

# Mobile Apps Development Report

## App Name: Daily Health Buddy

Prepared by:

**NAME:** MUHAMMAD SAFWAN BIN OMAR

**MATRIC NO:** 2023893378

**GROUP:** KCDCS1104C

## Table of Contents

1. Project Background .....	3
2. Problem Statement .....	3
3. Project Objective .....	4
4. Project Scope .....	5
5. Features of the App .....	6
6. Related Mobile App (Comparison) .....	6
7. Application Design / Storyboard .....	7
8. App User Flow.....	8
9. Project Timeline .....	11

## 1. Project Background

Daily Health Buddy is a mobile application designed to address the growing concern of inconsistent health tracking habits among youth. In today's fast-paced world, many young people fail to monitor their basic daily wellness due to busy schedules, forgetfulness, or lack of motivation. While smartphones are an essential part of daily life, few simple and motivating health apps exist that make tracking daily habits engaging.

This app aims to serve as a personal wellness assistant, helping users track key health activities, specifically water intake, sleep, and exercise, through a colorful and friendly interface. The development of this app also supports key learning objectives in mobile development, such as persistent local storage, effective UI/UX design, and functionality integration in Flutter.

## 2. Problem Statement

Youth and students often neglect their daily health habits, and there are few user-friendly, motivational tools to assist them. Most existing health apps are either overly complex, too clinical in design, or require login and personal data that users may not want to share.

This project specifically addresses the issue of low health habit consistency among youth by providing a tool that is fun, visually engaging, and simple to use. The core problem stems from a lack of apps that blend usefulness with a gamified and non-intrusive experience.

### 3. Project Objective

The main objectives of this project are:

- To develop a mobile application that enables users to log their daily water intake, sleep hours, and exercise duration.
- To integrate motivational features such as streak tracking, perfect day recognition, and badge collection to enhance user engagement.
- To provide visual representations of user progress through bar charts and a calendar view.
- To encourage long-term healthy behavior by making the app engaging, intuitive, and rewarding.

## 4. Project Scope

This mobile app is designed for Android and targets primarily youth and students who want to improve their health habits. The main features of the app include the ability to log daily water, sleep, and exercise, track progress over time, view a weekly bar chart, earn badges based on performance, and track daily consistency through a calendar view.

The app does not include features like account creation, cloud sync, or social sharing. Data is stored locally using shared preferences, and notifications are removed due to stability issues. The app is not intended to offer medical advice but serves as a simple habit tracker. While it has been built and tested successfully as an APK, it is not currently published on the Play Store.

## 5. Features of the App

Daily Health Buddy includes several engaging and practical features that support its objectives. Users can log their daily water, sleep, and exercise, and based on their performance, they can earn badges such as Starter, Bronze, Silver, or Gold. The app detects perfect days when all health goals are met and tracks the user's current streak. Visual elements like bar charts show weekly progress, and a calendar view lets users review their health history. An "About" page explains the app's purpose, and all screens are designed to be colorful and friendly.

## 6. Related Mobile App (Comparison)

Compared to other popular health tracking apps like WaterMinder and Fitbit, Daily Health Buddy focuses on simplicity and engagement. While those apps support advanced features and integrations, they often require sign-ins or overwhelm users with data. Daily Health Buddy stands out by offering a clean, motivating, and offline-friendly experience aimed at forming consistent habits without pressure.

## 7. Application Design / Storyboard

Figure 1.0 show that the app consists of six key screens: the Home screen (which shows streaks and navigation options), the Log screen (to input water, sleep, and exercise), the Progress screen (showing bar charts and badges), the Calendar screen (visualizing daily logs), the Goal screen (to set personalized daily targets), and the About screen (explaining the app's purpose and features). These screens are connected through intuitive navigation, and all components are styled to encourage daily use.

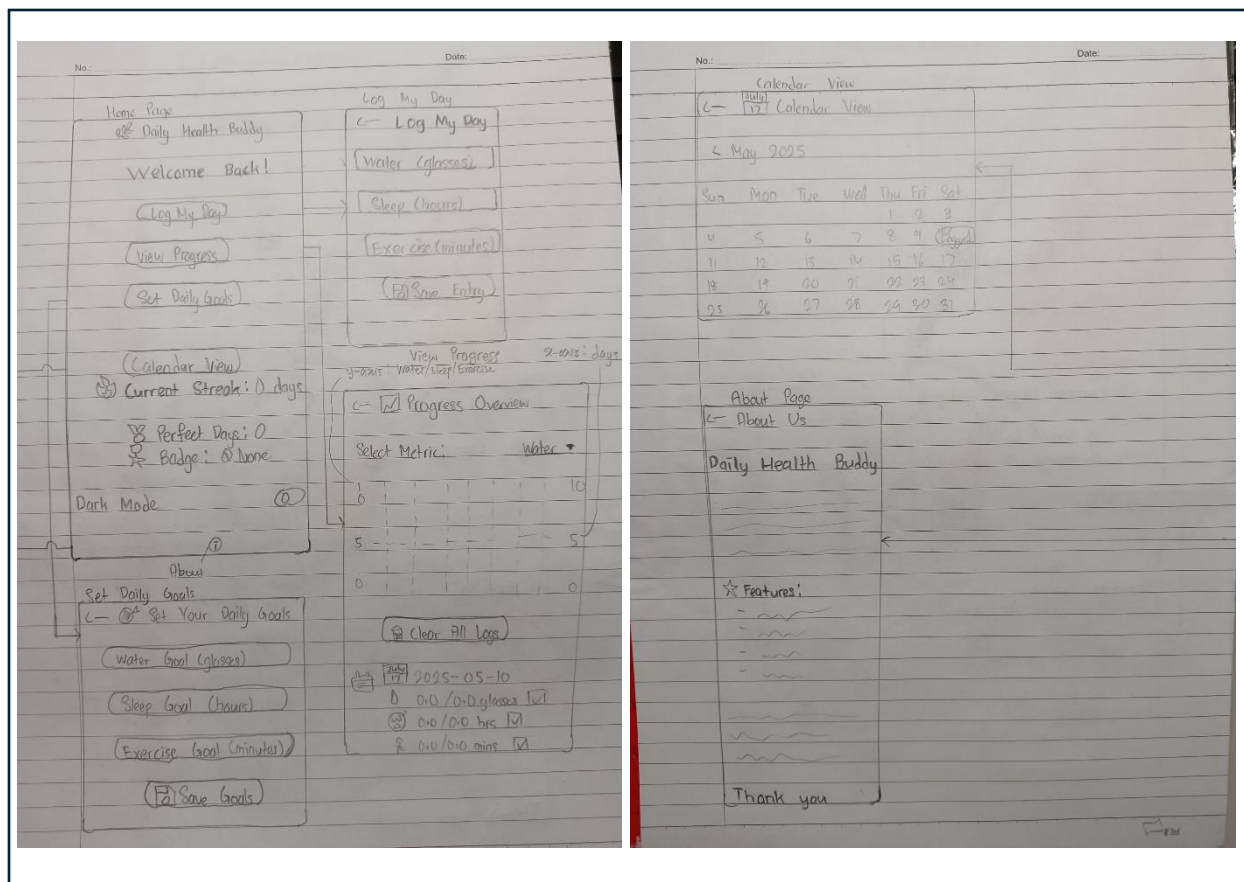


Figure 1.0: Application Storyboard

## 8. App User Flow

Figure 2.0 and Figure 2.1 show that the user starts at the Home screen and can navigate to log their day, view progress, update goals, view the calendar, or read the About page. After logging their health details, the app automatically checks for streak updates and perfect day detection, and the Home screen updates accordingly. The flow is designed to be smooth, requiring minimal taps to complete core actions.



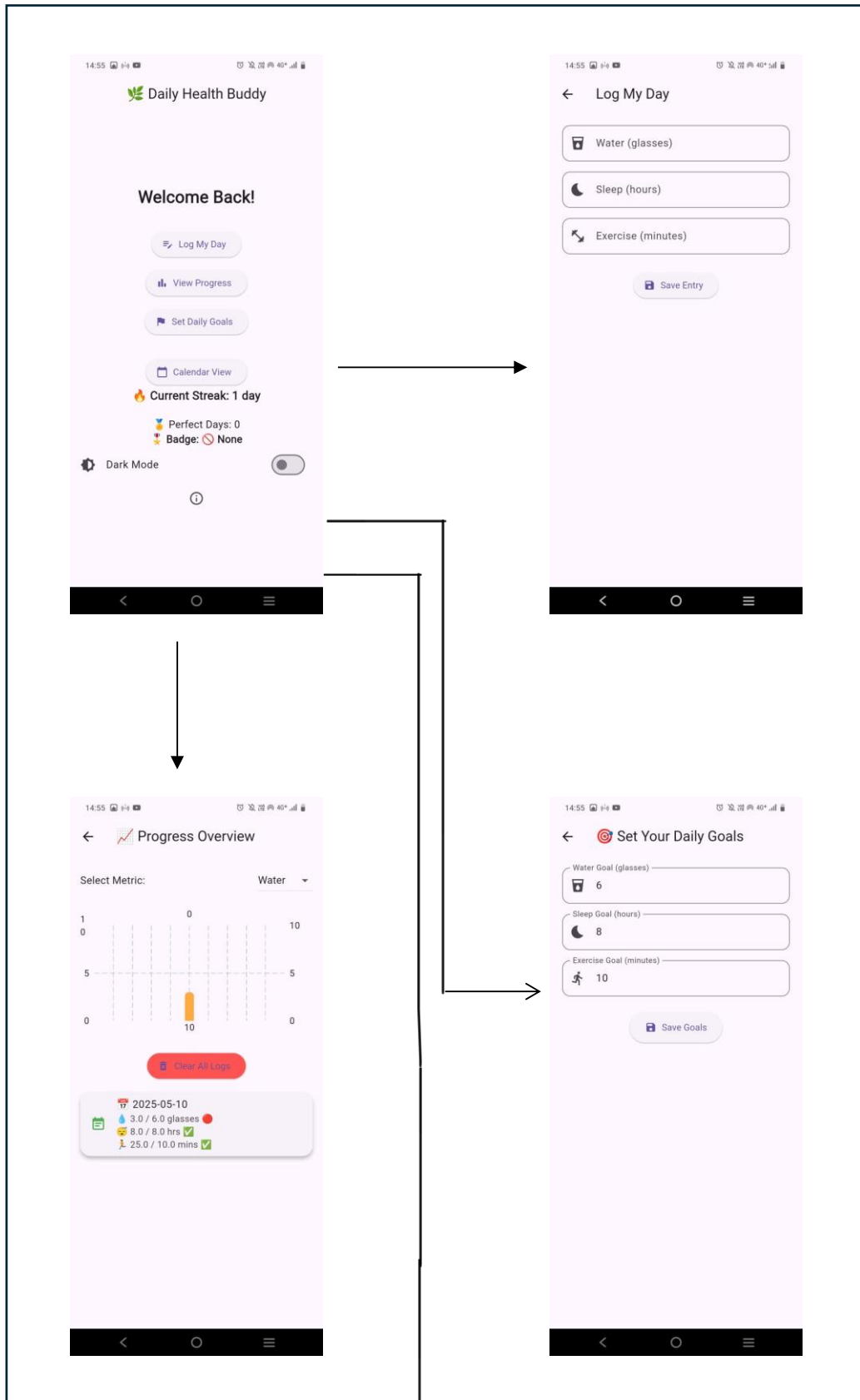


Figure 2.0: App User Flow

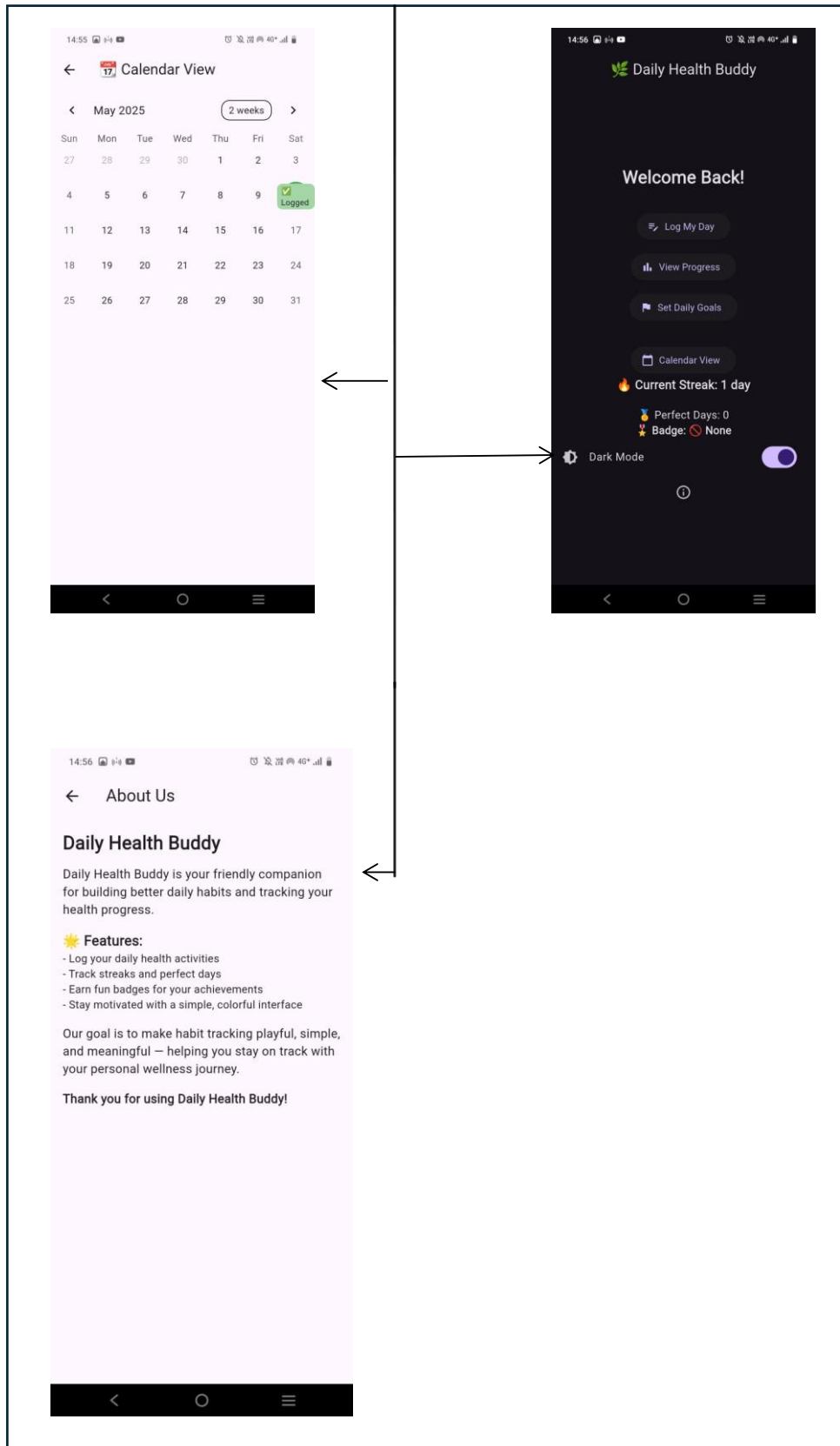


Figure 2.1: App User Flow (continues)

## 9. Project Timeline

The project was developed over several weeks. Initially, the idea was selected, and screens were planned. Over the next stages, logging functionality, streaks, chart views, badge logic, and calendar integration were implemented. In the later stages, the app was polished with improved UI and eventually built as a working APK.

Week	Tasks
1	Selecting the idea and planning screens interface
2	Implement a logging function and streaks
3	Implement chart views and badge logic
4	Implement calendar integration
5	Polishing the app UI
6	Built as a working APK