AWK's Fitness Tracker

Final Report

Presented by Willit Chao, Ariel Jacob Wazana & Kevin Judal

Table of Contents

Project Aim and Description

Our project will be a mobile application done in Flutter and Dart. This application will be a Fitness Tracker. This mobile fitness application will assist users in tracking their fitness goals, monitoring their physical activity, healthiness, and providing insights on their overall health and wellbeing.

Functional and Non-functional Requirements

1. Logo/ Splash screen

Simply put, a splash screen will appear whenever you start the application, briefly displaying the logo of the app before leading the user to the registration/login.

2. Login page/sign in/sign up/ forget password/reset password/

After the splash screen, the user will be directed toward the registration page where they can decide to log in with an existing account, or create a new one.

3. Robustness (User credentials authentication)

The user authentication is fairly simple: if the user inputs the wrong password, or the user does not exist, nothing will happen and they will not have access to the application's features.

4. User profile settings/update/change the pic, etc.

In the settings, you may change your username, weight and height and save those changes, which will be updated into the database.

5. Home page/landing page

Once the user logs in, they will be sent to the homepage in which a random quote will be displayed as a source of inspiration for the user.

6. Navigation menu (bottom up, side navigable)

To navigate around the application, the user has at their disposal a drawer navigation where they can either drag the left side of the application, or click on the triple bar icon to display the drawer. From there, the user may select which tabs they would like to access, from the Physical Tracking to the Settings. Additionally, the drawer will also display their username.

7. Database CRUD operations (SQLite)

For the database CRUD operations, in the settings page, you can save your settings by clicking the “Save Settings” button and view previous saved database entries by clicking the “Update shown database entries” button. You will now see the DB entries and can click the edit icon to be transported to a page to edit them or the delete icon to delete that db entry. CRUD operations are also used in the login and registration portion of the application.

8. API fetching

For the API fetching, we use a simple quote generating API for our random inspirational quote on the homepage.

9. Notifications

For the notifications, there is a simple clickable floating button that will send a notification with a message to motivate the user to work hard.

10. Location awareness (Google maps,)

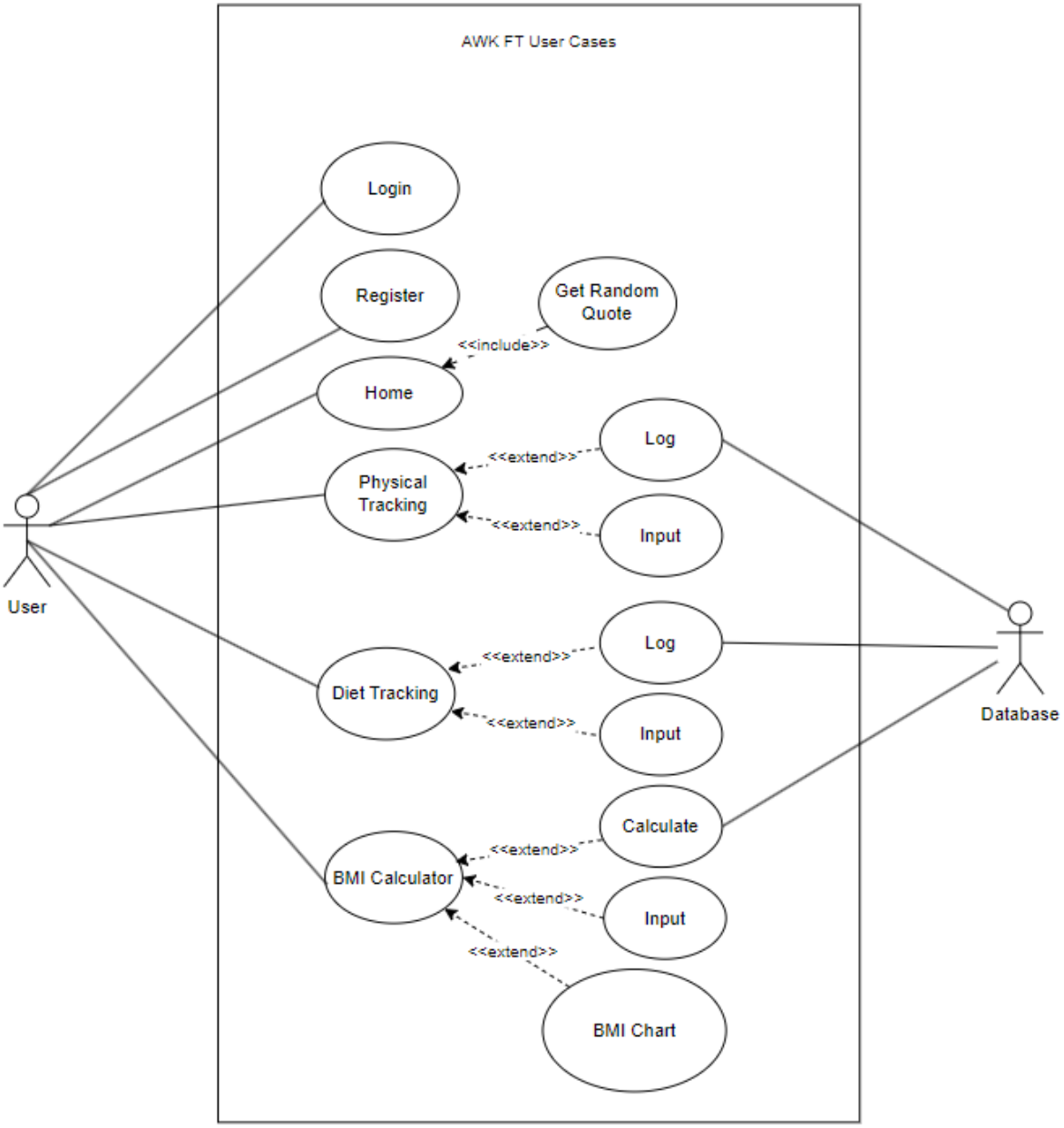
Unfortunately, this could not be implemented in time. However, the plan for this feature was to simply grab the user’s current location using google maps API and geolocation package and display it on their profile.

User Stories & Cases

Stories

As a…	I want to…	So I can…
User	Log in	Access the application
User	Register	Create an account to store my data and login
User	Access the drawer navigation	Access the tracker sections
User	Access Physical Tracking Section	Input and log my records
User	Access Diet Tracking Section	Input and track my diet
User	Access BMI Calculator	Calculate my BMI and compare it to the BMI chart

Cases


AWK FT User Cases
Login
Register
Get Random Quote
<<include>>
Home
Log
<<extend>>
Physical Tracking
<<extend>>
Input
User
Log
<<extend>>
Diet Tracking
<<extend>>
Input
Database
Calculate
<<extend>>
BMI Calculator
<<extend>>
Input
<<extend>>
BMI Chart

Test Cases

Test Case ID	Test Case Name	Description	Test Data	Expected Result	Status Pass/Fail
1	Registration	Add an account and checking if it registered in the database	User: wazanaBro@gmail.com Pass: racer1234	Being able to login with the newly created account.	Pass
2	Navigation	Navigating around the application with the drawer	Scrolling down and around	Being able to access all features and still being able to pull the drawer.	Pass
3	Login	Logging in with an existing account.	User: ariel@gmail.com Pass: cool1	Being able to enter the application	Pass
4	Home Page generating quote	API generates a new code whenever the homepage is accessed	Reloading home page	A new quote is generated.	Pass
5	Login with wrong credentials	Log into the application with the wrong user/password	User: ariel@gmail.com Pass: cool2	Nothing happens.	Pass
6	BMI Chart tab view	Check if the BMI chart is accessible.	Clicked BMI Chart Ta	Being able to access the BMI Chart tab in the BMI Section	Pass
7	User edit	Changing the settings and saving them	New user: ariel New pass: cool3 New weight: 150 New height: 190	The changes were saved and the user display the new data	Pass
8	Data recorded	Inputting the data in Physical/Diet Tracking and	Food: Corn on the cob Portions: 2	The inputted logs are recorded in the database	Pass

		having them saved.	Calories: 180		
9	Notification Pop-up	User gets a notification once the button is clicked.	Floating action button press	A notification is sent to your phone displaying the message “Keep working hard”	Pass

Responsibilities

Willit Chao: Sidebar, Physical Tracking, BMI Page, Diet Tracking, Quote API Fletching

Ariel Jacob Wazana: Splash Screen, Login & Registration, Notifications, CRUD Settings, Location, UI adjustments

Kevin Judal: Database ERD, Database Design