

User Manual

ActiveWare

A SmartPhone-Based Health Companion System



Team : Pirates

Team Members :

M.A.S. Ahamed - 190023G

M.H.A. Ahmed - 190028C

N.M. Hafeel - 190211G

Table of Contents

Table of Contents	2
Introduction	2
Overview	2
List of Features	3
DashBoard	3
Step Counter	4
Sleep Tracker	5
Emotion Detection	6

Introduction

Active Aware is a smartphone-based health companion app, designed to assist users to achieve a balanced lifestyle encompassing proper sleep, physical activity, and emotional well-being. The primary goal of the app is to provide a reliable platform to track their sleep, physical activity and emotional health, so that they could review their personal health. The app tracks the user's daily step count and thereby provides valuable insights into the user's fitness journey. The users are able to track the sleep utilising the sleep monitor feature. ActiveAware's sleep monitor utilises the smartphone's sensors to analyse the users' sleep cycles. This insightful data helps the user understand the sleep quality and identify areas of improvement. The user's emotional well-being is just as important as his/her physical health. ActiveAware incorporates emotion analyzer features to help the user identify and track emotions. Journaling questionnaires, mood analysers equip users with the ability to analyse their emotional health and thereby manage stress, cultivate positive emotions, and build resilience.

Overview

Main functionalities of the Application are given below.

- The app offers a central dashboard to view information from three key functionalities: step counter, sleep monitor, and emotion analyzer.
- Each functionality has a dedicated icon for easy access and further data visualisation.
- The dashboard also displays the user's current mood and light intensity indicator for healthy habits.
- The step counter provides daily step count, burned calories, progress towards a daily goal, activity status, and a step count graph for the past five days.
- The sleep tracker offers sleep status, last sleep time, and sleep history for past sessions.

List of Features

DashBoard

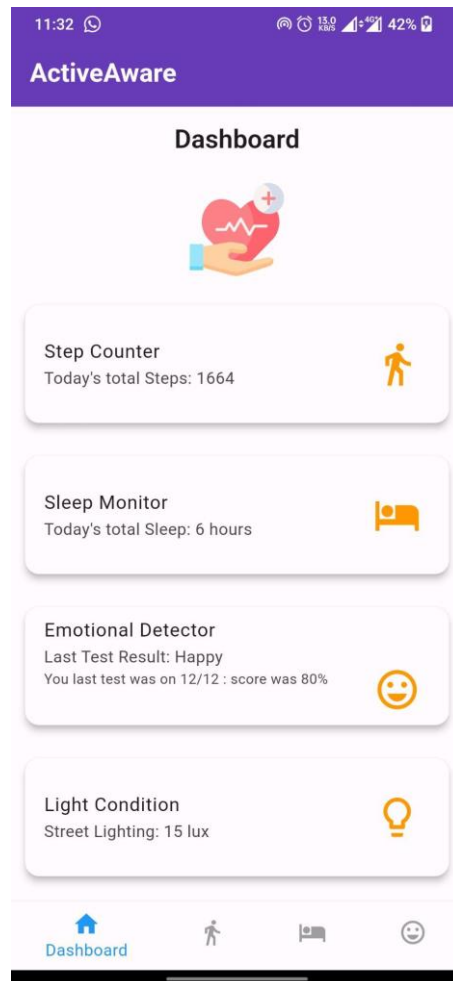


Figure 1 : Dashboard




The Dashboard page of the application is shown in Figure 1. The user would be able to observe information from all 3 components of the application namely; step count, sleep monitor and emotion analyser. These options are also included in a navbar at the bottom. The user can click the  icon to visualise further information about the step counter activity tracker. Similarly, the user can click the  ,  icons to visualise further information about the sleep monitor , emotion analyser functionalities respectively. Upon selecting an icon , the page selected is being highlighted to the user by a bluish version of the same icon as shown in Figure 2.



Figure 2: Dashboard Icon

The current mood of the user is also shown depending on previous emotion analyser output. A light intensity indicator is also added to inform the user of healthy and unhealthy lighting conditions.

Step Counter

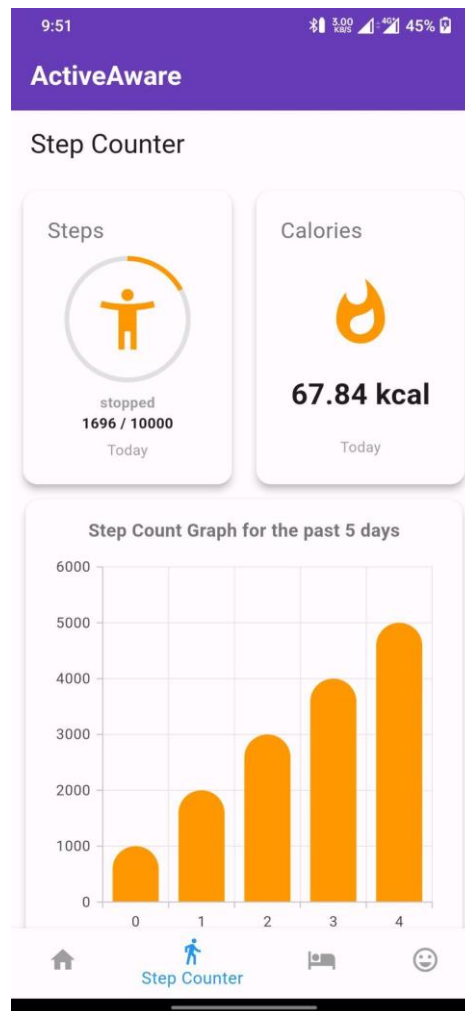



Figure 3 :Step Counter Page

The Activity Tracker page shown in figure 3 displays a summary of your daily step count and burned calories. The user is not required to interact with the page, instead the page displays valuable information for the user. The information includes;

Steps : This section showcases your current step count for the day.

- **Fraction :** The numerical value of your steps taken so far.
-  : Indicator of how much of the goal is achieved?
- **Goal:** Daily step goal.
- **Status :** The status (Walking / Stopped) of the user.

Calories: This section displays an estimate of the calories burned based on your steps taken.

- **Burned Calories:** The numerical value of calories burned.

Step Count Graph: This graph illustrates your step count for the past five days. The x-axis represents days while the y-axis represents step count. Sleep Tracker

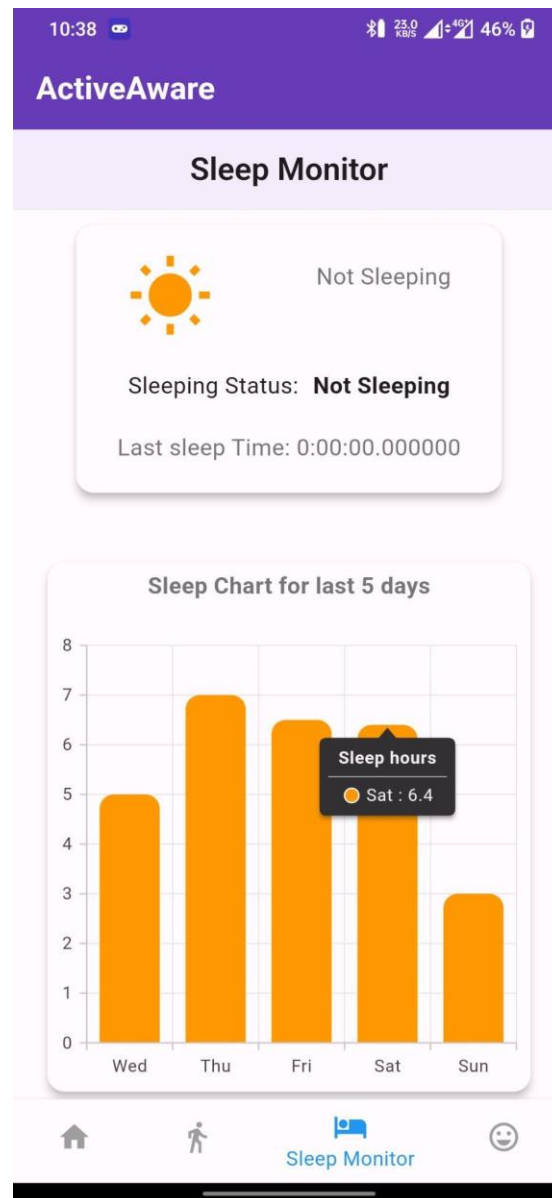


Figure 4 :Sleep Tracker Page

The Sleep Monitor page shown in Figure 4 serves as a data visualisation dashboard for the user's sleep patterns. It leverages the application's sleep tracking capabilities to provide insights into sleep quality and duration.

Key Features:

- **Sleep Status**
This section displays the user's most recent sleep state. This is indicated through text (e.g., "Sleeping," "Not Sleeping") .

- Last Sleep Time
This section showcases the time the user fell asleep during their most recent sleep session. The format could be in hours and minutes.
- Sleep History:
This section allows the user to view data for past sleep sessions.

Emotion Detection

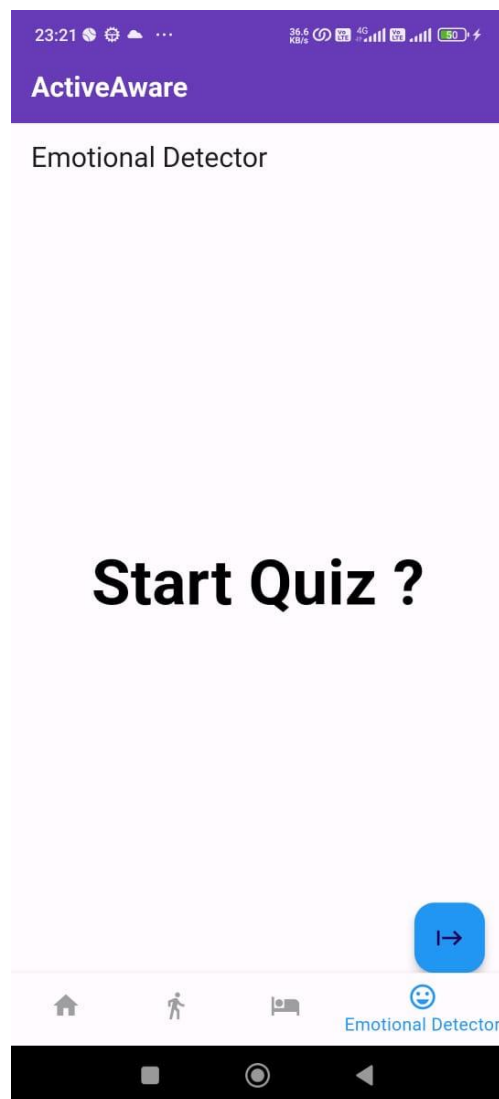


Figure 5 : Emotional Detection page

23:21 35.4 KB/s 4G

ActiveAware

Emotional Detector

Have you had thoughts of harming yourself or thoughts of suicide?

Never Often ☒ Rarely Sometimes

Here's a joke. Why did the golfer bring two pairs of pants?

Because he planned to play all day.

☒ I don't find it funny.

I'm rolling on the floor laughing!

In case he got a hole in one!

Have you had difficulty concentrating, making decisions, or remembering things?

More than half the days Nearly every day ☒ Not at all Several days

Emotional Detector

Figure 6 : Questionnaire Page

The Emotion Analyser page shown in Figure 5 shows the starting point of the questionnaire to analyse the emotions. When the user clicks on the blue arrow button, the user is directed to a questionnaire page shown in Figure 6. The user is able to select answers for each question. Upon clicking on an answer, the answer is highlighted along with a check mark to show the selected answer. The user is able to switch to another answer whenever possible before submission. Upon clicking the check button in the bottom left corner of the questionnaire page, the questionnaire is submitted and the user is redirected to the start quiz (Emotion Analyser) page.