

Health Track - Personal Health and Fitness Tracker

Study Project
Module Project Management

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1. Product Vision Board

Health Track is a mobile application designed to help users monitor, manage, and achieve their health and fitness objectives. The app prioritizes simplicity and functionality, providing a comprehensive set of tools to track daily activities, fitness routines, and overall well-being. It is tailored for individuals seeking an easy way to stay on top of their health goals.

Key Functionalities:

- **User Registration and Profile Management:** Create a personalized account to tailor health and fitness goals to your unique needs.
- **Health and Daily Activity Monitoring:** Keep track of daily steps, calorie consumption, hydration levels, sleep habits, and exercise routines efficiently.
- **Goal Setting and Progress Analysis:** Set realistic health targets and monitor achievements through progress summaries and insights.
- **Wearable Device Integration:** Seamlessly sync with smartwatches and other fitness devices to capture real-time data.
- **Alerts and Notifications:** Receive reminders to stay consistent with hydration, workouts, or other activities.
- **Visual Data Insights:** Use charts and dashboards to analyze trends and understand your health journey better.

Target Audience:

- Individuals looking to enhance or maintain their health and fitness.
- Fitness enthusiasts and occasional exercisers in search of a user-friendly app for tracking progress.
- Owners of wearable fitness devices seeking to maximize the utility of their collected data.

Unique Value: Health Track simplifies the fitness journey by offering a straightforward yet powerful platform, enabling users to make informed decisions about their health and empowering them to live healthier, more active lives.

Section	Description
Vision	Empower users to live healthier, more balanced lives by providing a personalized health tracking platform.
Target Group	Health-conscious individuals, fitness enthusiasts, and users with wearable devices seeking to improve their lifestyle.
Needs	<ul style="list-style-type: none">- Track physical activities (steps, exercise).- Monitor hydration, nutrition, and sleep.- Set and achieve fitness goals.- View progress insights to stay motivated.
Product	A mobile app that allows users to log activities, integrate with wearable devices, receive reminders, and view progress reports.
Business Goals	<ul style="list-style-type: none">- Attract 50,000 active users within the first year.- Partner with wearable device companies.- Generate revenue via premium subscriptions and ads.

Table 1: Product Vision Board

2. User Stories

User Story 1

User Story: As a user, I want to register and set up a profile so that I can access personalized health tracking features.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I am on the sign-up page,
When I enter my details and submit the form,
Then my account should be created, and I should land on the dashboard.
2. **Rule-Oriented:**
 - A valid email address is required for registration.
 - Passwords must have at least eight characters, including a number and a special character.

User Story 2

User Story: As a user, I want to log my daily steps so that I can monitor my physical activity and progress.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I am logged into the app,
When I sync my wearable device or manually input my steps,
Then the steps should appear in my daily activity summary.
2. **Rule-Oriented:**
 - Users can manually enter step counts but cannot exceed 50,000 steps per day.
 - The app must support syncing with at least two popular wearable devices.

User Story 3

User Story: As a user, I want to set hydration goals so that I can stay on top of my daily water intake.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to the hydration goals section,
When I set a target,
Then the app should remind me to drink water at regular intervals.
2. **Rule-Oriented:**
 - Users can set hydration goals between 1 and 5 liters per day.
 - Notifications must allow customization for timing and frequency.

User Story 4

User Story: As a user, I want to view progress charts so that I can see trends in my health data.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to the progress section,
When I select the weekly view,
Then it should display my activity data in a graphical format.
2. **Rule-Oriented:**
 - The app must support both weekly and monthly summaries.
 - Progress charts should update in real time when new data is logged.

User Story 5

User Story: As a user, I want to receive reminders for hydration and exercise so that I stay consistent with my goals.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I have set up reminders,
When it is time for a reminder,
Then the app should notify me via a pop-up or push notification.
2. **Rule-Oriented:**
 - Notifications must work even if the app is running in the background.
 - Users can snooze or dismiss reminders as needed.

User Story 6

User Story: As a user, I want to log calorie intake so that I can keep track of my diet.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to the calorie tracking section,
When I add food items,
Then the app should calculate the total calorie count for the day.
2. **Rule-Oriented:**
 - Users can add custom food items or select from a preloaded database.
 - Calorie data must be displayed in a clear and concise manner.

User Story 7

User Story: As a user, I want to track my sleep patterns so that I can identify areas for improvement.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I sync my wearable device,
When I check my sleep data,
Then it should display the total hours and quality of sleep.
2. **Rule-Oriented:**
 - Sleep tracking must include light, deep, and REM stages if supported by the device.
 - Manual entry must allow start and end times.

User Story 8

User Story: As a user, I want to integrate my smartwatch with the app so that activity data updates automatically.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I pair my smartwatch,
When data syncs,
Then my steps, calories, and other metrics should reflect accurately in the app.
2. **Rule-Oriented:**
 - The app must support three or more major smartwatch brands.
 - Data synchronization should be completed within 30 seconds.

User Story 9

User Story: As a user, I want to set exercise goals so that I can stay motivated to maintain a regular workout routine.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to the exercise goals section,
When I set a weekly or daily target,
Then the app should track and display my progress.
2. **Rule-Oriented:**
 - Users can set goals for at least three exercise types (e.g., cardio, strength training, yoga).
 - The app must notify users when they achieve their targets.

User Story 10

User Story: As a user, I want to view a weekly summary of my health activities so that I can evaluate my overall progress at a glance.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I select the weekly summary option,
When the summary loads,
Then it should display aggregated data for steps, hydration, calories, and sleep.
2. **Rule-Oriented:**
 - The summary must include visual graphs and key stats (e.g., averages and totals).
 - Users must be able to download the summary in a PDF format.

User Story 11

User Story: As a user, I want to receive personalized health insights so that I can make better decisions about improving my fitness and well-being.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I have logged my health activities for a week,
When I open the insights tab,
Then the app should provide actionable suggestions, such as increasing water intake or adjusting calorie targets.
2. **Rule-Oriented:**
 - Insights must be tailored based on logged data from at least two health metrics.
 - The app must provide tips in simple, non-technical language.

User Story 12

User Story: As a user, I want to participate in group challenges so that I can stay motivated through friendly competition.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I join a step challenge,
When I check the challenges tab,
Then I should see my rank and progress compared to others.
2. **Rule-Oriented:**
 - Each group challenge must support up to 20 participants.
 - Participants must receive notifications when they achieve milestones in the challenge.

User Story 13

User Story: As a user, I want to adjust notification preferences so that I only receive reminders that are relevant to me.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to notification settings,
When I enable or disable specific reminders,
Then only the selected notifications should be active.
2. **Rule-Oriented:**
 - The app must allow users to enable or disable reminders for each metric (e.g., hydration, exercise).
 - Notification frequency must be customizable (e.g., hourly, daily).

User Story 14

User Story: As a user, I want to export my health data so that I can share it with my doctor or fitness trainer.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I access the data export feature,
When I select a date range,
Then the app should generate a downloadable file in the chosen format.
2. **Rule-Oriented:**
 - The app must support CSV and PDF export options.
 - Users must be able to specify a start and end date for exported data.

User Story 15

User Story: As a user, I want to earn badges for reaching milestones so that I feel rewarded and motivated to continue.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I reach a milestone (e.g., 10,000 steps in a day),
When I open the rewards section,
Then the app should display a badge for that achievement.
2. **Rule-Oriented:**
 - The app must offer badges for at least five milestones (e.g., hydration, calories, steps).
 - Users must be able to view earned badges on their profile.

User Story 16

User Story: As a user, I want to track different types of exercises so that I can log and monitor various workout routines.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I start a new exercise session,
When I select the activity type,
Then the app should record metrics specific to that activity.
2. **Rule-Oriented:**
 - Users must be able to log at least five types of exercises (e.g., running, cycling, yoga).
 - Each activity must have tailored metrics such as duration and calories burned.

User Story 17

User Story: As a user, I want to receive weekly motivational messages so that I feel encouraged to stay consistent with my health goals.

Acceptance Criteria:

1. Scenario-Oriented:

- **Given** I have enabled motivational messages,
When a new week begins,
Then the app should send an encouraging message or quote.

2. Rule-Oriented:

- The app must provide at least 20 unique motivational messages to avoid repetition.
- Users must have the option to enable or disable this feature in the settings.

User Story 18

User Story: As an admin, I want to manage user accounts so that I can address issues such as policy violations or data corrections.

Acceptance Criteria:

1. Scenario-Oriented:

- **Given** I access the admin dashboard,
When I search for a user account,
Then I should be able to view, edit, or deactivate the account.

2. Rule-Oriented:

- Admins must be able to reset passwords and update user details.
- All actions performed by admins must be logged for audit purposes.

User Story 19

User Story: As an admin, I want to view system performance metrics so that I can ensure the application runs smoothly.

Acceptance Criteria:

1. Scenario-Oriented:

- **Given** I am on the admin dashboard,
When I check the system metrics tab,
Then I should see data such as server uptime, API response times, and error logs.

2. Rule-Oriented:

- Metrics must refresh automatically every 60 seconds.
- Any critical issues should be highlighted in red for quick attention.

User Story 20

User Story: As a user, I want to delete my account so that I can ensure my personal data is no longer stored in the system.

Acceptance Criteria:

1. Scenario-Oriented:

- **Given** I navigate to the account settings,
When I select the delete account option and confirm the action,
Then my account and associated data should be permanently removed.

2. Rule-Oriented:

- The app must display a confirmation prompt before proceeding with account deletion.
- Deleted accounts must be removed from all databases within 48 hours.

User Story 21

User Story: As a user, I want to invite my friends to join the app so that I can create a group and share fitness goals with them.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I access the invite friends feature,
When I share the invitation link via email or social media,
Then my friends should receive a link to download the app and join my group.
2. **Rule-Oriented:**
 - Invitation links must expire after 7 days for security reasons.
 - Users must have the option to resend the invitation if needed.

User Story 22

User Story: As a user, I want to manage my wearable device connections so that I can add, update, or remove devices easily.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I navigate to the device management section,
When I select a device,
Then I should be able to pair, unpair, or update its settings.
2. **Rule-Oriented:**
 - The app must support managing multiple devices simultaneously.
 - Device compatibility must be clearly listed in the app's settings.

User Story 23

User Story: As a user, I want to participate in wellness surveys so that I can receive personalized tips to improve my health.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I complete a wellness survey,
When I submit my answers,
Then the app should provide tailored recommendations based on my responses.
2. **Rule-Oriented:**
 - Surveys must cover topics like sleep, hydration, and fitness routines.
 - Recommendations must be generated within 10 seconds of survey completion.

User Story 24

User Story: As a user, I want to join local fitness events so that I can stay motivated and connect with others in my area.

Acceptance Criteria:

1. **Scenario-Oriented:**
 - **Given** I search for fitness events,
When I find one and register,
Then the app should display event details and send me a reminder.
2. **Rule-Oriented:**
 - Events must include options to RSVP or cancel registration.
 - Registered users must receive reminders 24 hours before the event.

User Story 25

User Story: As a user, I want to access a FAQ section so that I can quickly find answers to common questions.

Acceptance Criteria:

1. Scenario-Oriented:

- **Given** I navigate to the FAQ section,
When I search for a specific topic,
Then the app should display relevant answers.

2. Rule-Oriented:

- FAQs must be categorized for easy navigation (e.g., Account, Tracking, Devices).
- Search results must be displayed within 2 seconds.

3. Estimation and Ordering of User Stories

3.1. Estimating User Stories

Planning Poker was used to estimate the effort required for each user story. Story points, based on the Fibonacci sequence (1, 2, 3, 5, 8, 13), were assigned to represent the relative effort, complexity, and uncertainty of each task.

Story Points Description

- **1 Point:** Very simple tasks with minimal effort and no uncertainty.
- **2 Points:** Straightforward tasks requiring some effort.
- **3 Points:** Moderately complex tasks with minimal dependencies.
- **5 Points:** Tasks of significant complexity or effort, requiring coordination.
- **8 Points:** High-complexity tasks with substantial uncertainty or risk.
- **13 Points:** Very large tasks that might need splitting into smaller stories.

User Story ID	Story Points	Reasoning (Optional for Clarity)
User Story 1	3	Standard functionality with low complexity.
User Story 2	5	Requires integration with wearable devices.
User Story 3	3	Straightforward with custom notifications.
User Story 4	5	Data visualization involves moderate complexity.
User Story 5	3	Notifications are low complexity.
User Story 6	5	Calorie tracking and preloaded database add effort.
User Story 7	8	Involves wearable integration and sleep analysis.
User Story 8	5	Moderate effort for device pairing functionality.
User Story 9	5	Requires tracking multiple workout types.
User Story 10	8	Aggregating and visualizing multiple data metrics.
User Story 11	8	Generating personalized insights adds complexity.
User Story 12	5	Group challenge logic and notifications.
User Story 13	3	Simple notification preference settings.
User Story 14	5	Requires export functionality in multiple formats.
User Story 15	3	Simple badge-based rewards system.
User Story 16	5	Moderate effort for logging diverse exercises.
User Story 17	3	Low complexity for sending motivational messages.
User Story 18	8	Admin functionality with account management.
User Story 19	8	Real-time system metrics with critical alerts.
User Story 20	5	Data deletion and compliance requirements.
User Story 21	3	Simple invitation and link-sharing feature.
User Story 22	5	Device management requires multiple options.
User Story 23	5	Personalized recommendations from surveys.
User Story 24	5	Event search and registration logic.
User Story 25	3	FAQ section with categorization is simple.

Table 1: User Story Estimations

3.2. Ordering User Stories

Approach: The team evaluated the user stories based on their business value, ensuring that the most impactful features are prioritized. Stories were sorted by considering:

1. **User Needs:** Features essential for users to achieve their fitness and health goals.
2. **Competitive Advantage:** Stories that align with the app's core functionality and help differentiate it in the market.

Priority	User Story ID	Description	Reason for Priority
1	User Story 1	As a user, I want to register and create a profile so that I can personalize my health tracking.	Registration is essential for accessing the app, making it the highest priority.
2	User Story 2	As a user, I want to log my daily steps to monitor my physical activity.	Step tracking is a core feature and a primary reason users would engage with the app.
3	User Story 3	As a user, I want to set hydration goals to ensure I drink enough water each day.	Hydration goals support daily health routines and user engagement.
4	User Story 5	As a user, I want reminders for hydration and exercise to stay consistent with my goals.	Notifications are vital for building user habits and maintaining engagement.
5	User Story 4	As a user, I want to view progress charts to analyze trends in my health data.	Progress visualization adds value by helping users monitor and analyze their activities.
6	User Story 8	As a user, I want to sync my smartwatch with the app to automate activity tracking.	Wearable integration improves convenience and expands the app's functionality.
7	User Story 6	As a user, I want to log my calorie intake to keep track of my diet.	Diet tracking is a key feature for users focusing on holistic health management.
8	User Story 7	As a user, I want to track my sleep patterns to improve my sleep quality.	Sleep monitoring addresses an important aspect of overall health.
9	User Story 10	As a user, I want a weekly summary of my health metrics to evaluate overall progress.	Summaries provide valuable insights for users reviewing their performance.
10	User Story 11	As a user, I want personalized health insights to make informed decisions about my fitness.	Personalized insights help differentiate the app and add significant user value.
11	User Story 12	As a user, I want to join group challenges to stay motivated and engage with others.	Challenges enhance motivation and foster a sense of community.
12	User Story 15	As a user, I want to earn badges for milestones to feel rewarded for my efforts.	Gamification increases user retention and satisfaction.
13	User Story 13	As a user, I want to customize notifications to receive only relevant reminders.	Customization improves user control and overall app experience.
14	User Story 14	As a user, I want to export my health data to share it with my doctor or trainer.	Data export offers flexibility for users who consult health professionals.
15	User Story 9	As a user, I want to set exercise goals to maintain a consistent workout routine.	Goal tracking supports users' fitness objectives effectively.
16	User Story 16	As a user, I want to log various exercises to monitor my workout routines effectively.	Tracking diverse exercises adds depth to the app's functionality.
17	User Story 17	As a user, I want motivational messages to stay consistent with my health journey.	Motivational content adds inspiration and helps maintain consistency.

18	User Story 18	As an admin, I want to manage user accounts to address any issues or policy violations.	Admin tools are important for ensuring smooth app operation.
19	User Story 19	As an admin, I want system performance metrics to maintain app reliability.	Monitoring performance is crucial for app stability and maintenance.
20	User Story 20	As a user, I want to delete my account to ensure my personal data is no longer stored.	Account deletion is necessary for compliance and user trust.
21	User Story 21	As a user, I want to invite friends to join the app to create a group and share fitness goals.	Invitations promote app adoption and user engagement.
22	User Story 22	As a user, I want to manage my wearable device connections to add, update, or remove devices.	Device management ensures flexibility and usability for diverse users.
23	User Story 23	As a user, I want to complete wellness surveys to receive personalized health tips.	Surveys provide actionable recommendations, adding value to users' health plans.
24	User Story 24	As a user, I want to join local fitness events to stay motivated and connect with others.	Events enhance user engagement and community building.
25	User Story 25	As a user, I want to access a FAQ section to quickly find answers to common questions.	A FAQ section improves user support and reduces barriers to app usage.

Table 2: Ordering User Story

All 25 user stories have been prioritized by their business value to ensure the app delivers maximum impact and aligns with the needs of the target audience. Core features like registration, activity tracking, and notifications are given higher priority, while less critical features are placed lower on the list.

3.3. Definition of an MVP

The Minimum Viable Product (MVP) is the most basic version of the app that delivers core functionality, allowing users to experience its value while gathering feedback for further development. The MVP focuses on essential features required for health tracking and engagement, prioritizing user stories with high business value and usability.

Approach

To define the MVP, the team evaluated each user story based on:

1. **Core Functionality:** Features that are fundamental for the app's purpose, such as tracking health metrics.
2. **User Engagement:** Features that keep users motivated and ensure frequent interaction with the app.
3. **Ease of Implementation:** Features that can be delivered within a short timeframe while maintaining high quality.

User Story ID	Description	Justification
User Story 1	As a user, I want to register and create a profile so that I can personalize my health tracking.	Registration is essential for user onboarding and accessing the app's features.
User Story 2	As a user, I want to log my daily steps to monitor my physical activity.	Step tracking is a core functionality and a primary reason users will use the app.

User Story 3	As a user, I want to set hydration goals to ensure I drink enough water each day.	Hydration tracking is a key feature for daily health management.
User Story 4	As a user, I want to view progress charts to analyze trends in my health data.	Progress visualization enhances the app's usability and keeps users engaged.
User Story 5	As a user, I want reminders for hydration and exercise to stay consistent with my goals.	Notifications encourage users to maintain consistent health routines.
User Story 6	As a user, I want to log my calorie intake to keep track of my diet.	Diet tracking is essential for comprehensive health management.
User Story 8	As a user, I want to sync my smartwatch with the app to automate activity tracking.	Integration with wearable devices improves user experience and makes tracking effortless.
User Story 10	As a user, I want a weekly summary of my health metrics to evaluate overall progress.	Weekly summaries provide valuable insights to users, enhancing their fitness journey.
User Story 13	As a user, I want to customize notifications to receive only relevant reminders.	Customization ensures users can tailor the app to meet their specific needs, improving satisfaction.

Table 3: MVP User Stories

Justification

1. Comprehensive Tracking:

- Stories like step tracking, calorie logging, and hydration goals are foundational for health tracking.

2. User Engagement:

- Features like reminders, progress charts, and weekly summaries keep users motivated and engaged.

3. Seamless Integration:

- Wearable device synchronization ensures real-time tracking, appealing to modern users.

4. Flexibility and Control:

- Customizable notifications give users the freedom to adapt the app to their preferences.

Exclusions from the MVP

The following features were excluded from the MVP as they are not critical for initial user adoption:

- Advanced insights (User Story 11): Requires complex algorithms and can be added after gathering initial user feedback.
- Gamification (User Story 15): Badges and rewards, while engaging, are secondary to core health tracking.
- Admin functionalities (User Stories 18 & 19): These are vital for maintenance but don't directly impact end-users initially.

The selected stories for the MVP focus on delivering the app's core value proposition—tracking and managing health metrics effectively. By prioritizing essential features, the MVP ensures a balance between usability, user engagement, and development feasibility.