

Comp 2005
Assignment 2

Features:

1. The app supports running activity tracking: Records distance traveled, running pace, calories burned, etc.
2. Support multiple devices (mobiles, tablets, smart watches...) and is able to import data.
3. The app supports social interaction: Add friends and share data.
4. User data persistence: The app stores all recorded activity, and user profile information, including added friends.
5. The app supports additional activities besides running, like skating, cycling, etc.
6. The app provides a list of registered users
7. Aggregate activity data: The app is able to filter and present gathered data in different ways, including charts and reports.

Use Case:

Name: Connect with Other Users

Priority: This Use Case is given priority because without it, one of the features in the traceability matrix would not have been fulfilled. This feature (List Users) is an important feature as it forms part of the client's request.

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.

Basic Flow:

1. User 1 clicks on the list of other users to view it.
2. User 1 finds another user (User 2) on the list and want to connect with them.
3. User 1 sends an association request to the User 2.
4. The User 2 accepts the association request.
5. Association between the two users is recorded in persistence entity.
6. Both users can now view each other's data

Alternate Flow:

- 1a. User 2 does not accept the association request sent by User 1.
 1. User 1 is informed that association request is rejected.
 2. Users 1 and 2 cannot view each other's data.
- 1b. The User does not find anyone they would like to connect with.
 1. User exits to the main menu.

Actors:

Registered User – User must have a valid (active) profile.

System Entity – receives and verifies the provided information.

Persistence Entity – receives the profile information.

Preconditions:

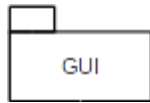
Users must have an active (valid) profile to appear on Users List.

Postconditions:

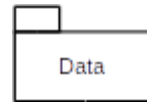
Users 1 and 2 are now connected. Both users can view each other's data / statistics

Traceability Matrix:

	<u>Support running activities</u>	<u>Support multiple devices</u>	<u>Social interaction</u>	<u>Data persistence</u>	<u>Additional activities</u>	<u>List users</u>	<u>Aggregate activity data</u>
Create user profile			x	x			
Import activity data	x	x		x	x		
Display activity statistics	x		x		x		x
Manage activity data	x			x	x		x
Connect with other users			x	x	x	x	

Modules:

The GUI module handles the interface and includes all necessary files that implements it.



The Data module stores and manages the recorded and imported data.

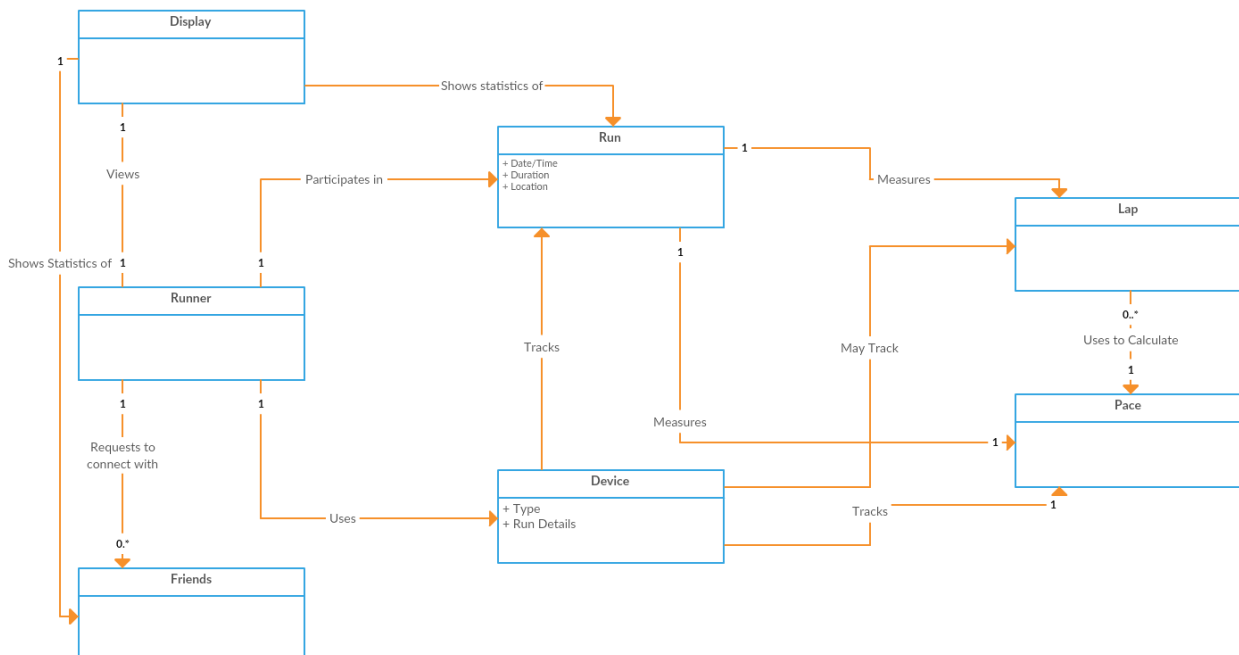


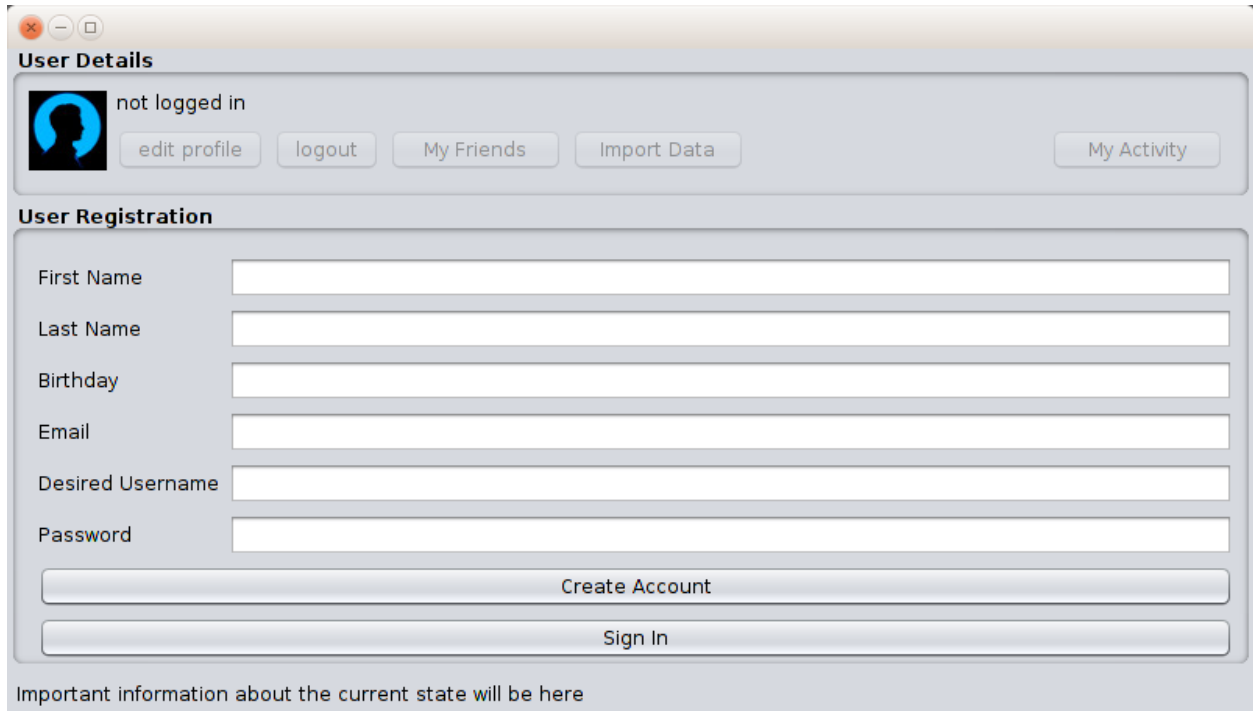
The User module handles the data pertaining to user, such as profile information and the user's friend list.



The Activity module stores the tools and utilities necessary to record the user's activities.

Activity Tracker Application Domain Model



GUI Prototype:

A GUI prototype for a user registration form. The window has a title bar with standard OS controls. The main content is divided into two sections: 'User Details' and 'User Registration'. The 'User Details' section shows a user profile icon, the text 'not logged in', and buttons for 'edit profile', 'logout', 'My Friends', 'Import Data', and 'My Activity'. The 'User Registration' section contains input fields for 'First Name', 'Last Name', 'Birthday', 'Email', 'Desired Username', and 'Password'. Below these fields are two buttons: 'Create Account' and 'Sign In'. At the bottom of the window, there is a placeholder text: 'Important information about the current state will be here'.

User Details

not logged in

edit profile logout My Friends Import Data My Activity

User Registration

First Name

Last Name

Birthday

Email

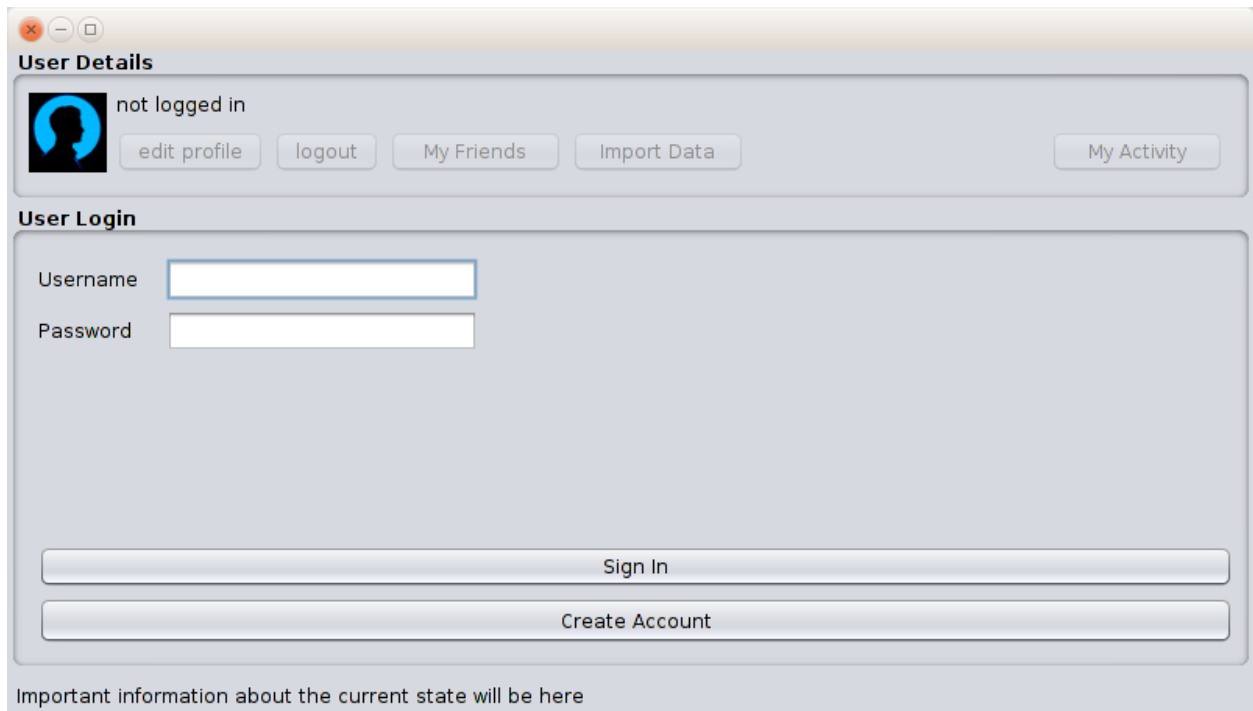
Desired Username

Password

Create Account

Sign In

Important information about the current state will be here



A GUI prototype for a user login form. The window has a title bar with standard OS controls. The main content is divided into two sections: 'User Details' and 'User Login'. The 'User Details' section shows a user profile icon, the text 'not logged in', and buttons for 'edit profile', 'logout', 'My Friends', 'Import Data', and 'My Activity'. The 'User Login' section contains input fields for 'Username' and 'Password'. Below these fields are two buttons: 'Sign In' and 'Create Account'. At the bottom of the window, there is a placeholder text: 'Important information about the current state will be here'.

User Details

not logged in

edit profile logout My Friends Import Data My Activity

User Login

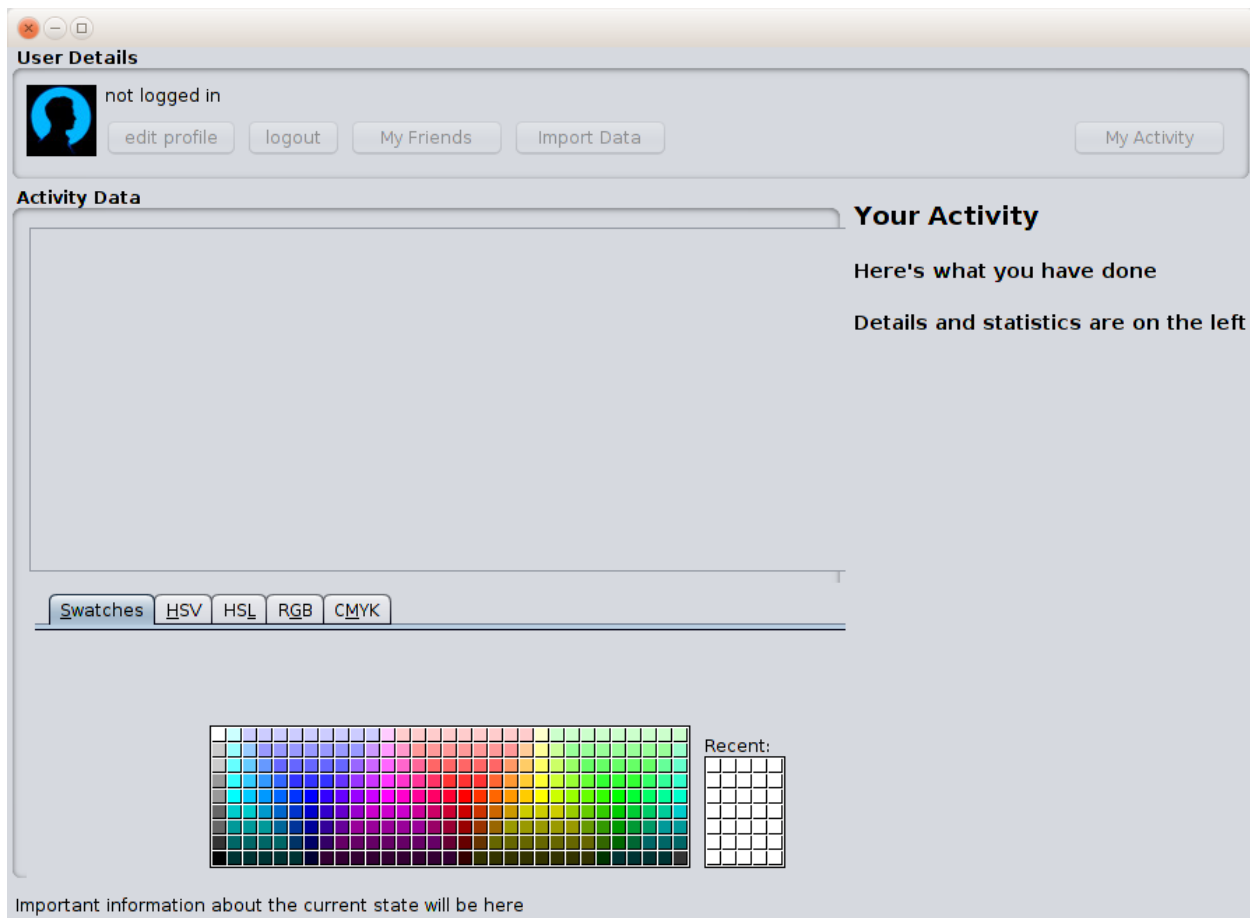
Username

Password

Sign In

Create Account

Important information about the current state will be here



The source code for this GUI implementation can be found on the GitHub repository.

<https://github.com/AA-Ibrahim/Comp-2005-Project/tree/master/ActivityTracker>