

Use Case Descriptions

1. Create User Profile

Name: Create User Profile

Description: The user would like to create a profile with the intent of registering the user's basic information and set up a username(e-mail) and password. The goal of this process is to authenticate the user and gain access to the application.

Basic Flow:

1. The User provides information like: e-mail, full name, password, date of birth and height.
2. The User confirms the provided information.
3. Profile is created successfully and data is stored in a persistence entity.
4. User concludes profile creation and moves to main screen of the application.

Alternate Flow:

- 1a. Information provided is not accepted by the System: e-mail format is invalid or existent, date of birth is invalid etc...
 1. System blocks the "Register" option and asks The User to correct the information provided.
 2. Asks User to login, in the case his/her e-mail is existent.
- 1b. User cancels the profile creation.
 1. System returns to the initial login screen/closes application.

Actors:

Non-Registered User – User does not have a pre-existing profile.
System Entity – receives and verifies the provided information.
Persistence Entity – receives the profile information.

Preconditions:

The user wants to create a new profile (if one doesn't already exists).

Postconditions:

The user's account is created and valid to log in. The main screen of the application is displayed.

2. Import Activity Data

Name: Import Activity Data

Description: The user would like to add their activity data to the application from an external source.

Basic Flow:

1. Registered User signals intent to system to import activity data
2. System asks Source Enumerator which sources are available
3. Registered User specifies the source of the data from a list of available sources
4. System instructs Data Parser to import data from Data Source to Persistence Entity

Alternate Flow:

- 2a. There are no available supported sources.
 1. System signals to user that there are no supported sources available
- 2b. User cancels the import
 1. System returns to the previous state prior to signalling their intent to import data.
- 4a. The data source was disconnected before the user selected it
 1. System signals to the user that the selected device is no longer available.
- 4b. Data Parser is not successful
 1. Data Parser signalled that the source is no longer available. Advise user that the source must remain plugged in.
 2. Data Parser signalled that it did not understand the source. Advise user that the source is not comprehensible and to check the condition of the source.

Actors:

Registered User – has preexisting account and is logged in

Persistence Entity – receives the imported information

Source Enumerator – this entity discovers and enumerates import sources

Data Parser – this entity exchanges data from the source to the persistence entity

Data Source – this is a device that contains records of activity

Preconditions:

The user must have an account and they must be logged in.

The persistence entity must exist and be initialized.

Postconditions:

The data must have been imported from the device into the persistence entity.

The user's account must still be valid and logged in.

3. Display Activity Statistics

Name: Display activity statistics

Description: The user would like to display activity data as well as statistics regarding this data so they can analyze their activities and gain insight on it. They would also like to be able to sort this data and display it for convenience.

Basic Flow:

1. Registered User signals intent to view activity data
2. System pulls the relevant data from a database
3. Statistics, such as pace are calculated from the data
4. System displays the data and statistics in a neat form

Alternate Flow:

- 2a Database does not contain any records of the activity
 1. System displays a message notifying the user
- 2b System can not connect to the database
 1. System displays an error message
- 4a. User selects a different metric to sort data
 1. System sorts data with respect to that metric
 2. System displays data in the sorted order
- 4b. User sets up a different length of lap (such as 1km, 2km etc)
 1. System recalculates statistics
 2. System displays data

Actors:

Registered User – has preexisting account and is logged in

Persistence Entity – receives the intent to display activity

Data Source – this entity contains records of the activity

Data Parser – this entity exchanges data from the database to the persistence entity

Preconditions:

The user must have an account and they must be logged in.

The persistence entity must exist

Postconditions:

System must have displayed the activity information with the option to set up laps and sort the data differently

4. Manage Activity Data

Name: Manage Activity Data

Description: The user would like to manually change recorded information about their activity. They will signal their intent to change recorded information, and the program will give the user a way to add, modify, or delete information manually.

5. Connect With Other Users

Name: Connect With Other Users

Description: The user would like to declare a relationship with another user of the program. The user will choose another user from the list of known users and formally request an association. The other user will be prompted to accept or reject the association. Once established, the association will enable either user to view the other's activity data.