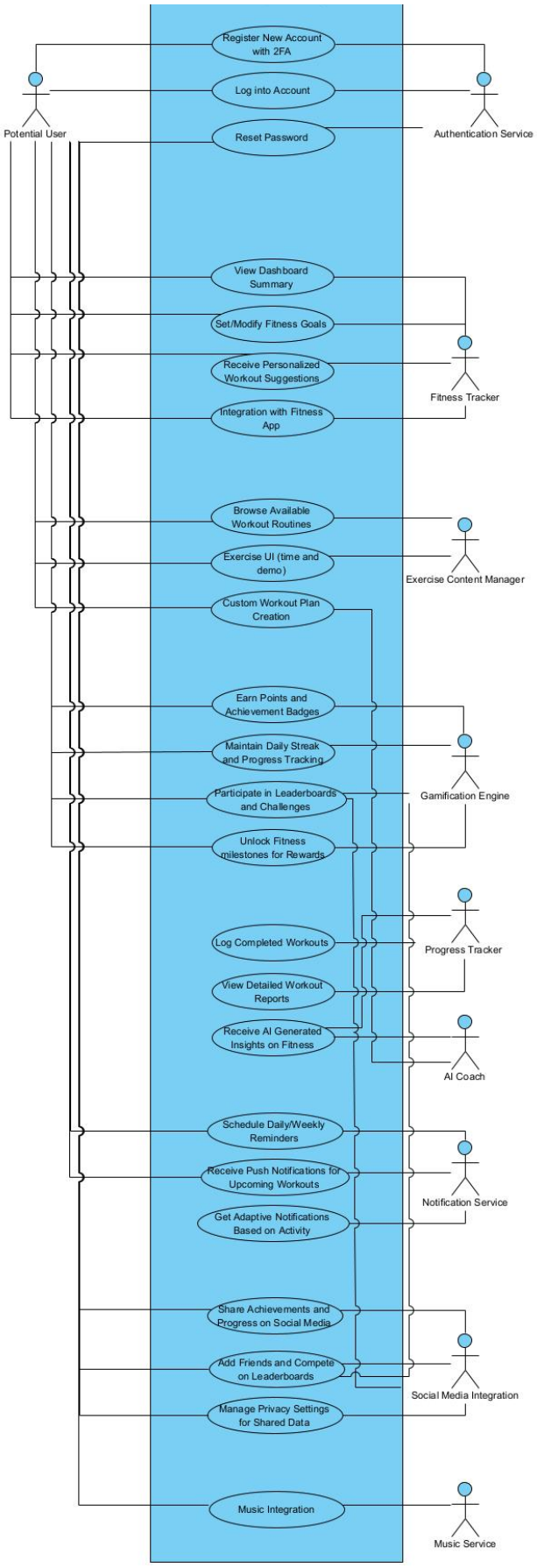
Use Case Diagram



Use Case Descriptions

Use case ID:	1.1		
Use case Name:	**Register a new Account**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Authentication Service
Description:	This use case allows users to create a new account using email/password or third-party authentication services like Google or Apple.
Preconditions:	• Users must have internet connection. • Users must have authentication services available. • The Email/Account mentioned must not be registered with another account
Postconditions:	• Users are successfully registered and can log-in. • User credentials are securely stored and encrypted. • User receives a confirmation email or message.
Priority:	High
Frequency of Use:	Once per new user
Flow of events:	1. User selects “Sign Up”. 2. System prompts for email, password, and optional third-party authentication. 3. Prompts user if the Email/Account mentioned is registered with another account. 4. User inputs required credentials. 5. System encrypts and stores user credentials. 6. System validates credentials. 7. System sends confirmation email. 8. User verifies account. 9. Account is created, and the user is redirected to the dashboard.
Alternative Flows:	AF-1: If the email is already registered, the system prompts the user to log in instead.
Exceptions:	EX-1: If the internet connection fails, the system displays an error message.
Includes:	• User identity verification. • Password Encryption.

Special Requirements:	• Two-Factor Authentication (2FA) must be available as an option.
Assumptions:	• Users will provide valid credentials.
Notes and Issues:	• Possible delays in email verification delivery.

Use case ID:	1.2		
Use case Name:	**Log into Account**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Authentication Service
Description:	Allows users to log into their accounts using email/password or third-party authentication.
Preconditions:	• User must have a registered account. • The system must have authentication services enabled.
Postconditions:	• User is successfully authenticated and gains access to their dashboard. • Authentication tokens are securely store
Priority:	High
Frequency of Use:	Every time user logs in.
Flow of events:	1. User selects “Login”. 2. System prompts for credentials. 3. User enters email/passwords or selects third-party login. 4. System validates credentials. 5. If valid, system generates an authentication token. 6. User is redirected to the dashboard.
Alternative Flows:	AF-1: If user forgets the password, they can request a password reset.
Exceptions:	EX-2: If login fails due to incorrect credentials, an error message is displayed.
Includes:	• User identity verification. • Password Encryption.
Special Requirements:	• Must support 2FA.
Assumptions:	• Users will remember their login credentials.
Notes and Issues:	

Use case ID:	1.3		
Use case Name:	**Reset Password**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Authentication Service
Description:	Allows users to securely reset their password.
Preconditions:	• User must have a registered account. • User must have access to their email.
Postconditions:	• Password is reset successfully. • User can login with the new password.
Priority:	High
Frequency of Use:	When user forgets their password
Flow of events:	1. User selects “Forgot Password”. 2. System prompts for email verification. 3. User receives an email with reset link. 4. User clicks the link and sets new password. 5. System updates the stored password securely.
Alternative Flows:	AF-1: If user doesn’t receive an email, they can request another one.
Exceptions:	EX-2: If the email is not associated with an account, the user will be notified.
Includes:	• User identity verification.
Special Requirements:	• Must support 2FA.
Assumptions:	• Users will remember their login credentials.
Notes and Issues:	Email delivery issues might delay the reset process.

Use case ID:	1.4		
Use case Name:	**Encryption enable Two-factor Authentication (2FA)**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Authentication Service
Description:	Provides additional security by enabling Two-factor Authentication (2FA) .
Preconditions:	• User must be logged into their account. • User must have a valid phone number or authentication app.
Postconditions:	• 2FA is enabled for future logins. • User receives verification codes for secure login.
Priority:	Medium
Frequency of Use:	Once, per user setup.
Flow of events:	1. User navigates to security settings. 2. User enables 2FA. 3. System prompts for a phone number or authentication app setup. 4. User verifies their phone/app using a code. 5. System confirms 2FA activation.
Alternative Flows:	AF-1: If user doesn't have access to a phone, email-based is provided.
Exceptions:	EX-4: if the user enters a wrong code, the system prompts them to try again.
Includes:	• User identity verification.
Special Requirements:	• Compliance with security practices.
Assumptions:	• Users will follow security guidelines.
Notes and Issues:	Lost 2FA devices can lock users out.

Use case ID:	2.1		
Use case Name:	**Display daily goals, achievements, and exercise history, progress**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • System
Description:	Displays user progress, fitness goals, and exercise history.
Preconditions:	• The user must be logged in. • The system has stored fitness data.
Postconditions:	• User sees updated fitness statistics and history.
Priority:	High
Frequency of Use:	Regular, every session.
Flow of events:	1. User navigates to the dashboard. 2. System retrieves fitness data. 3. Dashboard displays: a. Daily goals b. Achievements c. Work out history. d. AI-based recommendations.
Alternative Flows:	AF-1: If no data is available, the system suggests setting up fitness tracking.
Exceptions:	EX-2: If system fails to sync, an error message is displayed.
Includes:	• AI recommendations • Progress Tacking
Special Requirements:	• Dashboard updates in real-time.
Assumptions:	• Users actively track their fitness data.
Notes and Issues:	• Potential inconsistencies with third-party data sync.

Use case ID:	2.2		
Use case Name:	**Suggestions**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • AI coach
Description:	Provides AI-based fitness suggestions.
Preconditions:	• User must have stored fitness data.
Postconditions:	• User sees updated fitness statistics and history.
Priority:	Medium
Frequency of Use:	On-demand
Flow of events:	1. User requests fitness suggestions. 2. AI analyzes pervious workouts. 3. AI recommends a new workout or improvement plan.
Alternative Flows:	AF-2: If insufficient data available, AI provides general fitness advice.
Exceptions:	EX-3: If AI service is unavailable, system displays default workouts.
Includes:	• AI-Driven insights
Special Requirements:	• Requires machine learning model for recommendations.
Assumptions:	• Users trust AI-generated advice.
Notes and Issues:	• AI-generated advice must align with best fitness practices.

Use case ID:	2.3		
Use case Name:	**Modify Goals**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • System
Description:	Allows users to modify their goals
Preconditions:	• User must be logged in.
Postconditions:	• Users' fitness goals are updated.
Priority:	Medium
Frequency of Use:	On-demand
Flow of events:	1. User selects "Modify Goals". 2. System retrieves existing goals. 3. User input's new goal parameters. 4. System updates and saves the new goals.
Alternative Flows:	AF-1: If user cancels, no changes are made.
Exceptions:	EX-2: If system fails to update, an error message is displayed.
Includes:	none
Special Requirements:	Real-time goal tracking
Assumptions:	Users update goals based on progress.
Notes and Issues:	Prevent unrealistic goal setting.

Use case ID:	2.4		
Use case Name:	**Integration with fitness apps**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Fitness Tracker
Description:	Allows users to integrate third-party fitness apps (Apple Fitness, Fitbit, etc) with the system.
Preconditions:	• User must have fitness app account.
Postconditions:	• Users' fitness data syncs with the system.
Priority:	Low
Frequency of Use:	Once per setup, then automatic sync.
Flow of events:	1. User selects "Connect Fitness App". 2. System prompts for authorization. 3. User grants access. 4. System syncs data from the fitness app.
Alternative Flows:	AF-2: If authorization fails, user is prompted to retry.
Exceptions:	EX-4: If fitness app API is down, syncing is delayed.
Includes:	
Special Requirements:	Must comply with third-party API policies.
Assumptions:	Users have active fitness app accounts.
Notes and Issues:	none

Use case ID:	3.1		
Use case Name:	**Exercise Routine**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Exercise Content Manager
Description:	Allows users to browse and follow pre-defined exercise routines.
Preconditions:	• User must be logged in. • Exercise library must be available.
Postconditions:	• Users can view and start an exercise routine.
Priority:	High
Frequency of Use:	Regular
Flow of events:	1. User selects “Exercise Routines.” 2. System displays categorized exercises. 3. User selects an exercise and starts the routine. 4. System tracks progress and provides feedback.
Alternative Flows:	AF-3: If routine is unavailable, system suggests an alternative.
Exceptions:	EX-1: If video content fails to load, user is prompted to retry.
Includes:	Custom Workout plan creation
Special Requirements:	Must support video and text-based instructions.
Assumptions:	Users prefer guided workouts.
Notes and Issues:	High-resolution video content requires significant storage.

Use case ID:	3.2		
Use case Name:	Text Instructions, Timers, and Video Demonstrations		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Exercise Content Manager
Description:	Provides instructional content, timers, and video demonstrations for workouts.
Preconditions:	• User must be logged in. • Exercise content must be available.
Postconditions:	• Users can access guided instructions for workouts. • Users can set timers and follow video demonstrations.
Priority:	High
Frequency of Use:	Every workout session
Flow of events:	1. User selects an exercise routine. 2. System displays text instructions. 3. User starts the workout, and the system activated timers and videos.
Alternative Flows:	AF-1: If the video does not load, users can follow text-based instructions.
Exceptions:	EX-1: If no internet connection, system notifies user that video playback is unavailable.
Includes:	AI-powered Recommendations.
Special Requirements:	Must support offline access for text-based guidance.
Assumptions:	Users benefit from multimedia learning.
Notes and Issues:	Video buffering delays may impact user experience.

Use case ID:	3.3		
Use case Name:	Custom Workout Plan Creation		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Exercise Content Manager
Description:	Allows users to create and customize their own workout plans.
Preconditions:	• User must be logged in. • System must provide a workout customization interface.
Postconditions:	• User-defined workout plans are saved.
Priority:	Medium / Low
Frequency of Use:	On-demand
Flow of events:	1. User selects “Create Custom Workout Plan.” 2. System provides available exercise options. 3. User selects exercises and set preferences (duration, intensity, repetitions). 4. System saves the custom plan. 5. User can start and follow the customizes workout.
Alternative Flows:	AF-4: If user cancels, no changes are saved.
Exceptions:	EX-4: If system fails to save the workout, an error message is displayed.
Includes:	AI-powered Recommendations.
Special Requirements:	Must support cloud storage for cross-device access.
Assumptions:	Users have different fitness goals and prefer customization.
Notes and Issues:	Need to prevent unrealistic workout configurations.

Use case ID:	3.4		
Use case Name:	AI-Powered Recommendations		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • AI Coach
Description:	Provides AI-driven recommendations for personalized workouts.
Preconditions:	• User must have previous workout history stored. • System must have AI analysis enabled.
Postconditions:	• Users receive personalized recommendations for workouts.
Priority:	Low
Frequency of Use:	On-demand
Flow of events:	1. User requests an AI-based workout recommendation. 2. AI analyzes past workout data and user preferences. 3. AI suggests a new workout plan. 4. User reviews and accepts/rejects the plan.
Alternative Flows:	AF-2: If data is insufficient, AI provides generic recommendations.
Exceptions:	EX-2: If AI processing fails, the system provides standard workout plans.
Includes:	Progress Tracking
Special Requirements:	Requires machine learning model integration.
Assumptions:	Users trust AI-generated recommendations.
Notes and Issues:	AI recommendations need continuous improvement based on user feedback.

Use case ID:	4.1		
Use case Name:	**Earn points and badges**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Gamification Engine
Description:	Rewards users with points and badges based on fitness achievements.
Preconditions:	• User must be logged in. • The gamification engine must be active/enabled.
Postconditions:	• Users earn points and achievement badges for completing exercises.
Priority:	Medium
Frequency of Use:	Daily
Flow of events:	1. The user completes a workout. 2. The system evaluates performance. 3. The system awards points and unlocks badges.
Alternative Flows:	AF-3: Milestone Challenges o Users unlock challenges after reaching a milestone.
Includes:	Leaderboard System
Exceptions:	EX-2: If gamification system fails, rewards and stored and applied later.
Special Requirements:	• Rewards and Achievements must be visually appealing to users.
Assumptions:	• Users are motivated by competition and rewards.
Notes and Issues:	• Need for fair scoring mechanisms to prevent exploitation.

Use case ID:	4.2		
Use case Name:	**Streaks and Progress Bars**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Gamification Engine
Description:	Tracks user workout streaks and displays progress bard for motivation.
Preconditions:	• User must be logged in. • The gamification engine must be active/enabled.
Postconditions:	• User streaks are updated and visualized.
Priority:	Medium
Frequency of Use:	Daily
Flow of events:	1. User completes a workout. 2. System updates streak count. 3. System visually represents streaks using progress bars
Alternative Flows:	AF-2: If user breaks a streak, system provides motivational prompts.
Includes:	Earn Points and Badges
Exceptions:	EX-2: If gamification system fails, rewards and stored and applied later.
Special Requirements:	• Progress bards should be updated in real-time.
Assumptions:	• Users are motivated maintain streaks
Notes and Issues:	• Risk of user frustration if streaks reset unexpectedly.

Use case ID:	4.3		
Use case Name:	**Leaderboards and Community**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Gamification Engine • Social Media Integration
Description:	Allows users to compete with others through leaderboards and participate in community challenges.
Preconditions:	• User must be logged in. • The leaderboard feature must be enabled.
Postconditions:	• User rankings are updated based on workout performance. • User can compare scores with friends.
Priority:	Medium
Frequency of Use:	Daily/Weekly
Flow of events:	1. User completes a workout. 2. System updates leaderboard 3. User can view and compare rankings. 4. Users can challenge friends to improve rankings.
Alternative Flows:	AF-3: If user does not want to participate, they can opt-out of leaderboards.
Includes:	Streaks and Progress Bars
Exceptions:	EX-2: If leaderboard fails to update, system notifies users.
Special Requirements:	Must support social media sharing
Assumptions:	Users find leaderboard motivating.
Notes and Issues:	Privacy concerns regarding ranking visibility.

Use case ID:	4.4		
Use case Name:	**Milestone Unlock Challenges**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Gamification Engine
Description:	Unlocks new challenges when users reach fitness milestones.
Preconditions:	• User must be logged in. • The gamification engine must be active/enabled.
Postconditions:	New challenges are unlocked when fitness milestones are reached.
Priority:	Low
Frequency of Use:	On milestone completion
Flow of events:	1. User completes a fitness milestone. 2. System identifies a milestone achievement. 3. New challenges or badges are unlocked.
Alternative Flows:	AF-2: If no new challenges are available, system provides alternative rewards.
Includes:	Earn Points and Badges
Exceptions:	EX-2: If milestone tracking fails, user is notified.
Special Requirements:	Must dynamically generate new challenges.
Assumptions:	Users will be motivated to complete challenges.
Notes and Issues:	Need for variety in milestone challenges to maintain engagement.

Use case ID:	5.1		
Use case Name:	**Log Workouts**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Progress Tracker
Description:	Allows users to log completed workouts, tracking duration, calories burned, and steps.
Preconditions:	• The user is logged in. • The system has access to fitness tracking data.

Postconditions:	• The users' fitness progress is recorded. • Progress statistics are updated in the system.
Priority:	High
Frequency of Use:	Every workout session.
Flow of events:	1. The user completes a workout session. 2. The system logs the workout duration, calories burned, and steps. 3. The system updates streaks and records progress. 4. Users can view the logged workout on the dashboard.
Alternative Flows:	AF-2: If the user manually logs a workout, they enter details themselves.
Exceptions:	EX-2: If the fitness tracker sync fails, the system prompts the user to try again later.
Includes:	AI-Driven Insights
Special Requirements:	Must support third-party fitness tracker integrations.
Assumptions:	Users will consistently log workouts.
Notes and Issues:	Sync failures may lead to missing workout data.

Use case ID:	5.2		
Use case Name:	**View Detailed Workout Reports**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Progress Tracker
Description:	Allows users to view completed workouts, tracking duration, calories burned, and steps).
Preconditions:	• The user is logged in. • The system has access to logged workout data.
Postconditions:	• User can view historical workout data in graphical format.
Priority:	Medium
Frequency of Use:	On-demand
Flow of events:	1. User navigates to the progress tracking section. 2. System retrieves stored workout history. 3. System displays: a. Calories burned per session.

	b. Workout duration trends. c. Graphical representation of fitness progress.
Alternative Flows:	AF-2: If no prior workout exists, the system prompts the user to log workouts.
Exceptions:	EX-2: If system fails to retrieve workout history, an error message is displayed.
Includes:	AI-Driven Insights
Special Requirements:	Data visualization must be interactive and user-friendly.
Assumptions:	Users will prefer graphical representations of data.
Notes and Issues:	Large data logs may affect system performance.

Use case ID:	5.3		
Use case Name:	**Receive AI-Generated Insights on Fitness Trends**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Progress Tracker • AI coach
Description:	Provides AI-generated insights and recommendations based on workout trends.
Preconditions:	• The user must have previously logged workout sessions. • The system must have AI analytics enabled.
Postconditions:	• AI suggests ways to optimize workout routines. • System provides trend-based fitness recommendations.
Priority:	Low
Frequency of Use:	On-demand or periodically

Flow of events:	1. User requests AI-generated fitness insights. 2. AI analyses past workout data. 3. AI provides feedback on workout intensity, patterns, and improvements. 4. User reviews insights and adjusts their workout routine if needed.
Alternative Flows:	AF-3: If not enough data is available, AI provides general fitness tips.
Exceptions:	EX-2: If AI analysis fails, system provides default workout recommendations.
Includes:	• Workout Logging • Progress Reports
Special Requirements:	AI must continuously improve based on user feedback.
Assumptions:	Users value AI-driven coaching.
Notes and Issues:	AI-generated insights must be personalized to avoid generic suggestions.

Use case ID:	6.1		
Use case Name:	**Schedule Daily or Weekly Workout Reminders**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Notification Service
Description:	This use case allows users to set up workout based on daily or weekly preferences.
Preconditions:	• The user must have notification permission enabled on the device. • User must configure reminder preferences.
Postconditions:	• Reminders are scheduled and stored in the system. • User receives workout reminders based on the selected schedule.
Priority:	Medium / Low

Frequency of Use:	Configured by user preference.
Flow of events:	1. User navigates to reminder settings. 2. User selects daily or weekly workout reminders. 3. System saves the selected schedule. 4. Notifications are sent to remind the user before the workout.
Alternative Flows:	AF-4: If users cancel or modify the reminder, the system updates the schedule accordingly.
Exceptions:	Ex-4: If notifications are disabled, the system prompts the user to enable them.
Includes:	None
Special Requirements:	System must support push notifications and email notifications.
Assumptions:	Users will follow scheduled reminders.
Notes and Issues:	Users may ignore notifications over time.

Use case ID:	6.2		
Use case Name:	**Receive Push Notifications for Upcoming Workouts**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Notification Service
Description:	Sends push notifications to remind users about upcoming workouts.
Preconditions:	• User must have an active workout schedule. • Notifications must be enabled on the device.
Postconditions:	• User receives timely workout reminders.
Priority:	Medium / Low
Frequency of Use:	As per workout schedule.
Flow of events:	1. System checks upcoming workout schedules. 2. System sends a push notification to the user.

	3. User acknowledges or dismisses the push notification.
Alternative Flows:	AF-1: If a user reschedules a workout, notifications are updated accordingly.
Exceptions:	Ex-4: If notifications fail, system retires sending.
Includes:	None
Special Requirements:	Must integrate with mobile operating system notifications.
Assumptions:	Users will respond to push notifications.
Notes and Issues:	Too many notifications may lead to user frustration.

Use case ID:	6.3		
Use case Name:	**Get Adaptive Notifications Based on Inactivity**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Notification Service • AI coach
Description:	Sends adaptive notifications to encourage workouts if the user has been inactive for a period.
Preconditions:	• System must track user activity. • AI coach must analyze inactivity trends.
Postconditions:	User receives motivational notifications based on inactivity.
Priority:	Medium / Low
Frequency of Use:	Adaptive, based on inactivity patterns.
Flow of events:	1. System monitors user activity levels.

	2. If inactivity is detected, the system sends a reminder. 3. AI coach suggests motivational content or workouts.
Alternative Flows:	AF-1: If a user dismisses multiple notifications, frequency is reduced.
Exceptions:	Ex-4: If AI fails to analyze inactivity, system will use default notification scheduling.
Special Requirements:	Must be configurable to avoid excessive notifications.
Includes:	None
Assumptions:	Users benefit from adaptive reminders.
Notes and Issues:	Needs balance to avoid notification fatigue.

Use case ID:	7.1		
Use case Name:	**Share Achievements and Progress on Social Media**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Social Media Integration
Description:	This use case allows users to share fitness achievements and workout progress on social media platforms.
Preconditions:	• The user must be logged in. • Social media account must be linked. • System must have access to social media APIs.
Postconditions:	• The user can share fitness achievements on selected platforms. • The user receives confirmation of the successful post.
Priority:	Low
Frequency of Use:	User-driven (On-demand)
Flow of events:	1. The user selects an achievement or progress milestone to share. 2. The system formats the for social media sharing. 3. The user confirms sharing to the selected platform. 4. The system posts the update and provides a confirmation.
Alternative Flows:	AF-3: Privacy Settings. • The user can choose to share the progress privately or publicly.
Exceptions:	EX-3: Social Media API failure. • If the post fails, the system displays an error message.
Includes:	Privacy settings Management

Special Requirements:	• Must integrate with major social media platforms (Facebook, Instagram, Strava, Twitter). • User privacy settings must be customizable.
Assumptions:	• Users want to share their fitness achievements with friends. • Users are comfortable linking their social media accounts.
Notes and Issues:	• Privacy concerns regarding public sharing of data.

Use case ID:	7.2		
Use case Name:	**Add Friends and Compete on Leader boards**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Social Media Integration • Gamification Engine
Description:	This use case allows users to add friends, connect with them. And compete on leaderboards.
Preconditions:	• The user must be logged in. • Social media account must be linked. • Leaderboard system must be active.
Postconditions:	• User can view friends' rankings on leaderboards. • User can send and accept friend requests.
Priority:	Medium
Frequency of Use:	On-demand
Flow of events:	1. User navigates to the leaderboard or friend's section. 2. System displays suggested friends based on existing connections. 3. User sends a friend request. 4. If accepted, user can compare fitness progress with friends. 5. System updates leaderboard rankings in real-time.
Alternative Flows:	AF-4: If user declines a friend request, no connection is made.
Exceptions:	EX-2: Social Media API failure. • If the post fails, the system displays an error message.

Includes:	• Leaderboard Rankings • Gamification Achievements
Special Requirements:	• Must integrate with major social media platforms (Facebook, Instagram, Strava, Twitter). • User privacy settings must be customizable.
Assumptions:	• Users enjoy friendly competition.
Notes and Issues:	• Potential privacy concerns with leaderboard visibility.

Use case ID:	7.3		
Use case Name:	**Manage Privacy Settings for Shared Data**		
Created By:	Socratees Harshia	Last Updated by:	Socratees Harshia
Date Created:	02 Feb 2025	Date last updated:	04 Feb 2025

Actors:	• User • Social Media Integration
Description:	This use case allows users to manage the privacy settings of their shared fitness shared.
Preconditions:	• The user must be logged in. • Privacy settings feature must be accessible.
Postconditions:	• User updates privacy settings successfully. • Future shared content follows the updated privacy preferences.
Priority:	High
Frequency of Use:	On-demand
Flow of events:	1. User navigates to the privacy settings. 2. System displays available sharing options. (Public, friends only, private) 3. User selects a preferred privacy level. 4. System saves and applies the new privacy settings.
Alternative Flows:	AF-3: If user resets privacy settings, system reverts to default preferences.
Exceptions:	EX-2: If settings fail to update, system displays error message.
Includes:	• Shared Achievements • Add Friends

Special Requirements:	Must comply with data protection laws.
Assumptions:	Users want control over their shared fitness data.
Notes and Issues:	Misconfiguration could lead to unintended data exposure.