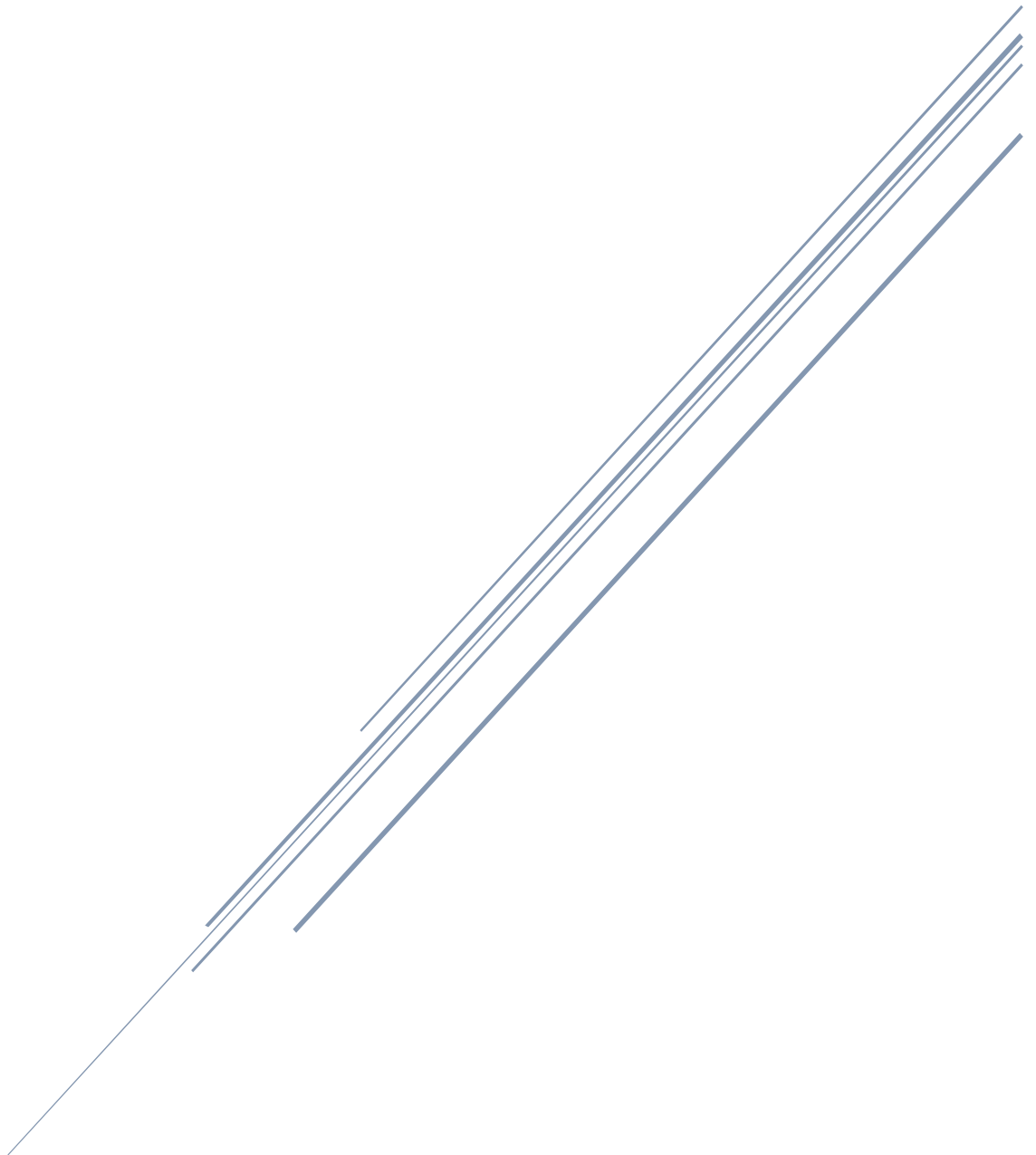


ST10084621

POE PART 1 – Research document (OPSC7311)



Course: BCAD year 3 (group 1)
Due date: 24 April 2023

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Part 1 – Research

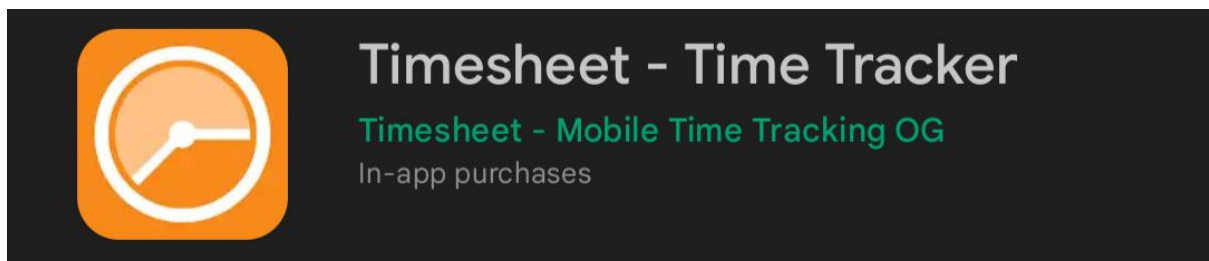
Introduction:

The following document includes research on 3 time-tracking apps that are available for the Android operating system. The purpose of this research document is to lay out the different aspects of a time-tracking app and what an app of this nature consists of. This research document will be used as an aid to planning and designing a time-tracking app that allows users to record and view the time they spend working on clients projects. The strengths and weaknesses of each app along with its innovative features will be discussed, and a list of the best features from these researched apps will be listed and used for the time-tracking app.

Research: App 1

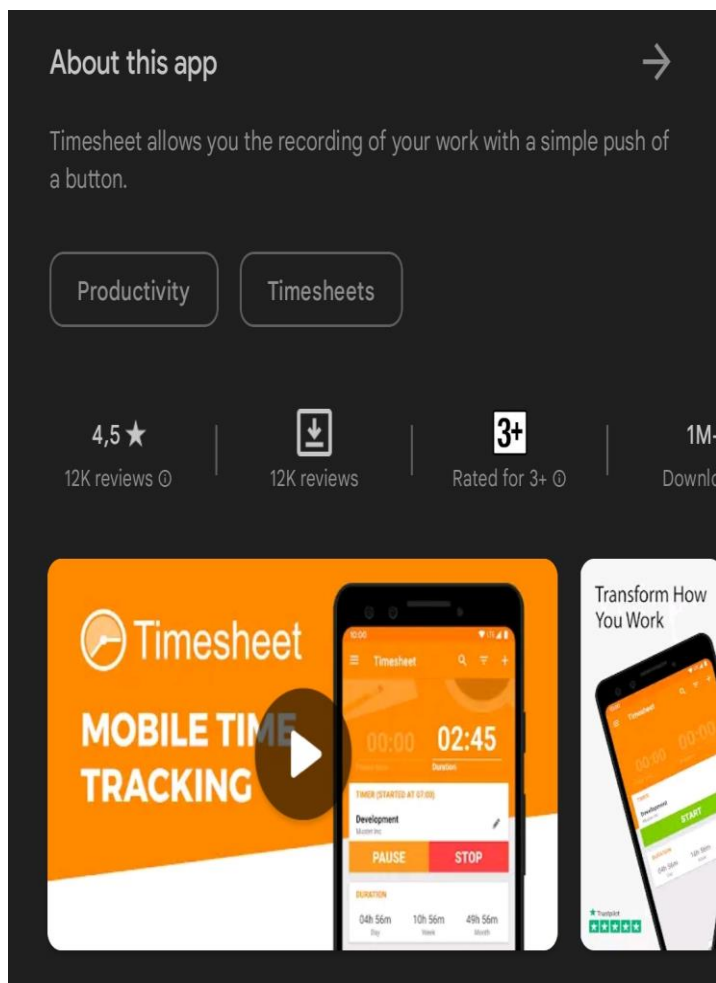
a. Overview of the app:

Screenshot 1



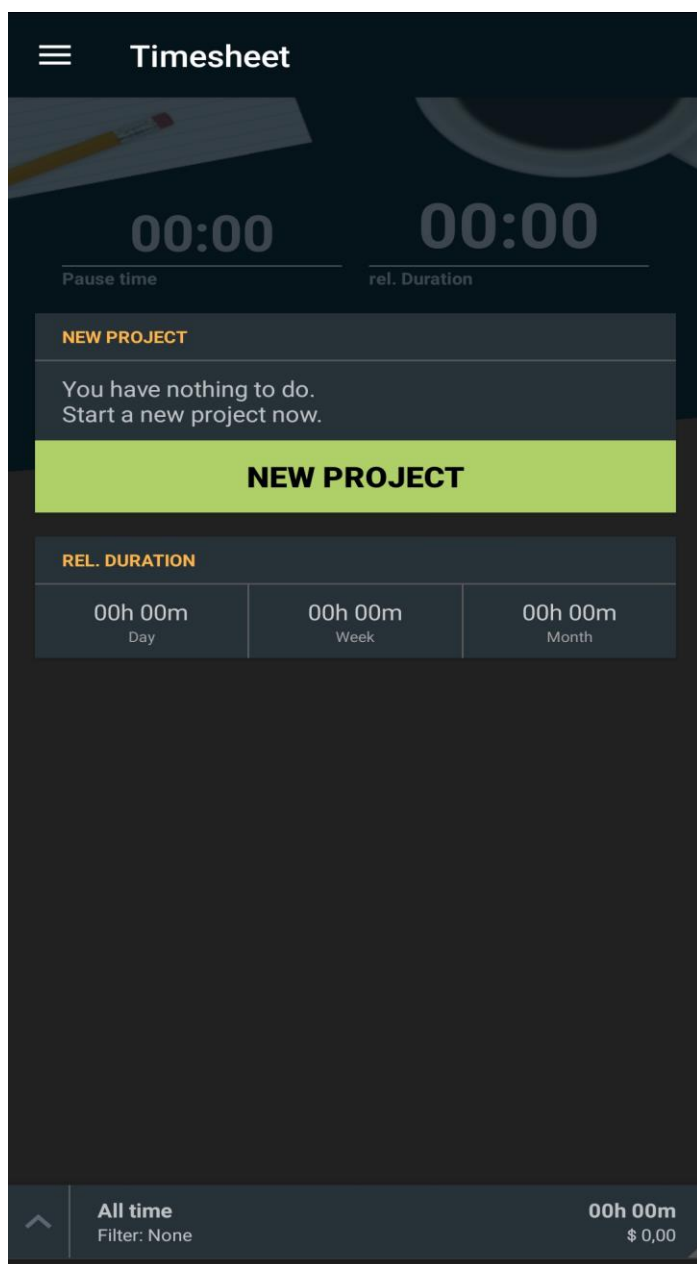
The name of the app is Timesheet – Time Tracker; it is available to download for free on the Google Play Store (OG, 2023)

Screenshot 2



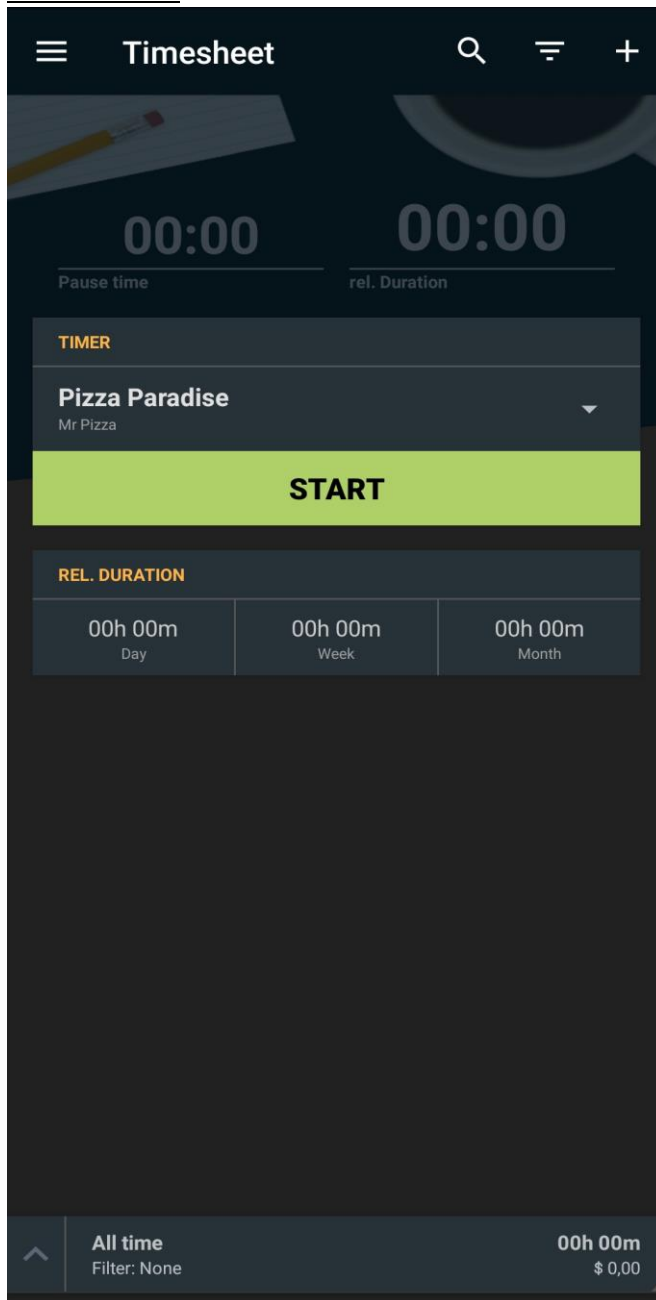
The app has a rating of 4.5 stars (amazing rating), which means it fulfils its purpose as a time-tracking app.

Screenshot 3



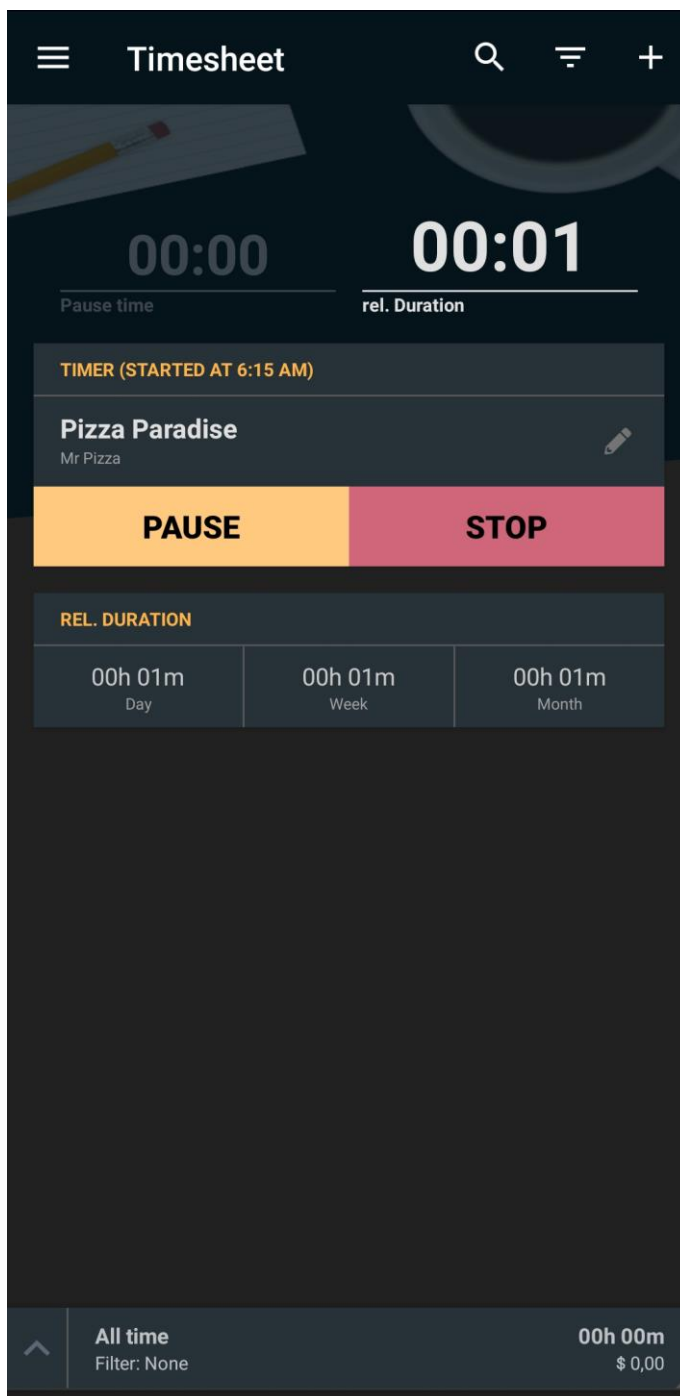
Once the app is opened, the user will be prompted to sign up, and then this activity in the app will open indicating that you may start a new project. NEW PROJECT must be clicked in order to start creating a Project to store the timesheet.

Screenshot 4



Once the project has been created, your project details will appear above the START button in a drop down list. You may click on the drop down list to choose the project you want to track time for. Click START to begin the time-tracker.

Screenshot 5



Once the timer has started, PAUSE may be clicked in order to stop the timer temporarily, and STOP may be clicked in order to stop the timer completely.

b. Strengths and weaknesses of the app

Strengths:

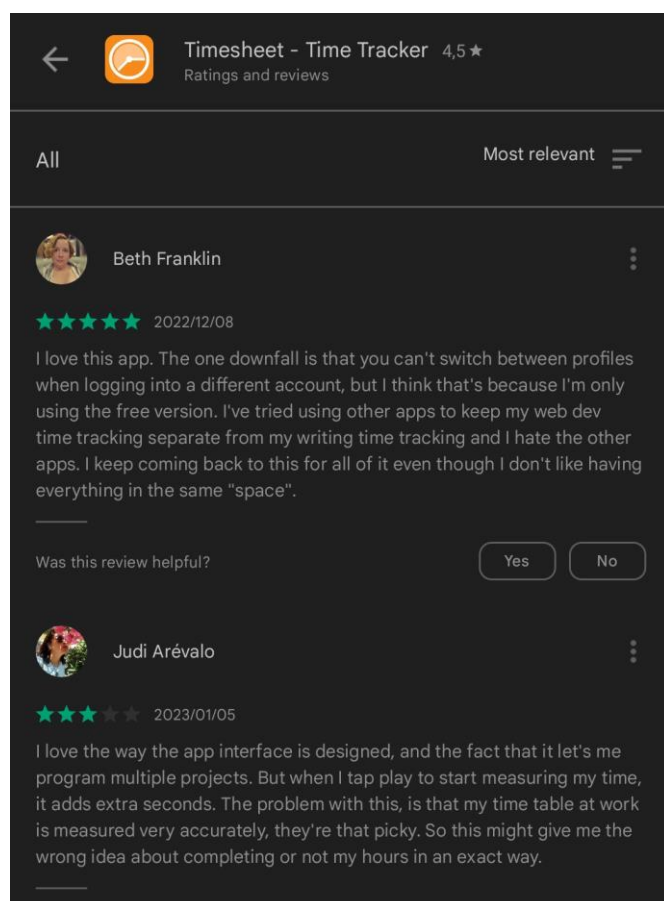
- Components on each activity throughout the app are well sized and placed.
- Theme is consistent throughout the app.
- Tracks time and stores it in project folder, it is easily accessible.
- The app is free to download.

Weaknesses:

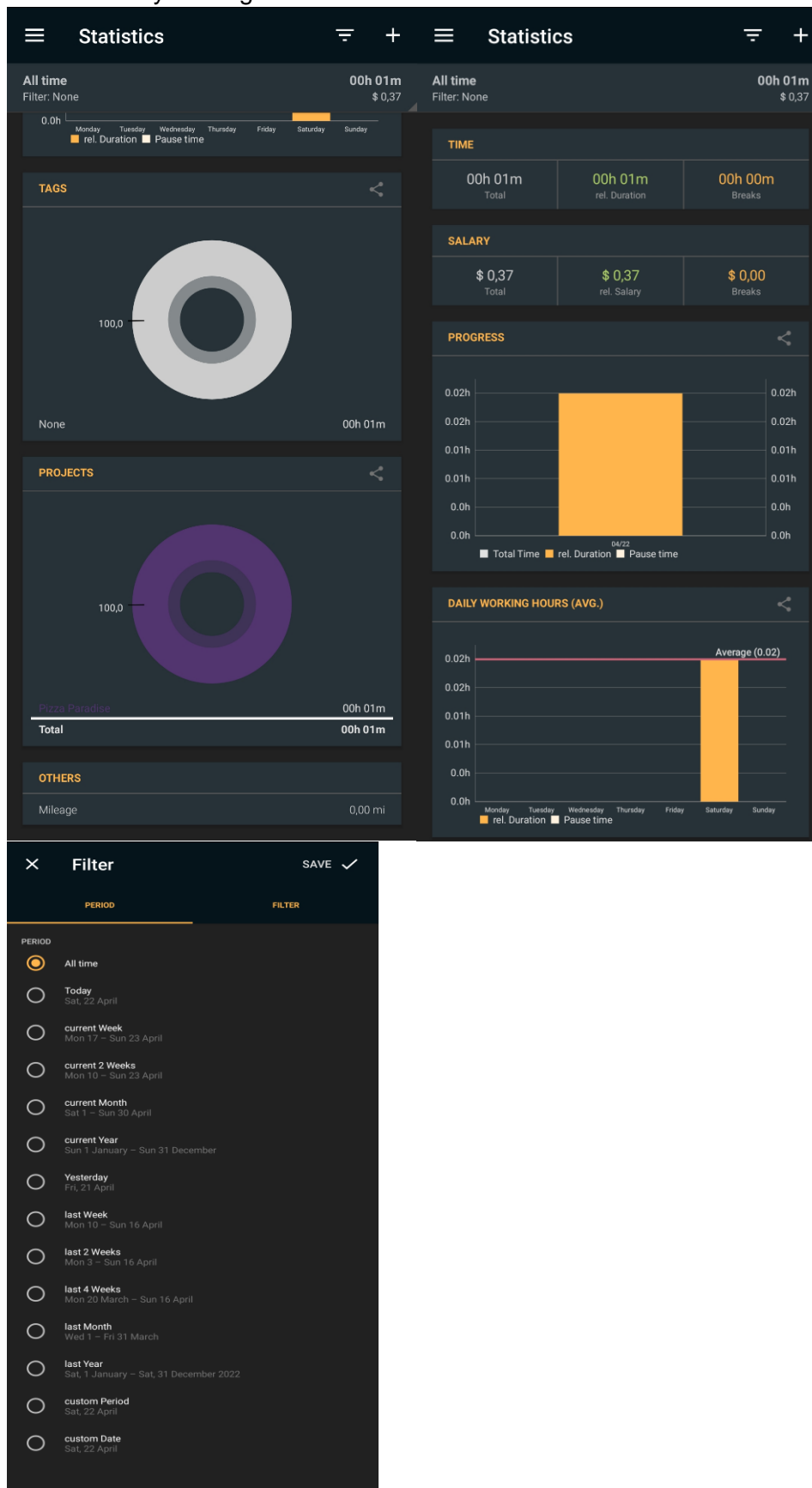
Based on the most relevant reviews for the app (12k reviews):

- When the time is being tracked, it adds extra seconds, which is inaccurate.
- Users are unable to switch between profiles. This is a weakness because another device would be needed if you want to access another profile.

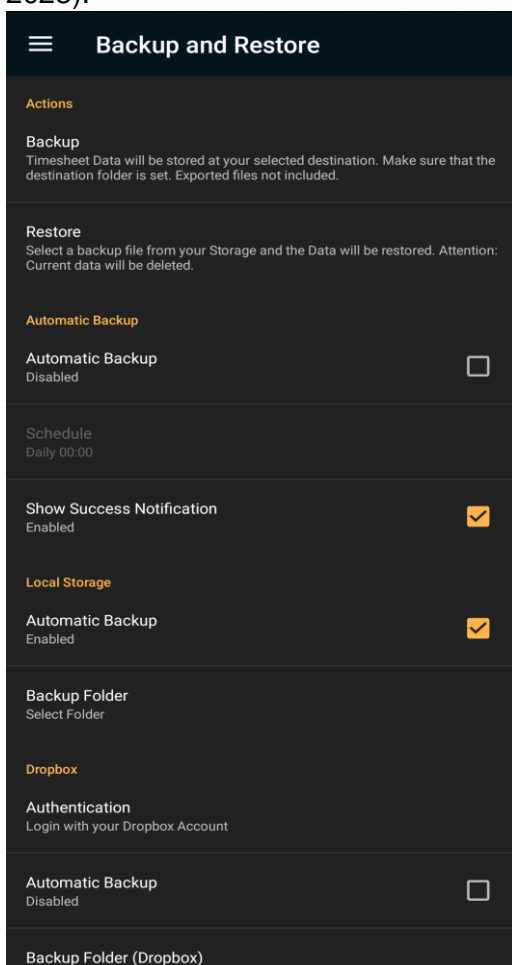
Screenshot of the most relevant reviews of the app:



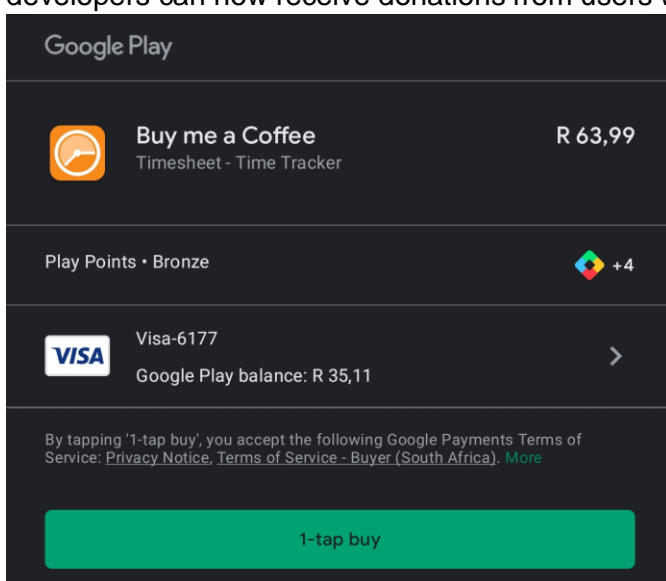
- Statistics of the timesheets for projects can be viewed and filtered. This is nice way of allowing the user to view summaries of their timesheets or specific timesheet information by filtering the statistics.



- Timesheets may be backed up and restored. This is very useful in case of a natural disaster occurs, the timesheets that have been backed up can be restored (cloudian, 2023).



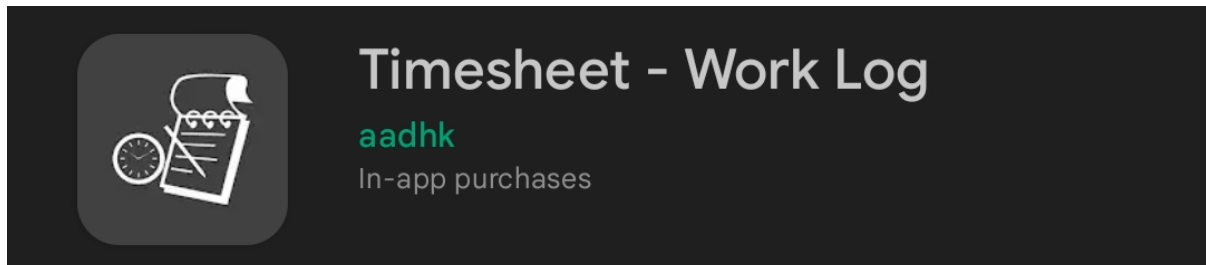
- A donation (Buy me a Coffee) to the app can be made. This is very useful because developers can now receive donations from users who are generous.



Research: App 2

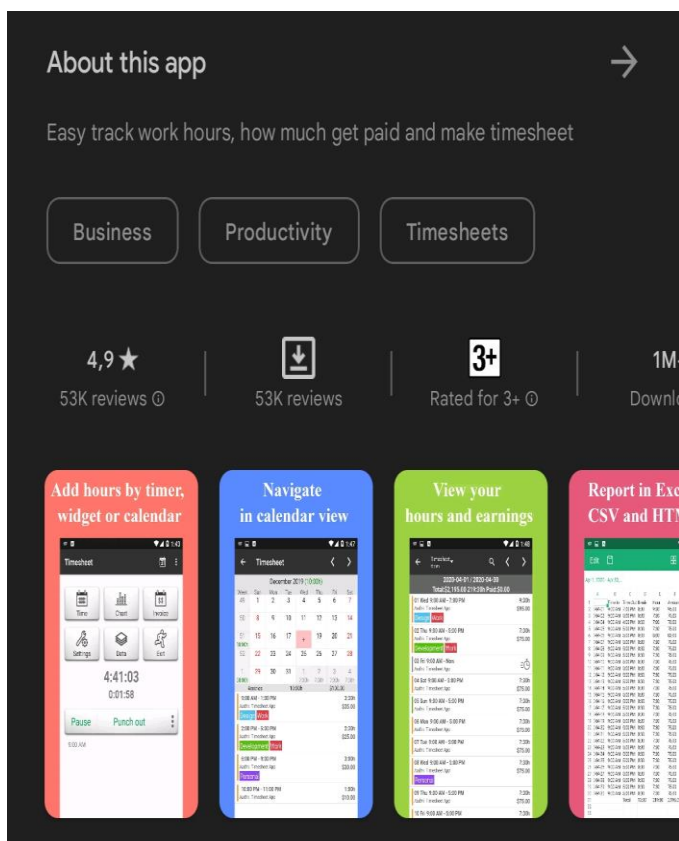
a. Overview of the app:

Screenshot 1



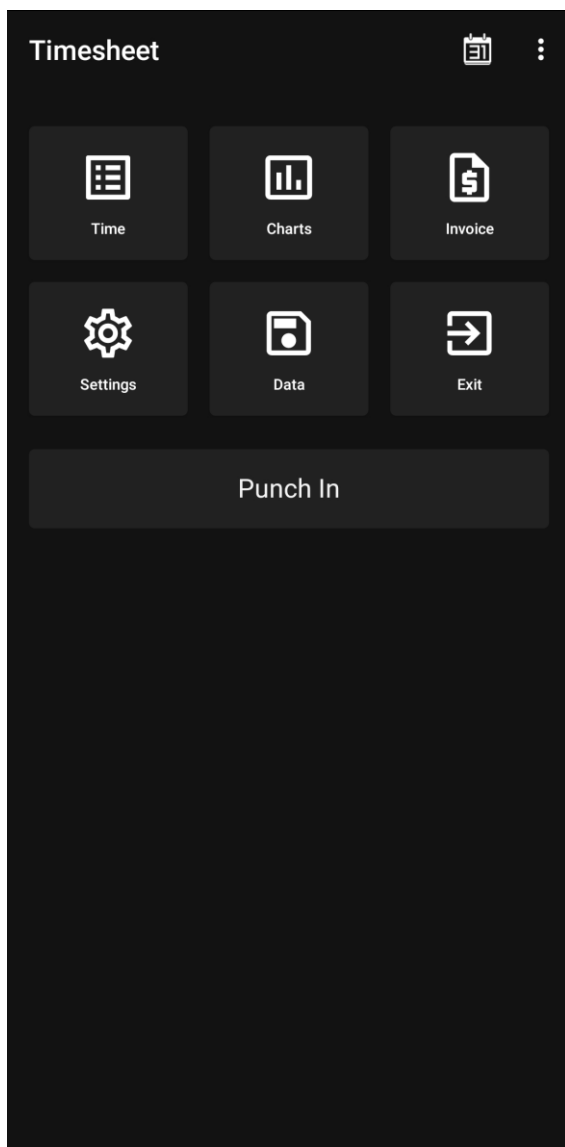
The name of the app is Timesheet – Work Log; it is available to download for free on the Google Play Store (aadhk, 2023)

Screenshot 2



The app has a rating of 4.9 stars (outstanding rating).

Screenshot 3



This is the main page of the application. Punch In can be clicked to start tracking time for a project, a Punch Out button will then appear. If the Time tab is clicked, the timesheets for projects can be viewed and filtered. The Charts tab allows the user to view statistics of their timesheets in different charts that may be filtered. The Invoice tab allows the user to create invoices for their clients. The Data tab allows users to backup and restore their projects with their timesheets.

Screenshot 4

←

Update Time

Project	What have you done?
Client	Who do you work for?
Time In	04/22 11:38
Time Out	04/22 11:38
Break	Minutes
Working Hours	00:00
Hourly Rate	Amount
Bonus Rate	Amount
Tag	
Status	Open
Note	What task have you done?
Add Expense/Deduction	
Add Mileage	
<div><div></div><div></div></div>	
Delete	Update

Once Punch Out has been clicked, the user can update project and timesheet details.

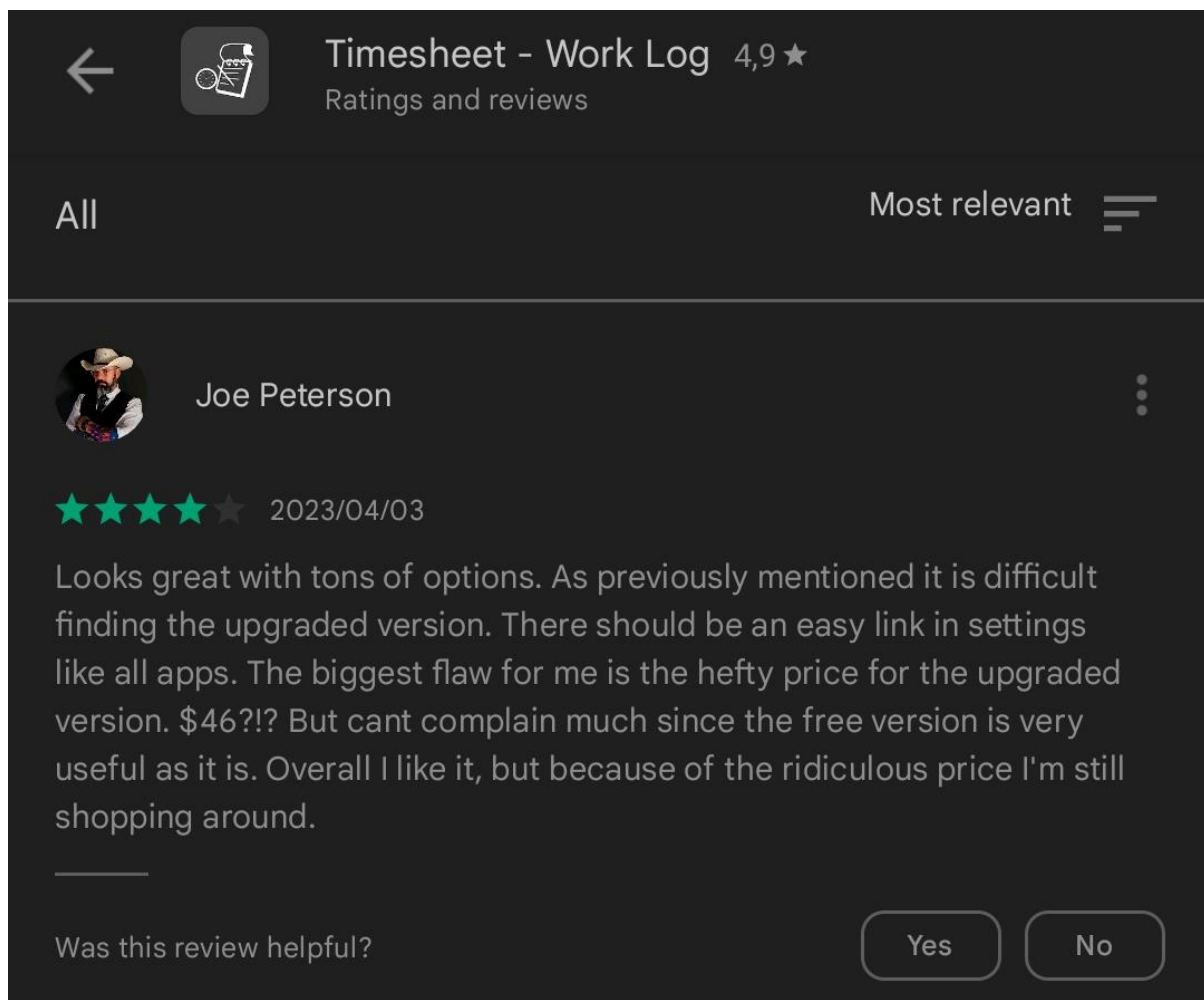
b. Strengths and weaknesses of the app:Strengths:

- Users can easily track time for projects.
- The time tracked for each project can be viewed via lists, charts and calendars.
- Consistent black white and grey theme throughout the app.
- The app is fully functional and easy to use

Weaknesses:

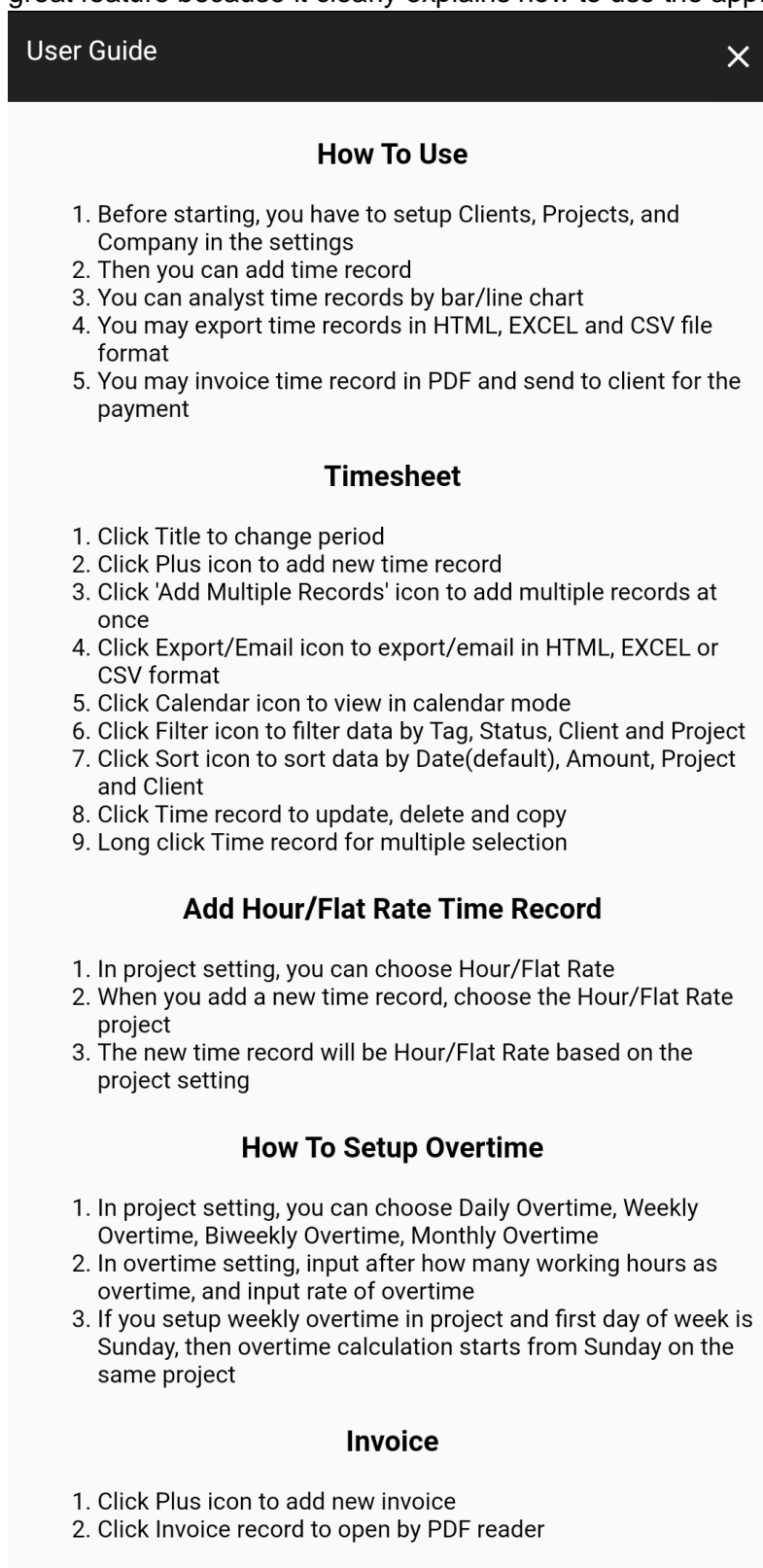
Based on the most relevant reviews for the app:

- Difficult for users to find the upgraded version of the app.

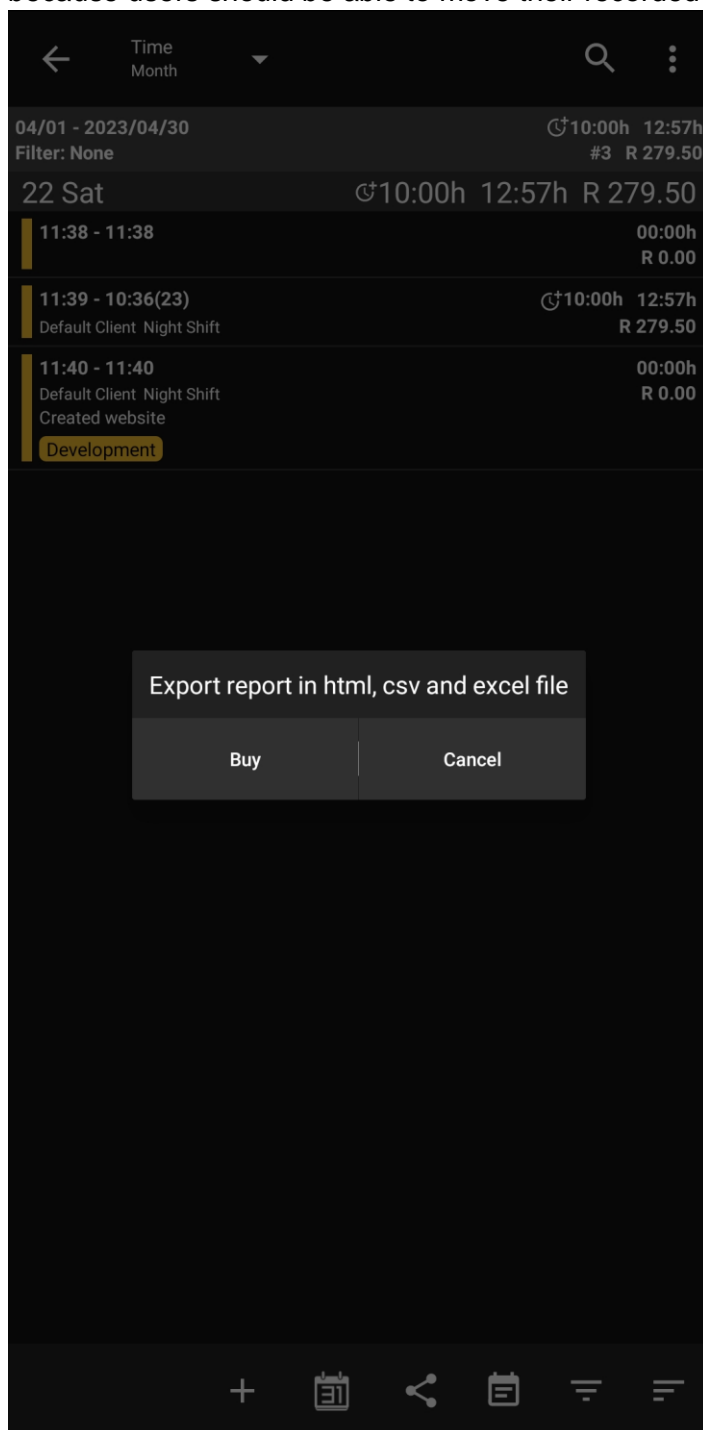
Screenshot of most relevant review for the app:

c. Innovative features of the app:

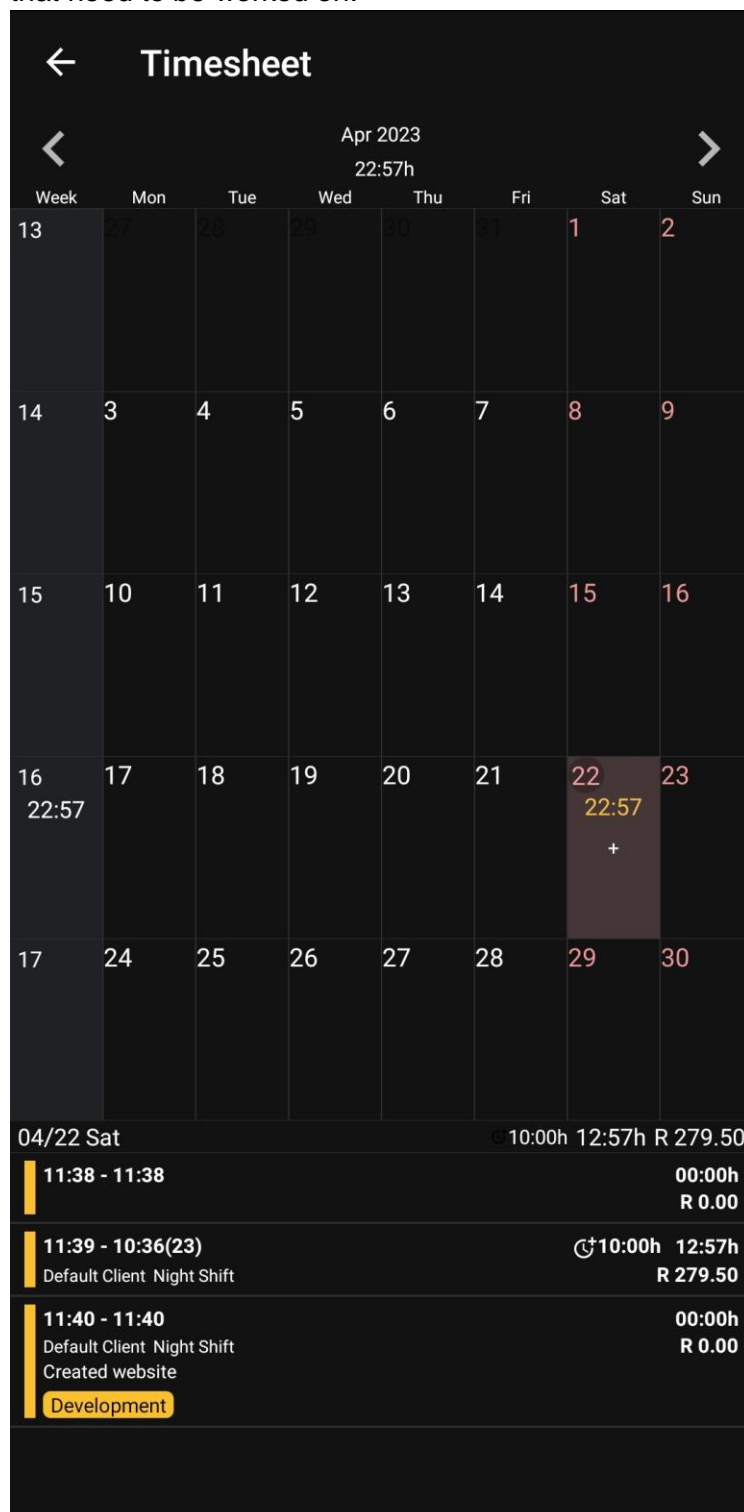
- A user guide is displayed to the user when opening the app for the first time. This is a great feature because it clearly explains how to use the app.



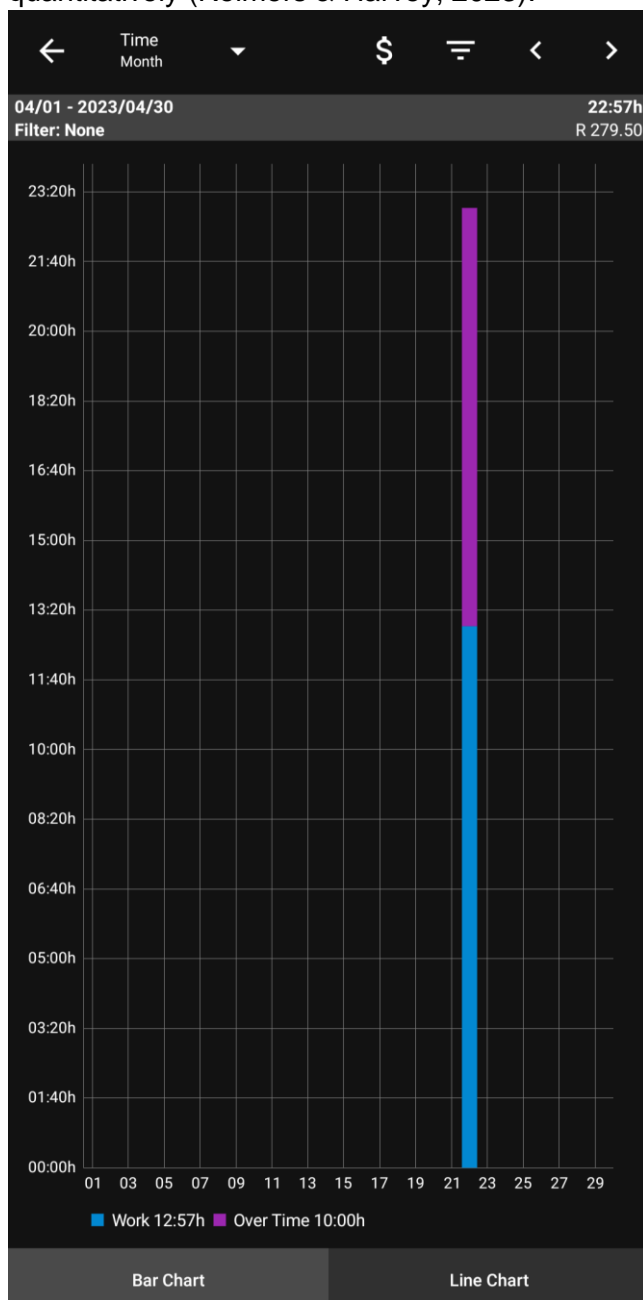
- Users can export timesheets for projects in either html, csv or excel file format, although a user will have to purchase exports of timesheets. This is a good feature because users should be able to move their recorded timesheets beyond this app.



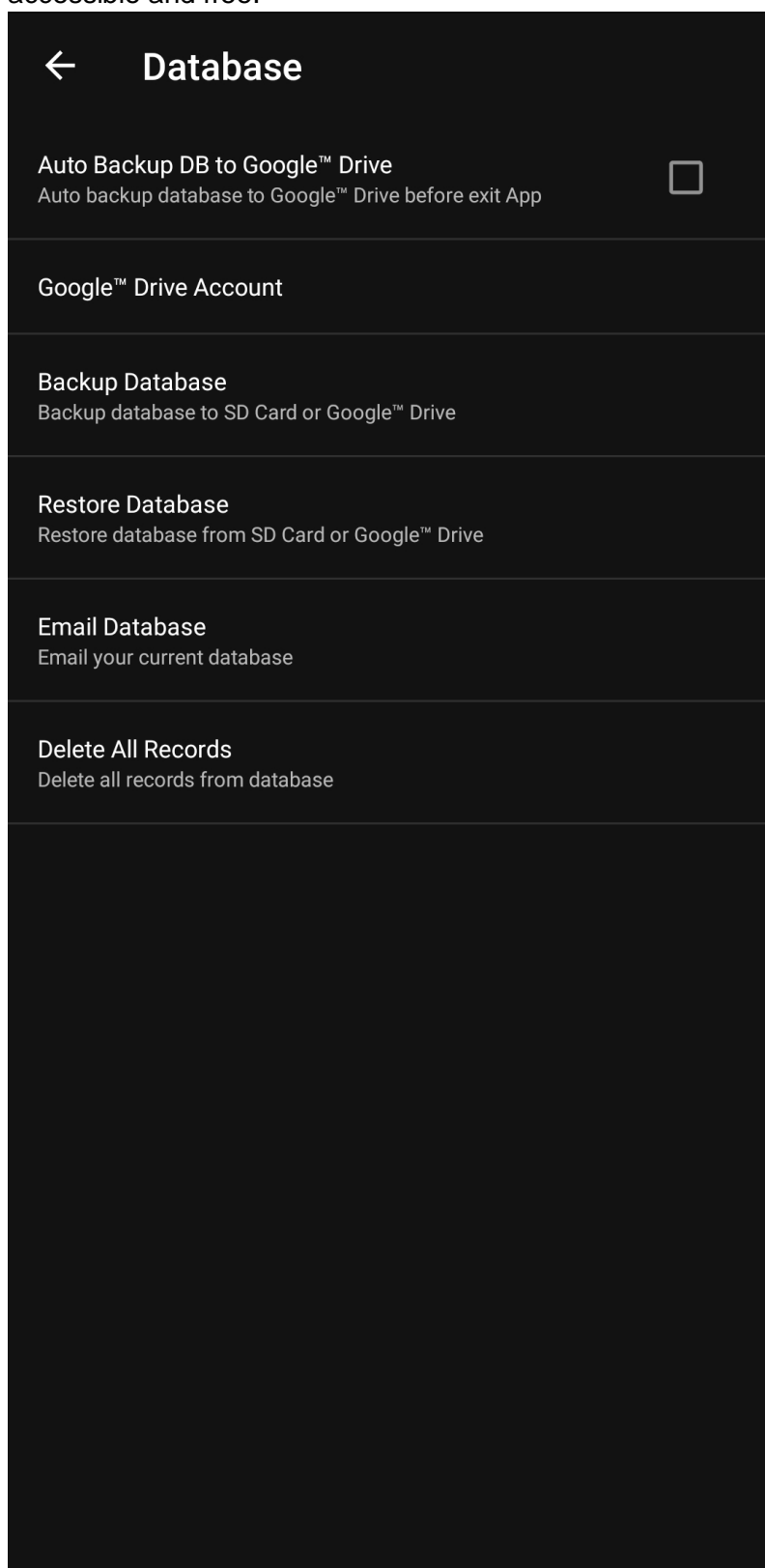
- Users can view a calendar and have the ability to schedule days to work on projects of their choice. This feature allows users to view their projects in a calendar format because it makes it easier for users to manage their time according to the projects that need to be worked on.



- Users can view statistics of the timesheets of their projects on both a Bar Chart and Line Chart, the statistics may be filtered. This feature is visually pleasing and useful by graphically displaying summarized information about users' timesheets quantitatively (Reimers & Harvey, 2023).



- Users can back up the database that holds their project and timesheet details directly to their Google drive. This feature is very useful because Google drive is easily accessible and free.



- Users can create invoices for their clients. This is a useful feature because when a user works on a project, invoices for the project can be created easily using this app instead of creating an invoice externally.

Add Invoice

Data

Format

Invoice Number

INV0001

Invoice Date

2023/04/22

Due Date

2023/04/29

✕

Profile

Client

Default Client

Time

R 0.00(0h)

Subtotal

R 0.00

Discount

R 0.00

Tax

R 0.00

Paid

R 0.00

Total Due

R 0.00

Note

Payment Details

File Name

INV0001

←

INV0001

✉

💰

⋮

Invoice					
Invoice Number: INV0001					
Invoice Date: 2023/04/22					
Due Date: 2023/04/22					
Bill To					
Default Client					
Description	Date	Time	Work	OT	Amount
2023/04/22 11:39 - 2023/04/23 10:36, Night Shift	R 10.00	00:00	12:57	10:00	R 279.50
2023/04/22 11:40 - 2023/04/22 11:40, Night Shift	R 10.00	00:00	00:00	00:00	R 0.00
Development, Created website					
Subtotal:	00:00	12:57	10:00		R 279.50
Total:					R 279.50

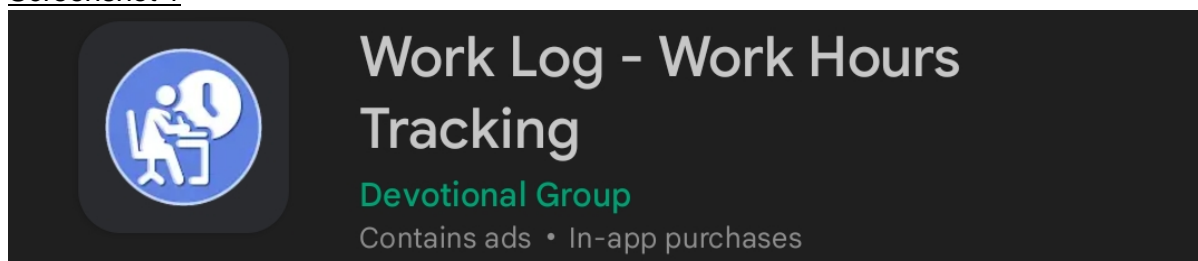
- Users can view invoices information for the year (reporting feature). This feature is useful because it gives users an overview of clients along with invoices in a neatly displayed format.

Report				
Paid	Client	01/01 - 2023/12/31		
	Client	Invoice	Tax	Paid
2023	0	0	R 0.00	R 0.00
December	0	0	R 0.00	R 0.00
November	0	0	R 0.00	R 0.00
October	0	0	R 0.00	R 0.00
September	0	0	R 0.00	R 0.00
August	0	0	R 0.00	R 0.00
July	0	0	R 0.00	R 0.00
June	0	0	R 0.00	R 0.00
May	0	0	R 0.00	R 0.00
April	0	0	R 0.00	R 0.00
March	0	0	R 0.00	R 0.00
February	0	0	R 0.00	R 0.00
January	0	0	R 0.00	R 0.00

Research: App 3

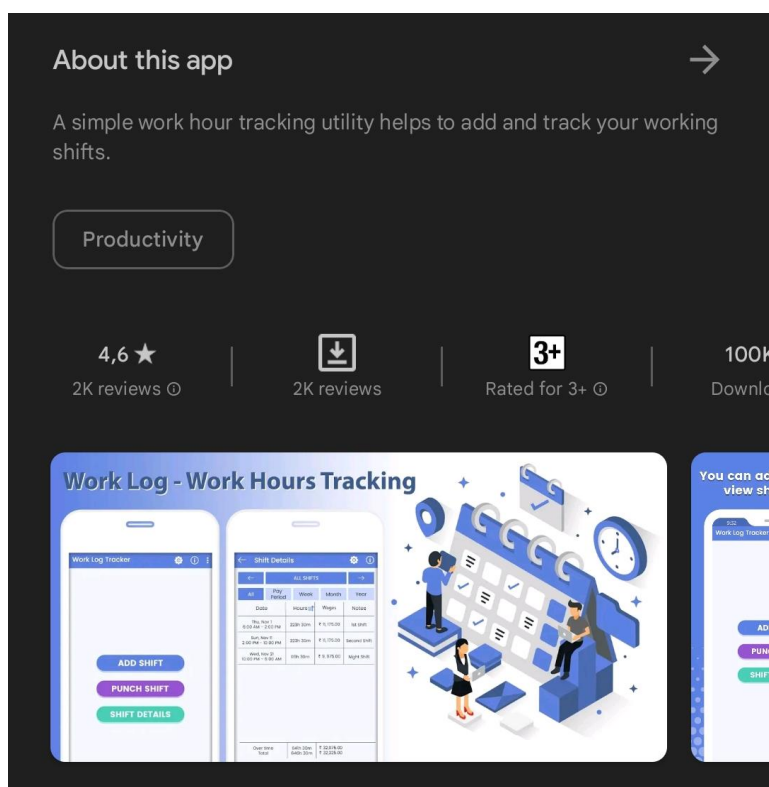
a. Overview of the app:

Screenshot 1



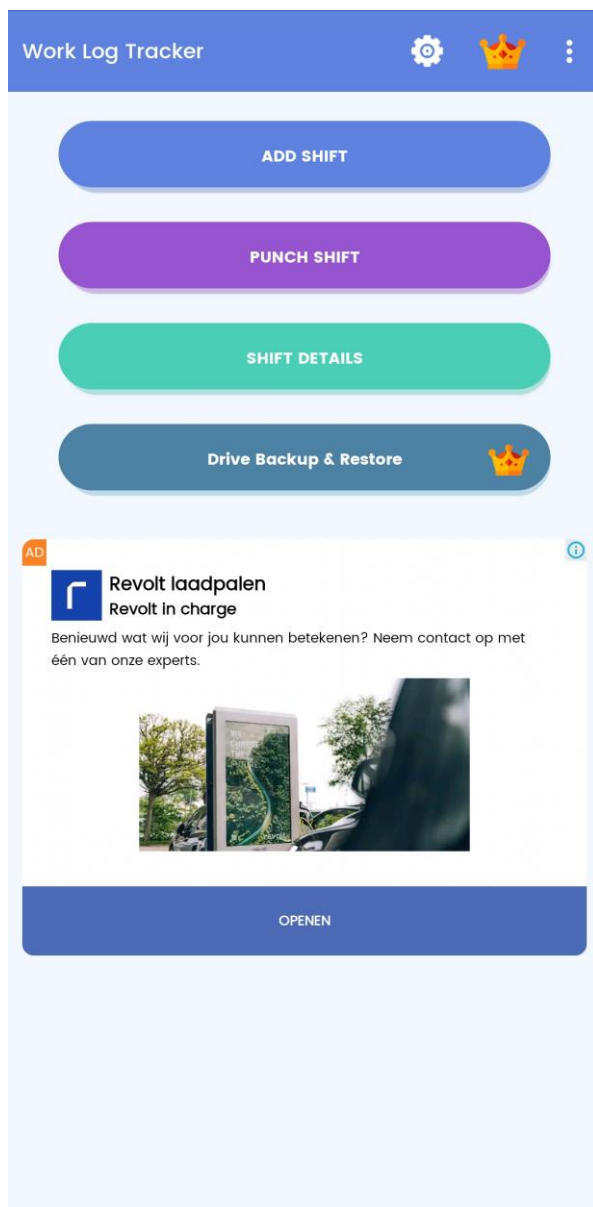
The name of the app is Work Log – Work Hours Tracking; it is available to download for free on the Google Play Store (Group, 2022)

Screenshot 2



The app has a rating of 4.6 stars (outstanding rating).

Screenshot 3



This is the main page of the app. The user can navigate through the different parts of the app on this page. Users can click on PUNCH SHIFT to start tracking time for a shift

Screenshot 4

The screenshot shows a mobile application interface for tracking work shifts. At the top, a blue header bar contains a back arrow, the text 'Punch In Shift', and two circular icons: a close button (X) and an information button (i). Below the header, the interface is divided into several sections. The first section, 'Shift Start', displays the time '12:24 PM Sun Apr 23' and a downward-pointing chevron icon. The second section, 'Break Start', features a play button icon. The third section, 'Break Total', includes an edit icon (pencil). Below these is a 'Notes' section with a horizontal line for text entry. At the bottom of the screen is a large, rounded blue button labeled 'PUNCH OUT'.

This page appears when users punches in. Users can add notes to their timesheet and take breaks. PUNCH OUT can be clicked once a user's shift is finished. The details for their timesheet will get stored in a database.

Screenshot 5

← Add shift ⓘ

Shift Start
23/04/2023 ▼ 12:24 PM ▼

Shift End
23/04/2023 ▼ 12:24 PM ▼

Break(unpaid)
--- ▼

Total Hours (paid)
0.0h

Notes

✓

Users can add shift details of a timesheet after punching out of a shift. This shift information will get stored in a database.

b. Strengths and weaknesses of the app:

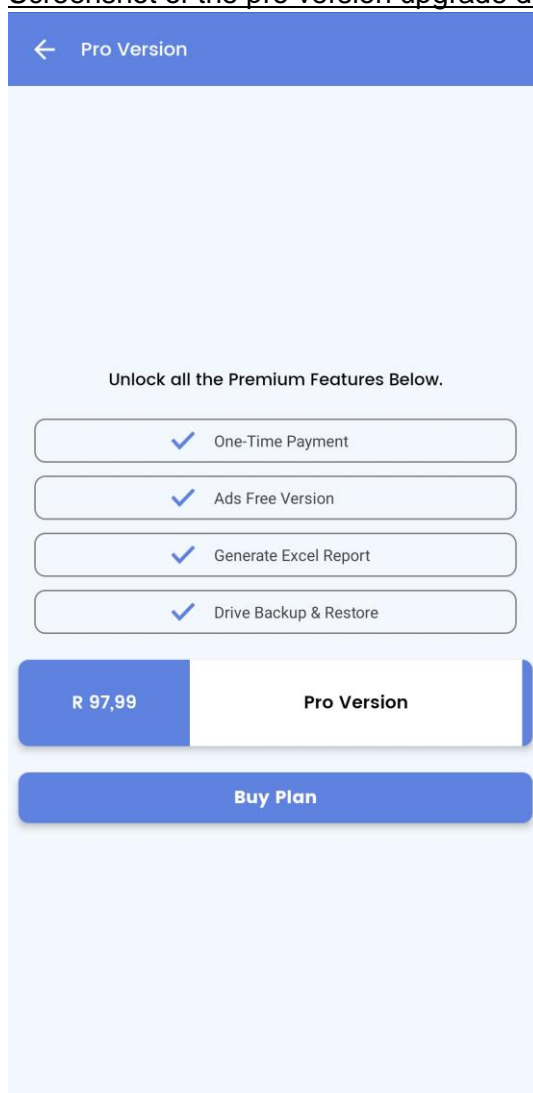
Strengths:

- Consistent blue and white theme throughout the app.
- Users can easily track time for their shifts.
- Timesheets and shift details are stored in a database.

Weaknesses:

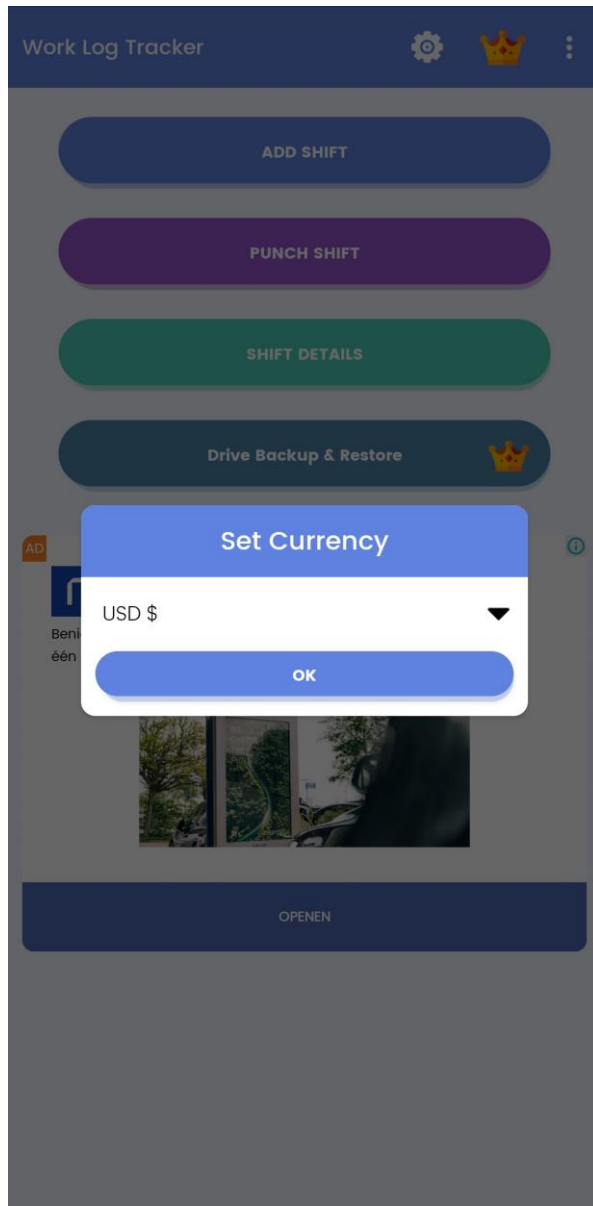
- Users cannot generate Excel reports or use backup and restore feature without purchasing the pro version of the app

Screenshot of the pro version upgrade details:



c. Innovative features of the app:










- When the app is first opened, the user is prompted to set a currency. This is a useful feature because users from different countries use different currencies.



- Users can view their shift and timesheet details in a tabular format that may be filtered according to the date. This is a useful feature so users can view timesheets recorded that have been stored in a database (Macrotone, 2023).

Shift Details			XLS	⚙	i
All Shifts					
All	Pay Period	Week	Month	Year	
Date		Hours	Notes		
23/04/2023-23/04/2023	12:24 pm-12:24 pm	0.00			
23/04/2023-23/04/2023	12:24 pm-12:24 pm	0.00			
23/04/2023-23/04/2023	12:24 pm-12:24 pm	0.00			
Total		0.00			

Visual (infographic) comparison of all 3 apps:

App name	Timing	Specs	Charting
Timesheet – Time Tracker (App 1)			
Timesheet – Work Log (App 2)			
Work Log – Work Hours Tracking (App 3)			

The above infographic depicts a comparison of different aspects of each app (icon-icons, 2023).

List of best features from all the apps that will be included in developed app:

- Users can export timesheets in Excel format. This feature would be useful because users can use/edit their timesheets in Excel.
- Users can view statistics of timesheets on a graph. This is a feature that would be visually pleasing to the user.
- Users can back up and restore their timesheets. This feature will be useful if a user needs created timesheets on another device.
- A user guide will appear to user when the app is first opened. This feature will clearly explain how to use the app to the user.
- Users can view details of their timesheets on a calendar. This feature would be good for users to have an overview of the timesheets created for the month.

Conclusion

This document includes research on 3 time-tracking apps, a comparison of these apps and a list of the best features from these apps that will be included in the design of the app. Based off of this research document, a design document for a time-tracking app will be created.

References

aadhk, 2023. *play.google.com*. [Online]
Available at: <https://tinyurl.com/56f4cwd9>
[Accessed 23 April 2023].

cloudian, 2023. *cloudian.com*. [Online]
Available at: <https://tinyurl.com/7fwn9utf>
[Accessed 22 April 2023].

Group, D., 2022. *play.google.com*. [Online]
Available at: <https://tinyurl.com/33rvuczc>
[Accessed 23 April 2023].

icon-icons, 2023. *icon-icons.com*. [Online]
Available at: <https://tinyurl.com/592fvete>
[Accessed 23 April 2023].

Macrotone, 2023. *macrotoneconsulting.co.uk*. [Online]
Available at: <https://tinyurl.com/pfxakzze>
[Accessed 23 April 2023].

OG, M. T. T., 2023. *play.google.com*. [Online]
Available at: <https://tinyurl.com/3ev8rh2j>
[Accessed 22 April 2023].

Reimers, S. & Harvey, N., 2023. Bars, lines and points: The effect of graph format on judgmental forecasting. *International Journal of Forecasting*, pp. 1-18.