# Time Tracker Android Application

Welcome to the Time Tracker Android application! This README provides step-by-step instructions for setting up the development environment, detailed guidelines on how to build and run the prototype, and an explanation of the system’s functionalities and user roles.

## Application Description

The purpose of the application is for a user to be able to add, view and edit timesheets. The time sheets have the date, category, start and end time, description, and a picture. Other features include adding categories for the timesheets, Daily goals, view total hours, graph showing the total hours worked and notifications.

## Group Members:

Nabeel Van Niekerk – ST10066882

Umar Ahmed - ST10221775

Kurt Siebritz - ST10208082

Mushfeeq Hartnick - ST10082857

## Setup Development Environment

Install Android Studio:

* Download and install the latest version of Android Studio.
* Follow the installation instructions specific to your operating system.

Install Kotlin Plugin:

* Open Android Studio.
* Go to File > Settings > Plugins.
* Search for Kotlin and install the Kotlin plugin.
* Restart Android Studio.

Clone the Repository:

* Open a terminal window.
* Clone the repository.

Open the Project in Android Studio:

* Open Android Studio.
* Click on Open an existing Android Studio project.
* Select the time tracker directory.

Install Required SDKs and Libraries:

* Android Studio will prompt you to install the required SDKs and libraries. Follow the prompts to install them.

## Build and Run the Prototype

Connect an Android Device or Start an Emulator:

* Connect your Android device via USB and enable Developer Options and USB Debugging.
* Alternatively, start an Android emulator from Android Studio.
* Build the Project:
* Click on Build > Rebuild Project.

Run the Application:

* Click on Run > Run 'app'.
* Select your device or emulator from the list and click OK.

## Functionalities

**User Authentication:**

Users can log in to the app using a username and password.

**Category Management:**

Users can create categories that timesheet entries will belong to.

**Timesheet Entry Creation:**

Users can create a timesheet entry, specifying the date, start and end times, description, and category. Users can optionally add a photograph to each timesheet entry.

**Daily Goals:**

Users can set a minimum daily goal for hours worked and a maximum daily goal.

**Viewing Timesheet Entries:**

Users can view the list of all timesheet entries created during a user-selectable period. If a photo was stored for an entry, users can access it from this list.

**Category-wise Time Tracking:**

Users can view the total number of hours spent on each category during a user-selectable period.

**Graphical Representation:**

Users can view a graph showing the total hours worked each day over a user-selectable period.

The graph displays the minimum and maximum goals.

**Goal Tracking:**

The app visually shows how well users are doing with staying between their minimum and maximum hour goals over the past month.

**Data Storage:**

Data is stored in an online database.

# Features implemented from part1.

## Dark mode

Dark mode allows a user to change the color theme of the app. Dark mode is a display setting in applications and operating systems that uses a dark color palette, typically with black or gray backgrounds and light-colored text and icons. This mode is designed to reduce eye strain in low-light environments, save battery life on devices with OLED or AMOLED screens, and enhance the visual appeal by offering an alternative to the standard light mode. Dark mode can also help reduce glare and improve screen readability for some users, making it a popular choice for those who prefer a subtler, less intrusive interface, especially during nighttime use.

## Password Reset

Allows the user to change their password if they have forgotten or want to change their password to something different, if the user remembers their email and it is a valid one. Password reset is a security feature in applications and online services that allows users to regain access to their accounts when they forget their passwords. This process typically involves verifying the user's identity through an email link, SMS code, or security questions, and then allowing them to create a new password. Password reset ensures that users can maintain access to their accounts while keeping their information secure and helps prevent unauthorized access by requiring verification before a new password can be set.