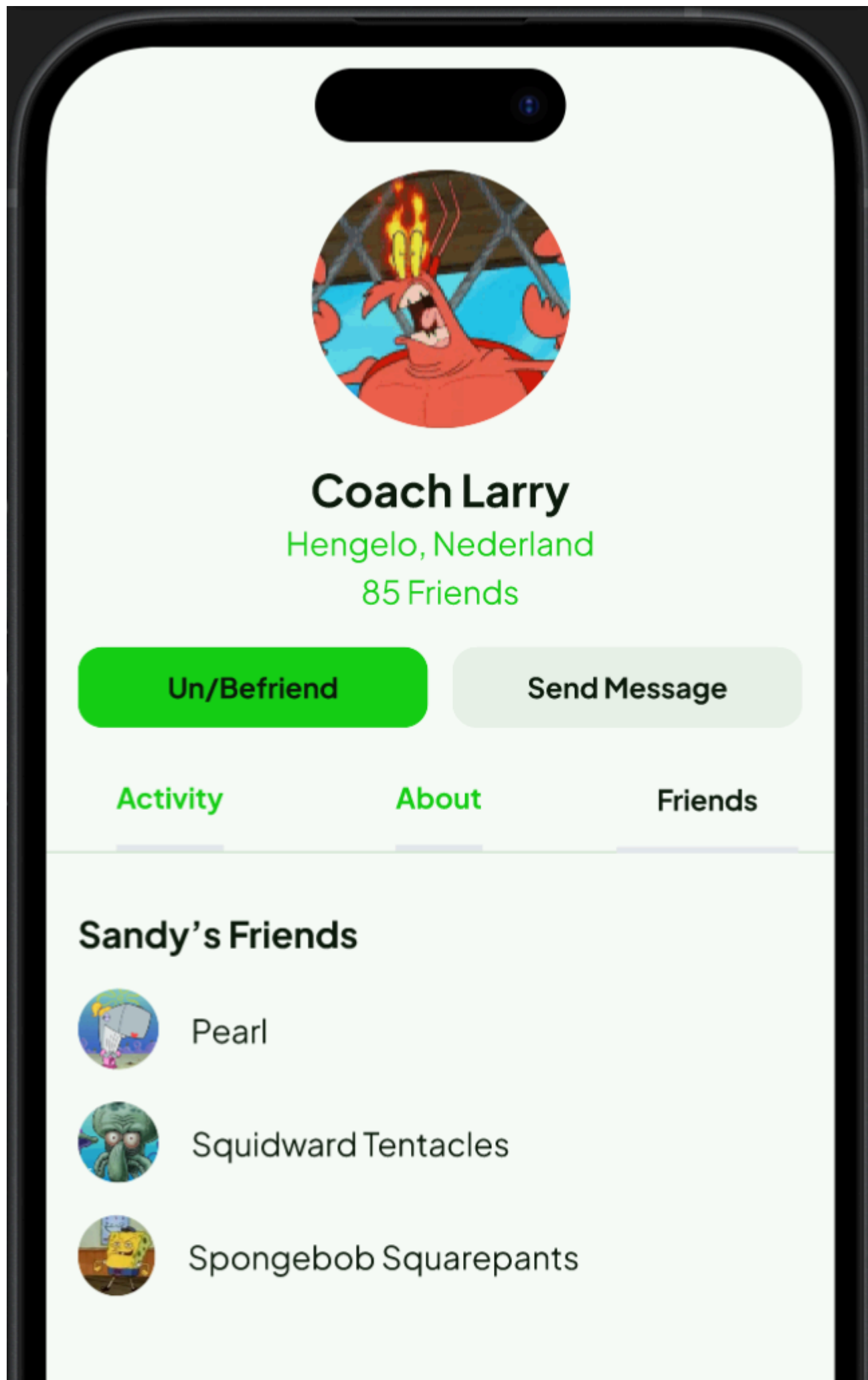
Add group members

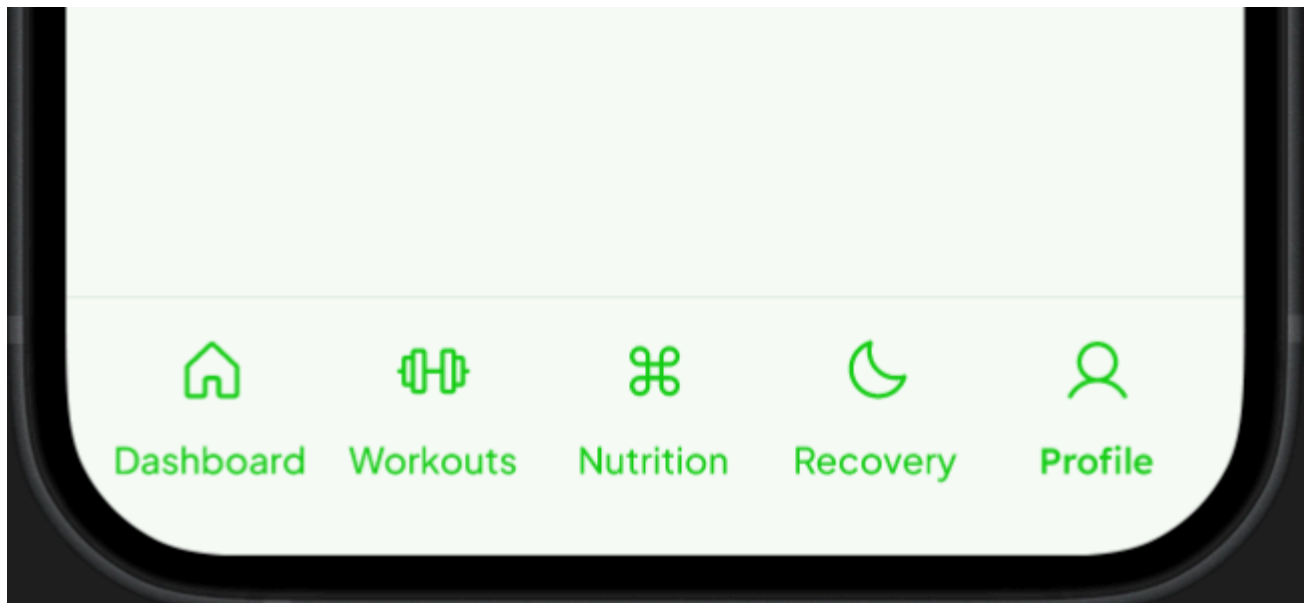
Lets users search and select friends to add to a group. A checkbox appears next to each name, and tapping Add members confirms the selection and updates the group.



Friend profile

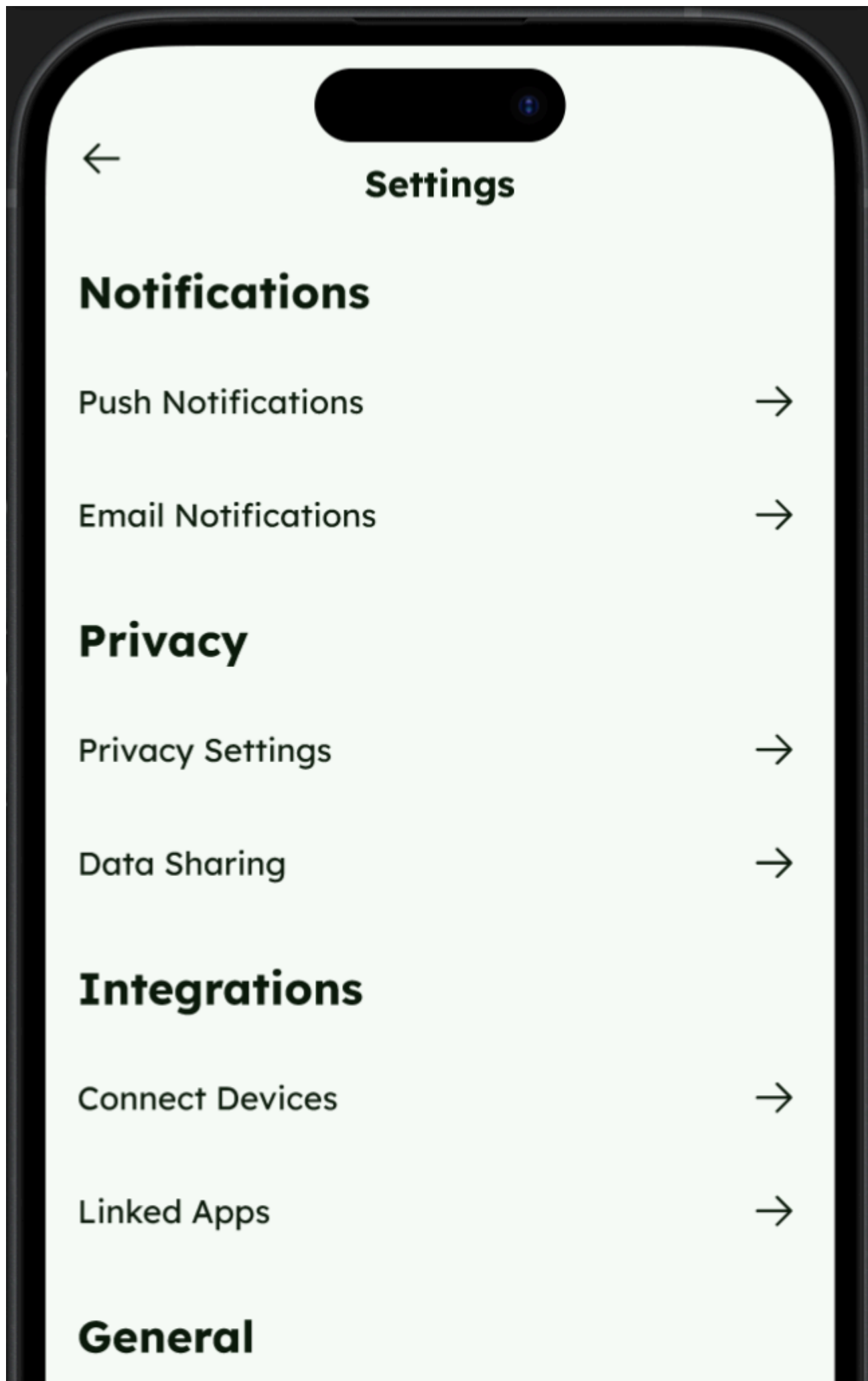
Shows another user's profile with options to Un/Befriend or Send Message. Tabs let you view their Activity, About, and Friends list. This helps users connect and explore social circles.

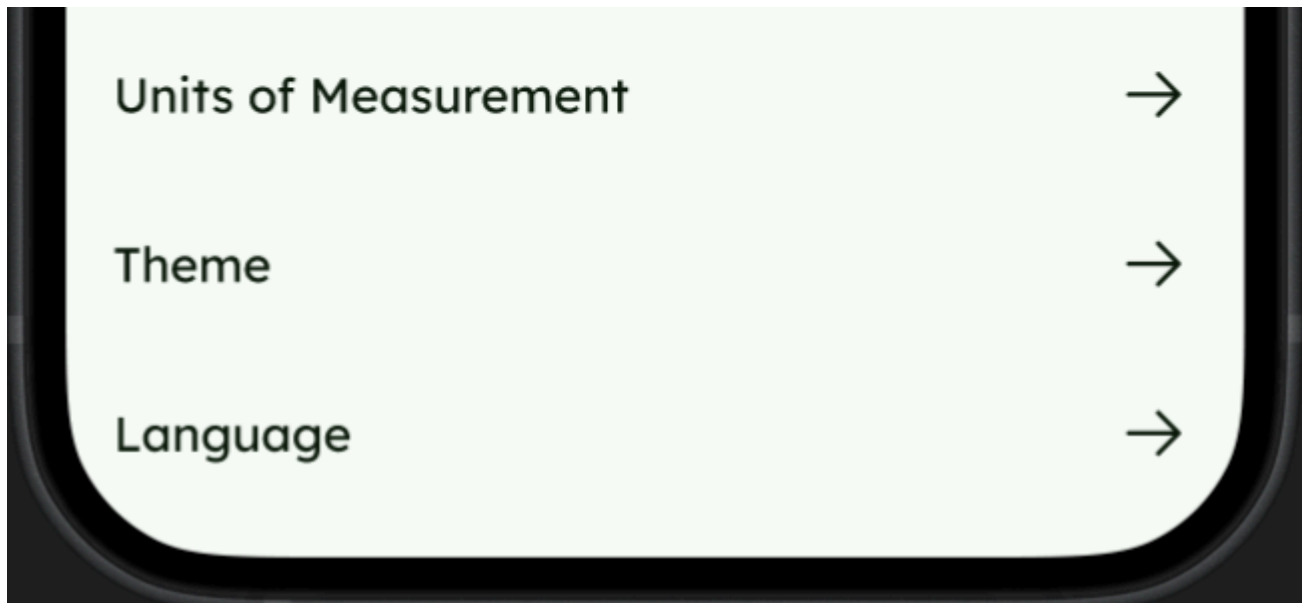




Settings

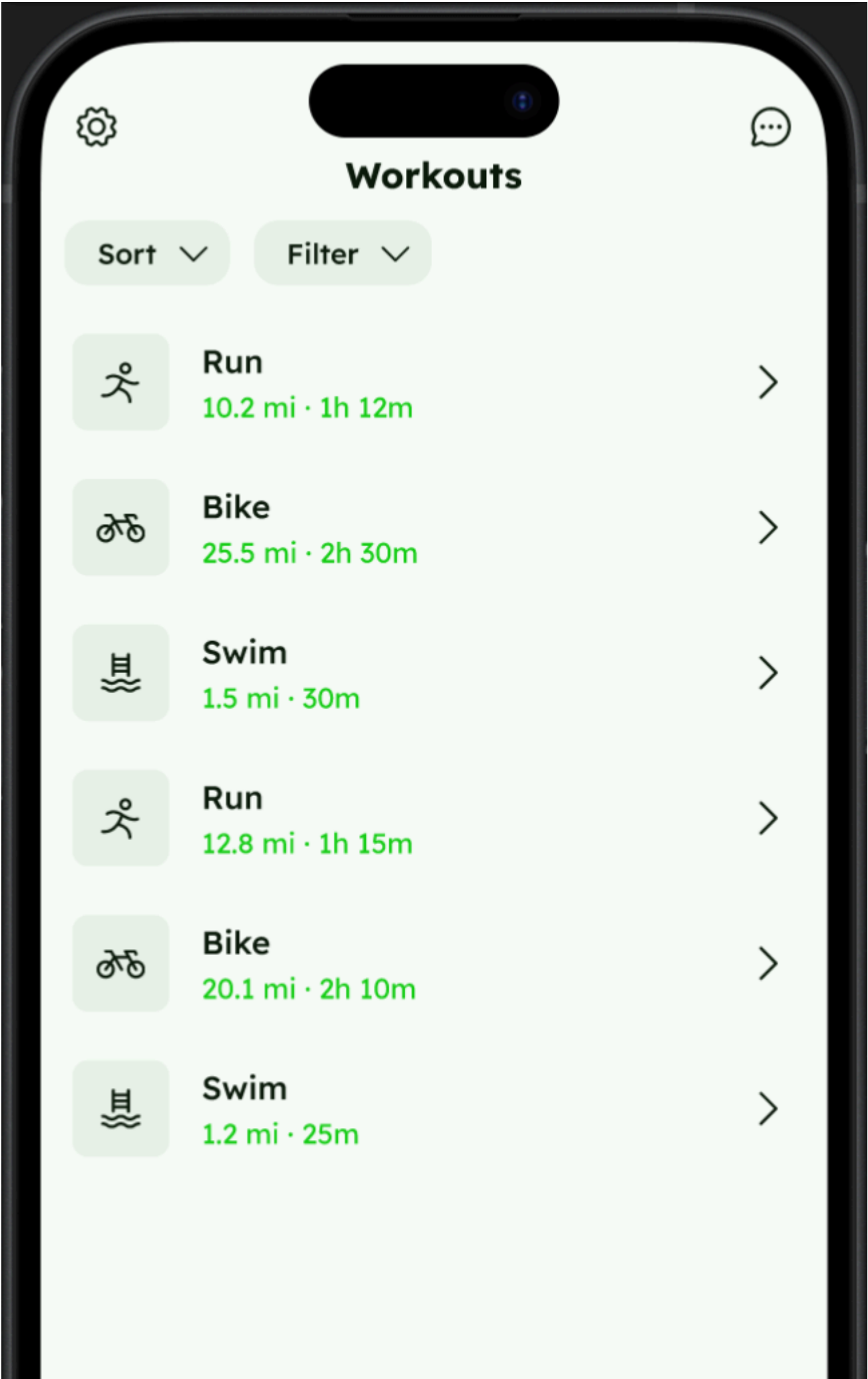
Lets users customize their experience with options for notifications (push, email), privacy (privacy settings, data sharing), integrations (connect devices, linked apps), and general preferences (units, theme, language).

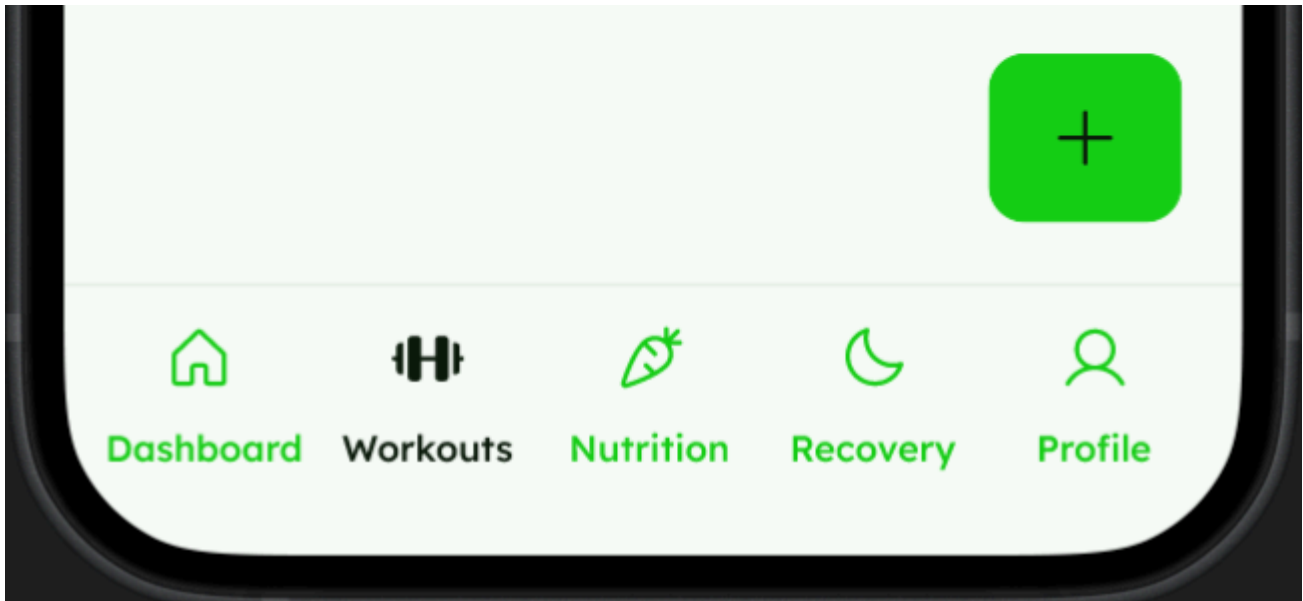




Workouts

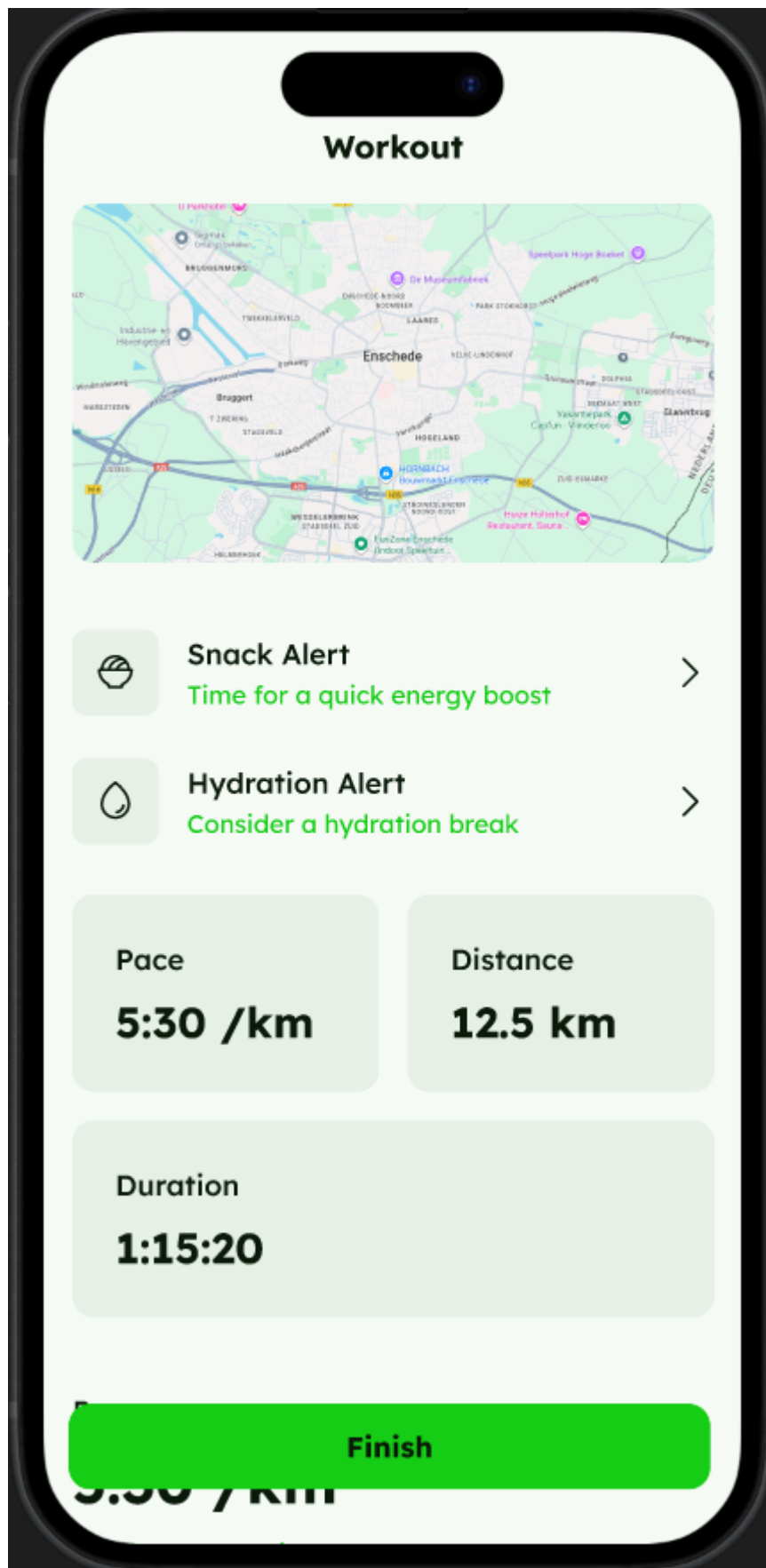
Displays a list of recent workouts (run, bike, swim) with distance and duration. Users can sort or filter activities and use the plus button to add a new workout.





Workout

Displays detailed information for an ongoing workout. Includes a map of the route, real-time alerts like Snack and Hydration reminders, and workout metrics such as pace, distance, and duration. Users can monitor performance and tap Finish to end the session. You can also scroll down for more information as seen in the [workout.webm](#) video.



Workout summary

Shows a detailed breakdown of a completed workout including distance, pace, duration, and elevation gain. Includes a visual map of the route and a section for performance analysis like pace trends over time. Helps users review and reflect on their activity. Below is some personalized advice on nutrition and recovery as seen in the [workout-summary.webm](#) video.



Workout Summary



Distance
10.2 miles



Pace
7:30 min/mile

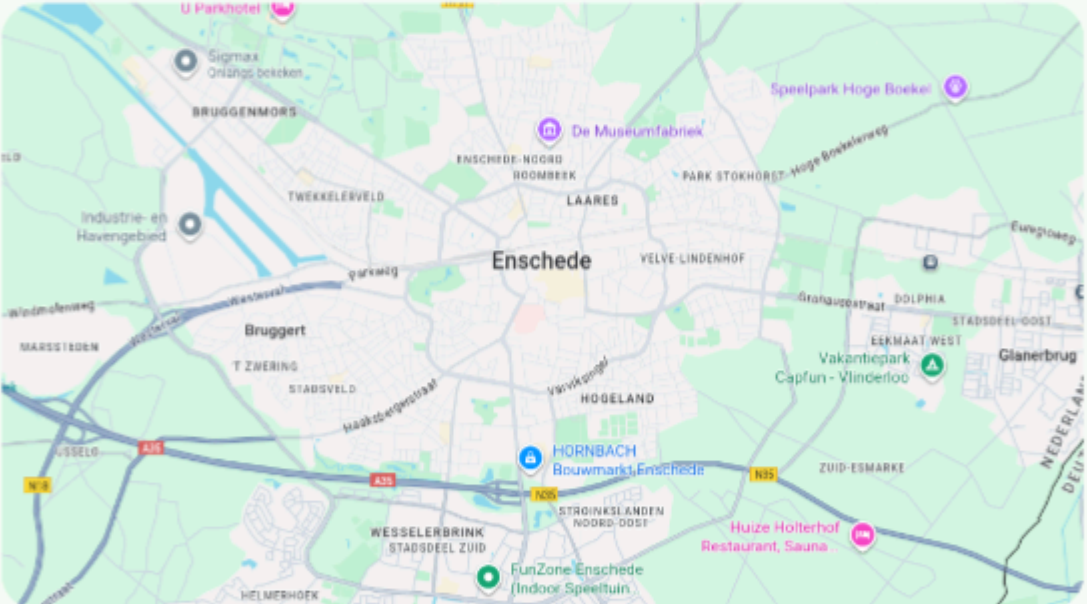


Duration
1h 16m 30s



Elevation Gain
550 ft

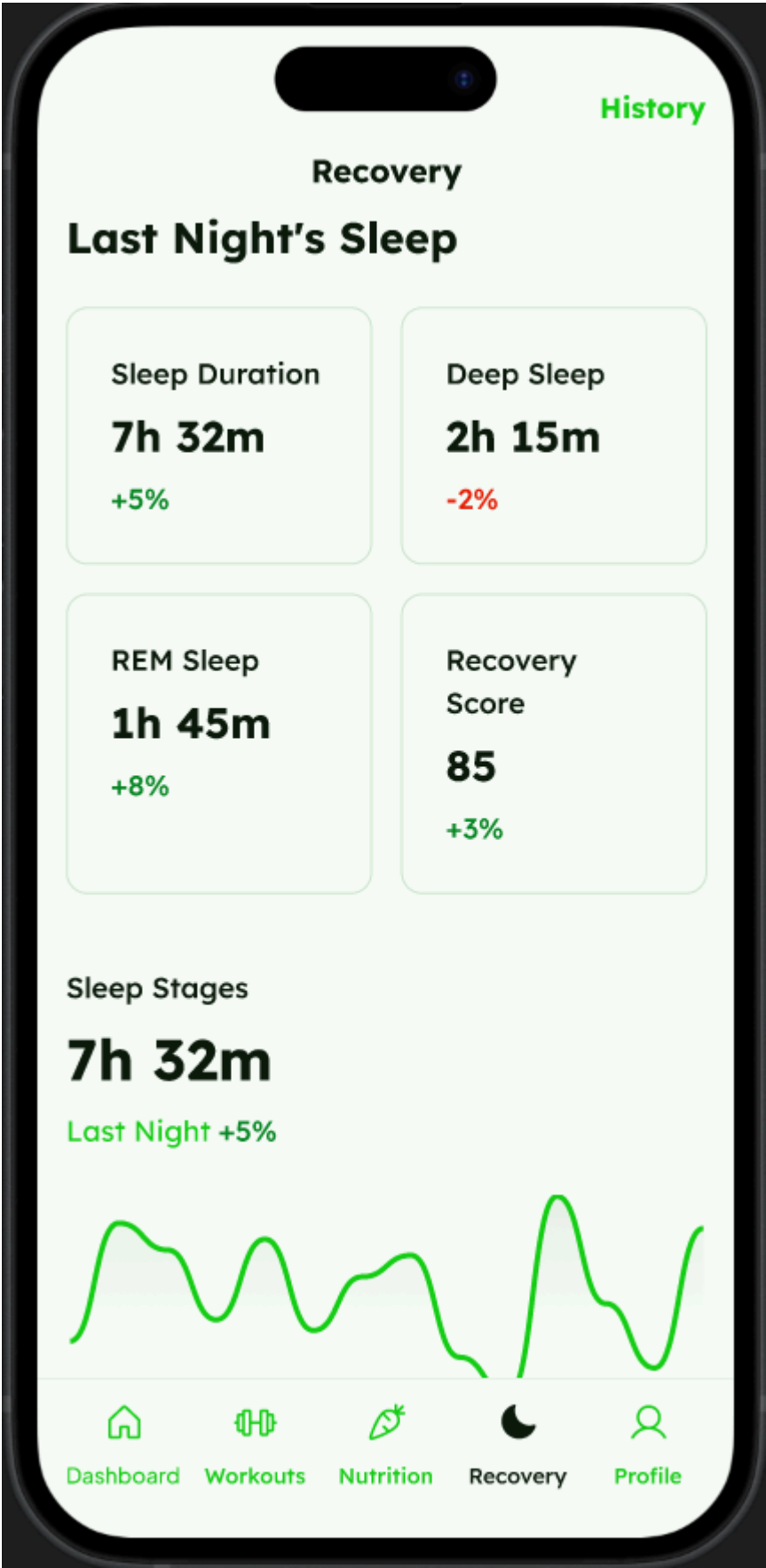
Route





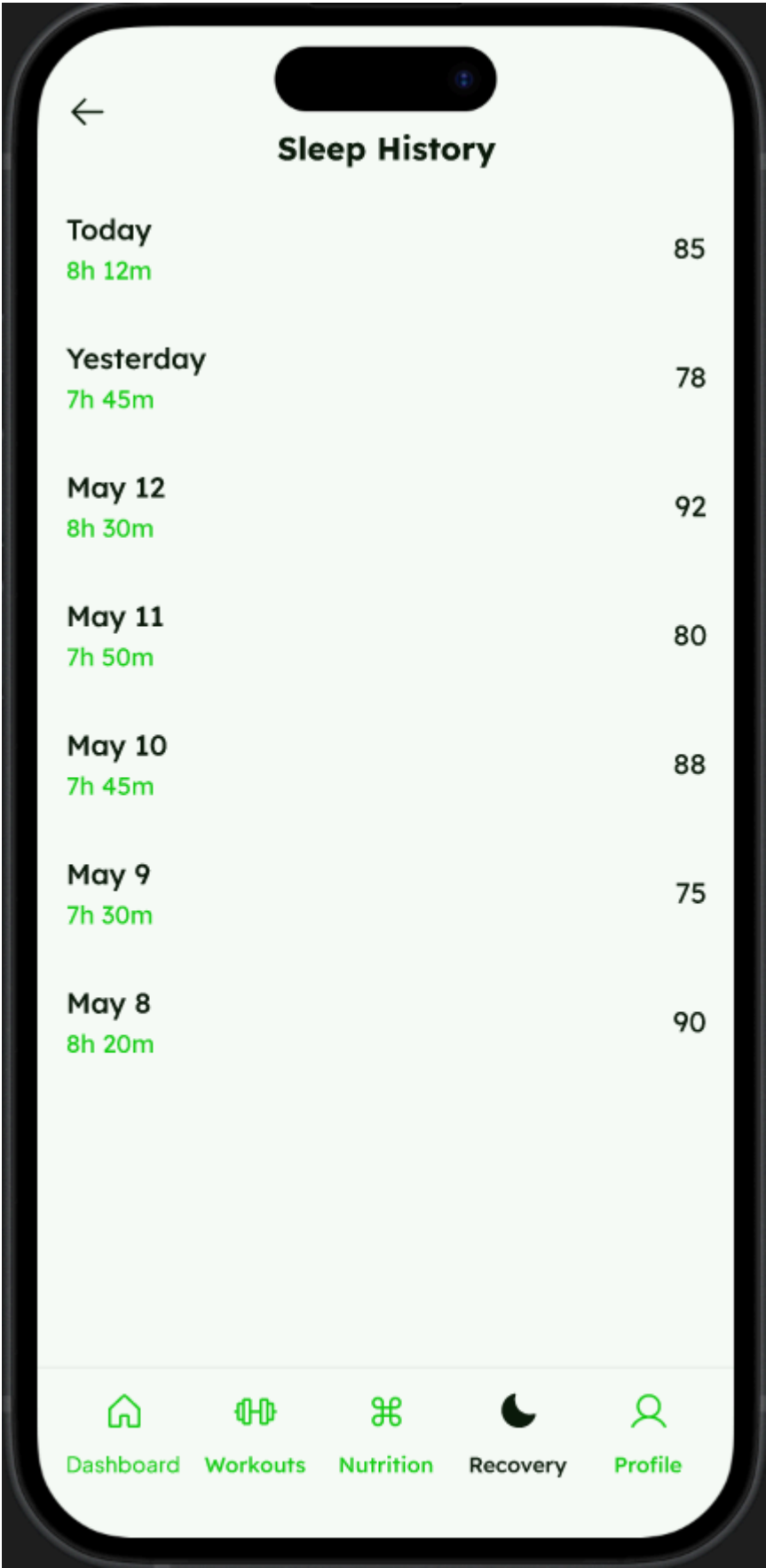
Recovery

Shows sleep analysis from last night, including total sleep duration, deep sleep, REM sleep, and a recovery score. A graph of sleep stages provides more detail. Percentage changes from the previous night are displayed in green (improvement) or red (decline). A History button lets users view past recovery trends.



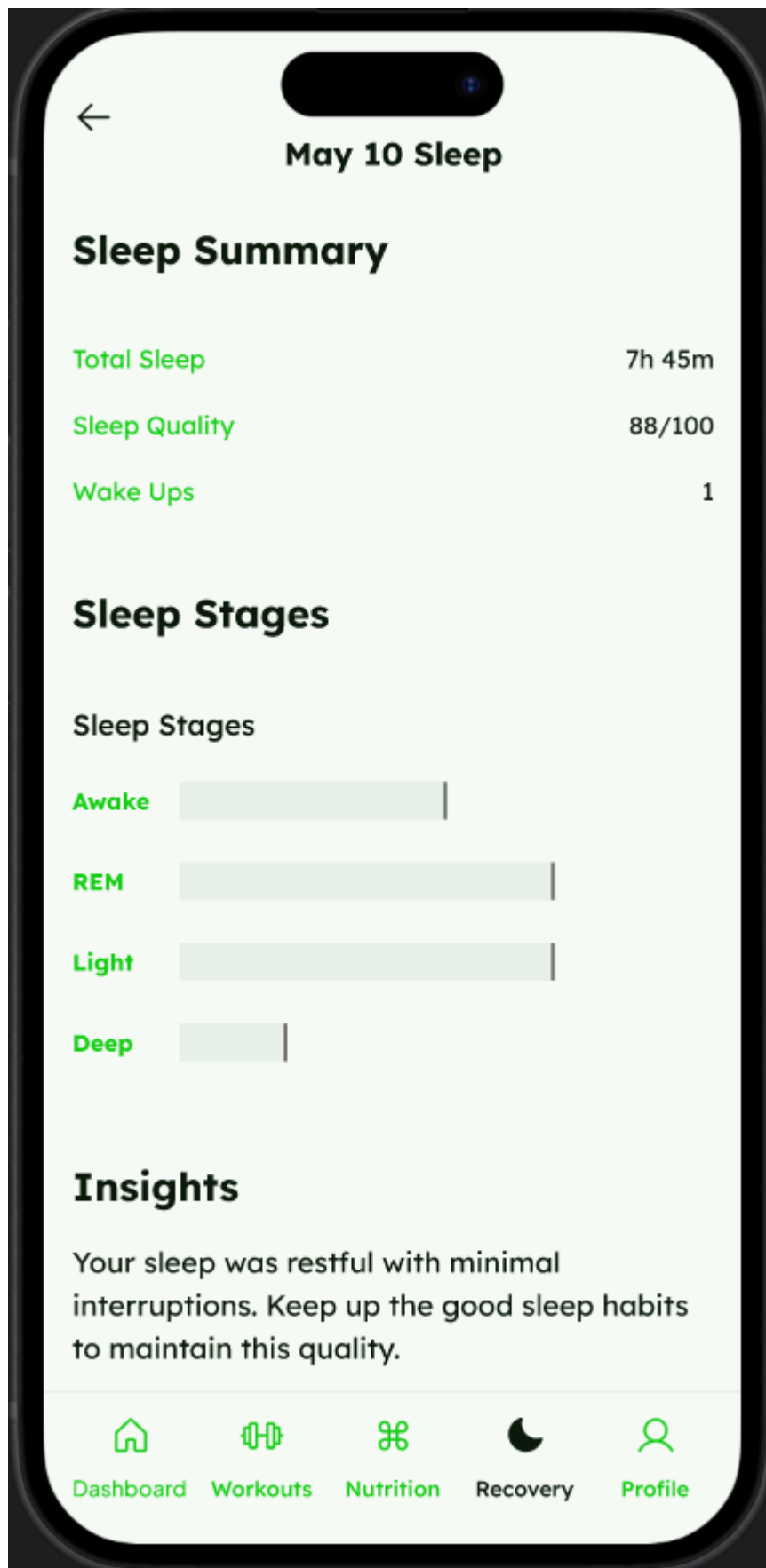
Recovery History

Displays a list of past nights' sleep data, showing date, total sleep duration, and recovery score. Users can scroll through previous entries to track progress and compare sleep quality across days.



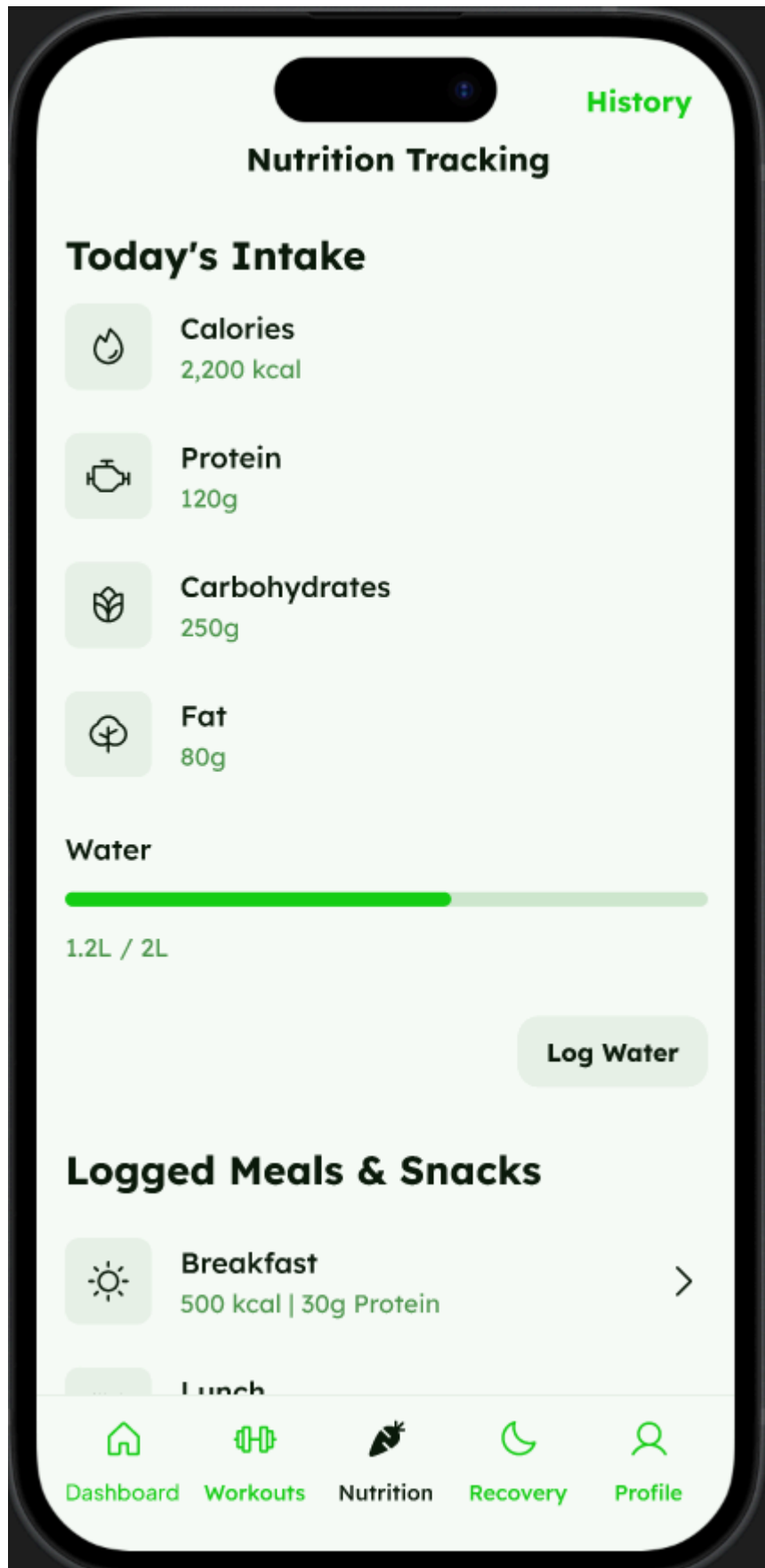
Recovery Day

Provides a detailed breakdown of a specific night’s sleep, including total sleep, quality score, and wake-ups. Visual bars show time spent in different sleep stages (Awake, REM, Light, Deep). An Insights section offers personalized feedback to help improve or maintain sleep quality.



Nutrition

Shows today's intake summary (calories, protein, carbs, fat), water progress with a "Log Water" button, logged meals with calories and protein per meal, a History button in the header, and micronutrient progress indicators (Vitamin D, Iron, Calcium, Magnesium). Tapping meals opens details/edit, Log Water increments water, and History navigates to past nutrition records. Full page can be seen in [nutrition.webm](#) video.



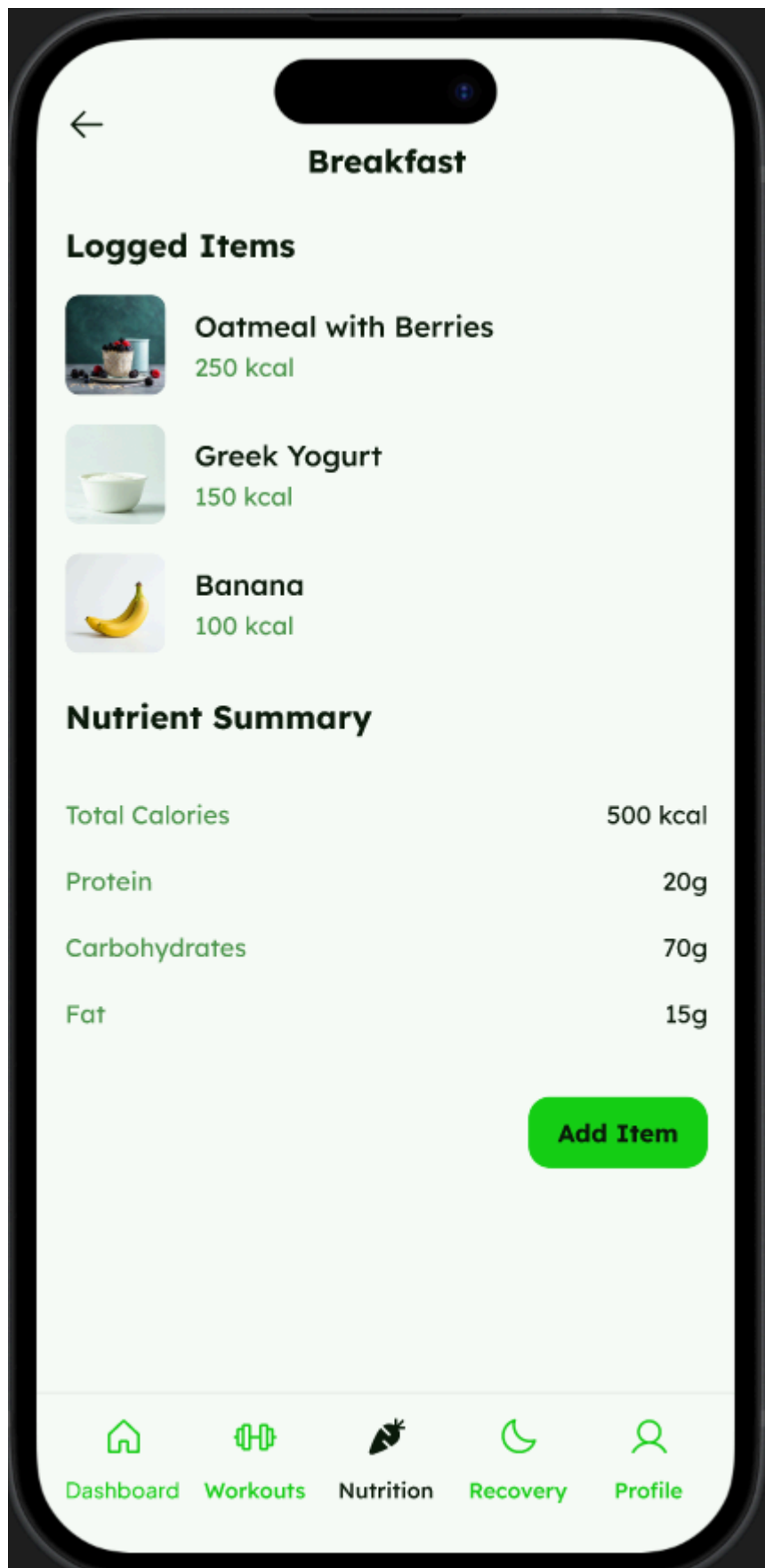
Nutrition history

A history screen showing macronutrient balance and micronutrient intake overview (status + last-30-days change) with small weekly trend charts, followed by a scrollable list of past daily summaries (date plus calories and protein). Tapping any daily entry opens that day's full nutrition summary (meals, macros, and micronutrient breakdown).



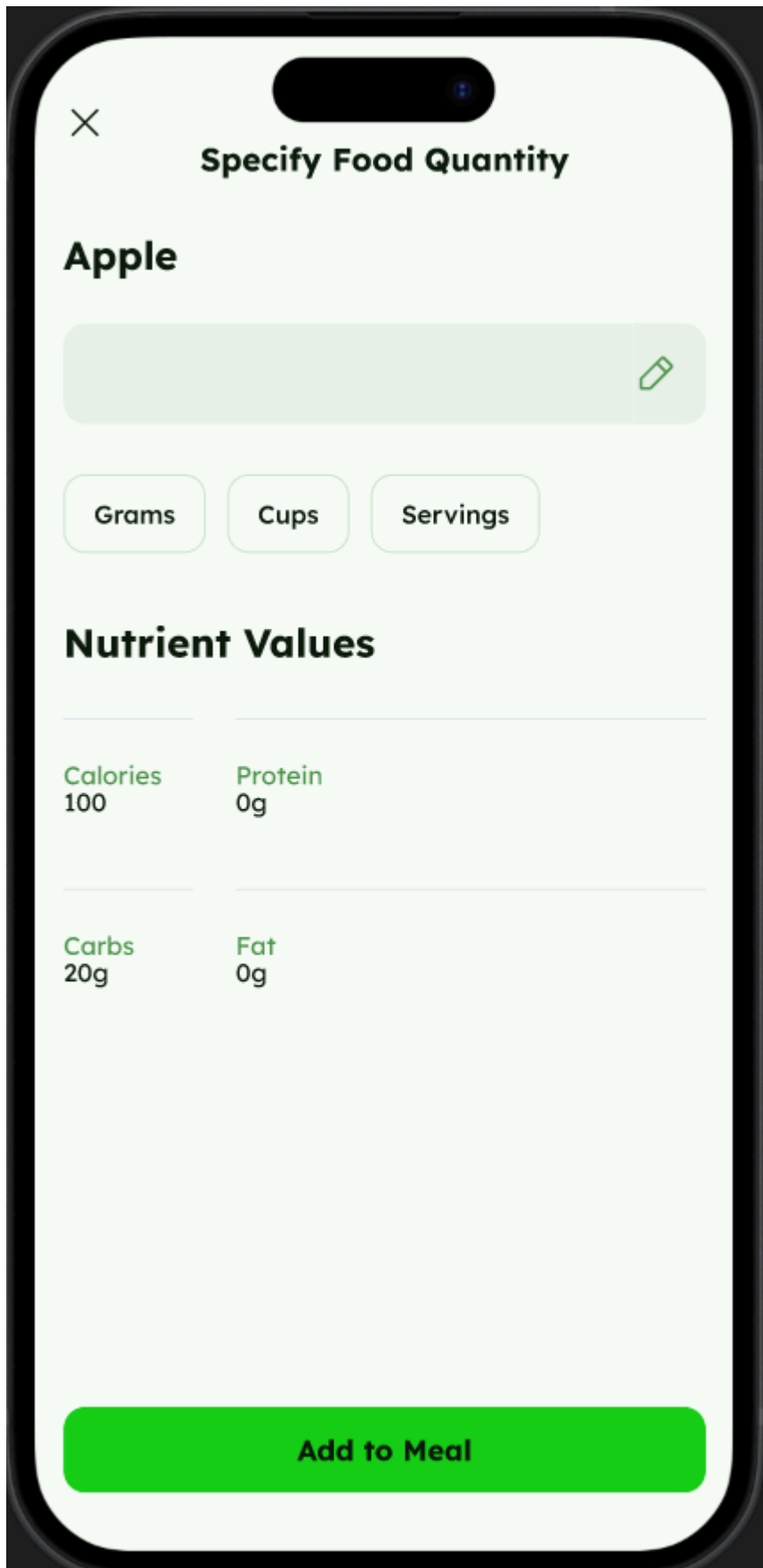
Nutrition tab

This page shows the details of a selected meal (here, Breakfast), listing logged food items with their calories, a nutrient summary of total calories, protein, carbs, and fat, and an option to add more items. Navigation to other sections is available at the bottom.



Food quantity

This page lets the user specify how much of a selected food (e.g., Apple) they are adding. They can choose units like grams, cups, or servings, and see the corresponding nutrient values (calories, protein, carbs, fat) update. A button at the bottom allows adding the chosen quantity to the meal.



User testing

Purpose

This user testing session aims to evaluate the usability and intuitiveness of the Strava+1 app. The app includes features like endurance workouts, sleep and nutrition tracking, and social interaction tools such as

chats and friend lists.

We've designed a set of wireframes for this app, and now we want to validate our assumptions by observing how real users interact with the prototype.

This is done using the Thinking Aloud Protocol, where users complete tasks while verbalizing their thoughts. This helps us identify pain points, misunderstandings, or friction in the design.

Our goal is to uncover usability issues early in the design process, so we can refine our interface before investing further in development.

Research objectives

- Evaluate onboarding flow: Can users easily create an account and start a workout?
- Assess social features: Are users able to find and use group chat and friend management functions?
- Understand data navigation: Can users find specific data (e.g., sleep or nutrition logs) without guidance?
- Assess overall clarity: Is the interface easy to understand, or do users struggle to interpret icons, labels, or navigation paths?

Target Users

A typical Strava+1 user:

- Exercises regularly (e.g., running, cycling, swimming)
- Is interested in tracking metrics like sleep and nutrition
- Wants to share and discuss progress with friends
- Has used apps like Strava, Nike Run Club, Fitbit, or MyFitnessPal before

User Tasks

For this test, I recruited two friends to simulate the typical user experience. Below are the five user tasks designed for this test. Each task includes a short scenario for context and a clear goal.

Test 1: First Experience with Strava+1

Scenario: You've heard of this new app, Strava+1, and decided to try it for your next running workout. You download it, open it, and want to use it for your next running session.

Objective: Create an account, finish a run workout, and view the results.

Test 2: Chat with friends

Scenario: You've heard your friends also installed and started using Strava+1. To make training more fun, you propose creating a group chat where you and your closest friends can share all the wild adventures, achievements, and stories from your workouts.

Objective: Create a group chat with your friends.

Test 3: Delete a friend

Scenario: You've just discovered some dirty secrets about your friend Larry the Lobster. After thinking it over, you decide you no longer want to stay connected with him on Strava+1. You open the app and look for a way to remove Larry from your friends list.

Objective: Unfriend Larry the Lobster.

Test 4: Share sleep data

Scenario: Your friend keeps saying you missed the greatest party ever on May 10th. To prove your point, you want to show that your sleep was way more important than any party. You open Strava+1 to check your sleep data for that night and plan to send a screenshot to your friend as evidence.

Objective: View your sleep data on May 10th.

Test 5: Update Nutrition List

Scenario: You suddenly remember that you forgot to log the apple you ate this morning. You don't want your nutrition tracking to be incomplete, so you quickly add it to your nutrition list before you forget again.

Objective: Add the missing apple to your breakfast nutrition list.

Results

The usability tests were largely successful. Both participants, Pepijn and Eran, were able to complete all assigned tasks and provided valuable feedback for potential improvements. Pepijn managed to complete all tests without any issues. His main suggestion was to display the date alongside completed workouts to make it easier for users to see when each activity took place. This feedback is both reasonable and aligns with typical user expectations for workout tracking applications.

Eran also completed the tests successfully, though he experienced some confusion during the second test involving the creation of a group chat. Initially, he navigated to the friends page instead of the chats overview, indicating that the chat creation option might not be immediately intuitive. He mentioned that it would have been nice if, from the friends page, users could already select and hold a friend to start creating a group chat. Additionally, when inside a specific chat, it would be useful to have a three-dotted menu button offering options such as unfriending, reporting, or adding new members to expand the chat.

In his own words, Eran also noted that it would be helpful if sleep history could be accessed by scrolling down or swiping, instead of tapping a separate button. He found the overall layout and style clear and visually appealing but suggested that small usability improvements, such as more intuitive group creation and gesture-based navigation, could enhance the experience further.

While these are minor suggestions, they highlight useful directions for future iterations of the app. Most notably, improving accessibility for chat-related actions and enhancing navigation between related pages, like sleep and chat interfaces, could lead to a smoother and more intuitive user experience.

Recordings

All screen + audio recordings are included in the user-tests-recordings folder. Please refer to:

- pepijn.mkv
- eran.mp4

Help Received

Pepijn and Eran assisted with user testing the functional design, providing valuable feedback that helped refine the design.

For the wireframes, I reached out to Roy, who had already done his project. He shared that he had used Google Stitch in combination with Figma and highly recommended it. I'm really glad I followed his advice, as Stitch made it incredibly easy to generate a solid design and export it directly to Figma. This saved me a lot of time and effort in the process!