# OPSC7311 POE – DESIGN AND PLANNING

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## Introduction

The SARS group is focusing on the crucial planning and design phase in this component of Task 1 for the Open-Source-POE. This stage is crucial because it will give the SARS members a full grasp of how our app will work by presenting them with a visual image of the finished product. We want to create a solid foundation for a successful project by carefully outlining the project's criteria, visualizing our goals, establishing the scope of work, and planning our strategy.

In this stage, we will focus on multiple critical areas:

- Project Scope Definition: We will outline the general project, its main components, and produce a draft logo design.
- List of Requirements: We will put together an extensive list of the app's functional specifications.
- UI Design: To improve our comprehension of the app's functionality, we will create mock-ups of the UI designs, which will give users a visual depiction of the interface.
- Project Plan: To enable effective time and resource management during the development period, we will create a plan with clear phases and deadlines.

Our goal in designing the user interface and carefully organizing every step of the development process is to reduce misunderstanding and optimize our workload in the future. We think that using this strategy will lay the groundwork for a successful project that is well-thought-out.

## The App: Lifetime



Option 1





Option 2

Option 3

Lifetime, a user-friendly app, is designed to transform the often-tedious task of time-tracking into a seamless and enjoyable process. With its intuitive interface, adding, tracking, and planning tasks becomes a breeze. Whether you are managing multiple projects or a busy personal schedule, Lifetime makes it easy to stay organized. You can quickly add new tasks, set deadlines, and monitor your progress in real-time.

#### **Innovative Features:**

- Summary of current tasks
- Calander display of upcoming tasks
- Built in Timer for easy time tracking.
- Profile customisation.
- Detailed Graph breakdown of Week's tasks
- Reminder Notifications

## List of Requirements

## Log in feature:

User's must be able to login to the application. This also entails that the app must have the functionality to create a user profile with security measures in place. User profile must consist of at least a username and password. This data must be stored, not just in runtime. All user information regarding their time tracking can then be associated with their account and stored.

## Category creation:

To organize tracked activities, users should be able to create categories to which they can assign activities. This allows for better organization and stat tracking. Categories should only need to consist of a name and description at minimum, for other app functionality we can include the option to tag a category as a work category. The app is meant to help users with their work life balance and thus it is important to separate work statistics from other recreational categories such as sport. Along with creation of a category, it also necessary to take a step further and employ CRUD functionality, not just creation but also the ability to read, update and delete created categories.

## Timesheet entry creation:

The main function of the program, to create timesheet entries. These entries are to include/consist of the date, start time, end time, description, category, and an optional image at minimum. Timesheet creation should be a streamlined process and this section should be focused on the most as it is the main function of the program. Building of this it is important to include CRUD functionality, instead of stopping at creation as the bare minimum, it is important to be able to edit, and delete stored timesheets. Not only this but timesheets can be taken further and include a new attribute, the 'activity' attribute exists as a template making it easier to read time sheet entries, giving them a name, and not just relying on descriptions alone. The idea is to separate timesheets and activities where activities are recorded as timesheet entries. For example, we could have an IT category tagged as work, under which we associate a Coding and Meetings activities, then we create a time sheet entry for either activity.

For Example:

21 March 12:00 – 14:00 Finished making variables.

## Additional photograph:

Along with the creation of each timesheet entry, the user should have the option to also include an image with the entry. Images are optional; however, this functionality requires image data to be stored in a database along with other user personal information.

#### Goals:

User should be able to set a minimum and maximum daily goal for worked hours. This goes in hand with the need for a work tag to be added to a category. If the user has multiple work-related categories, then a complete work hour goal can be set that affects them all. We can also extend the goals functionality to each individual category, keeping to the idea of the app helping the users work-life balance.

#### Timesheet list:

The complete list of all timesheet entries for a user selectable time range must be displayed. From this list the user must also be able to access any photos included in this list. This is most likely to be accomplished by displaying the list of dates to the user and upon clicking a day, will expand and display the timesheet entries. This list would come in the form of a calendar making it easier to read by the user.

## Category total hours review:

The user should be able to select a time range. From there the app will display the user with the total amount of hours worked on each category in that time range.

## Total hours worked graph:

The app should be able to display a graph consisting of the total hours of work done over a user selectable period. The graph will also display the set user minimum and maximum goals. The app will combine all the categories that relate to the work tag as mentioned previously.

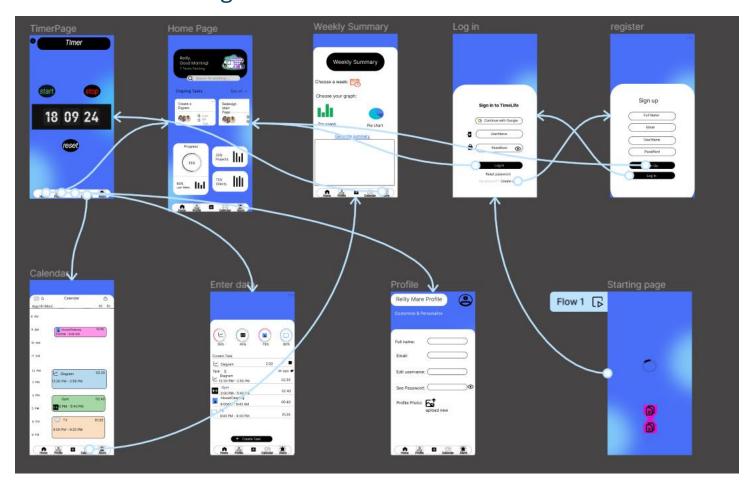
#### Goal review:

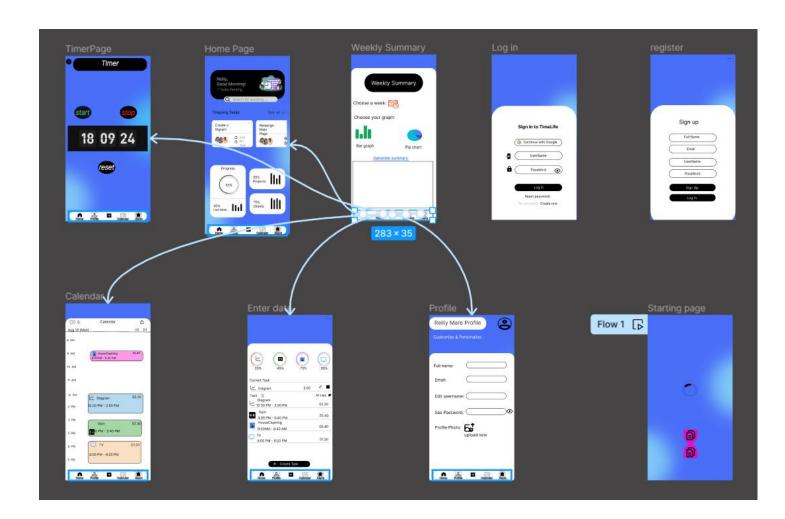
The app needs to be able to show the user how well they are staying within their minimum and maximum work hour goals during the current month in a visual format. Easiest method of implementation is to show a detailed graph.

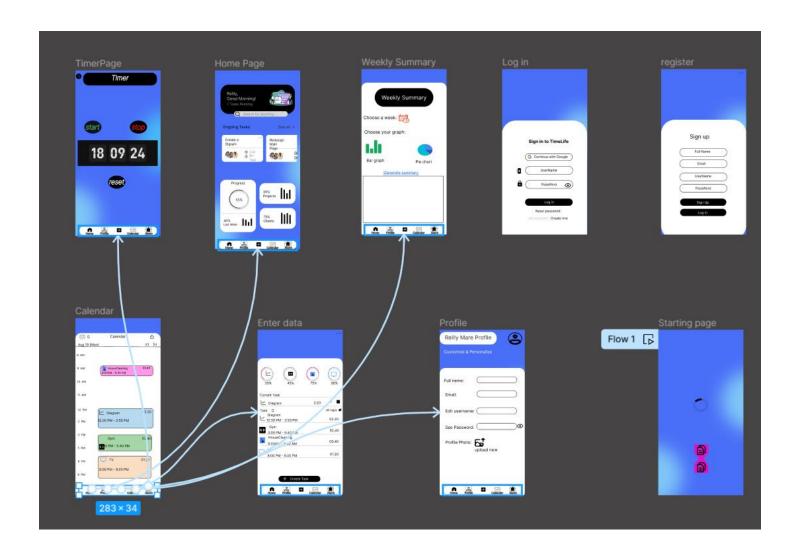
#### Database:

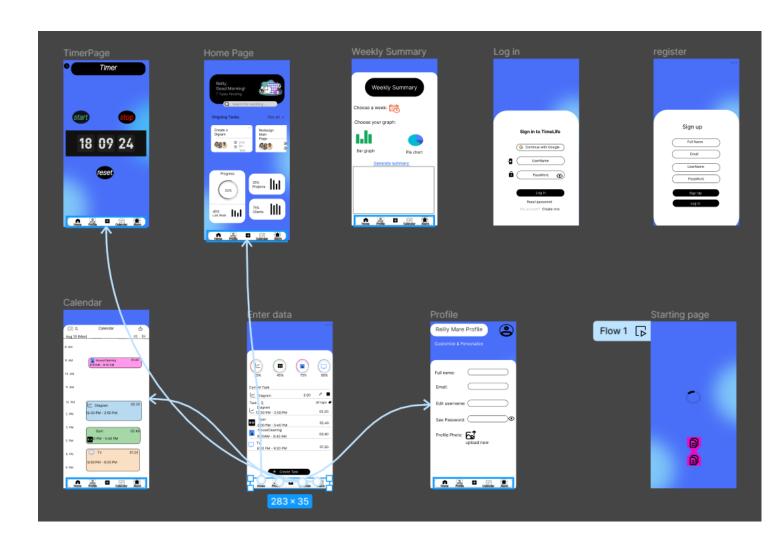
All user data needs to be stored in a database; no information will be stored locally in the app other than temporary data such as an ongoing timer.

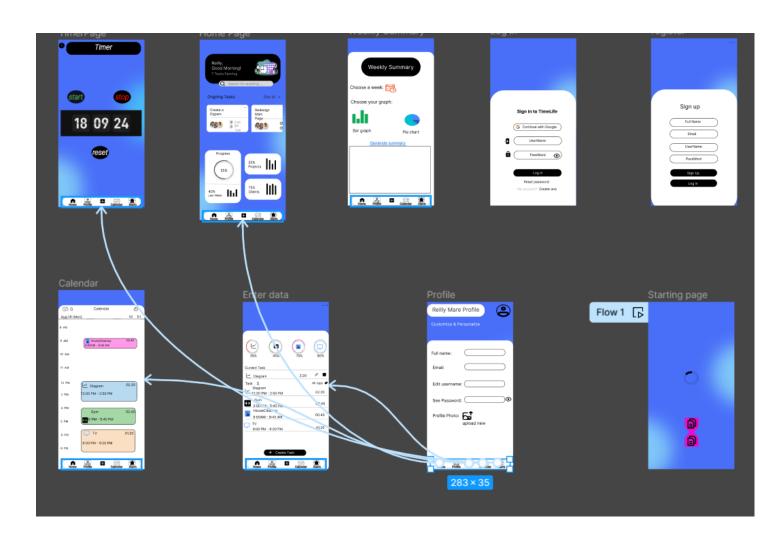
# User Interface Design

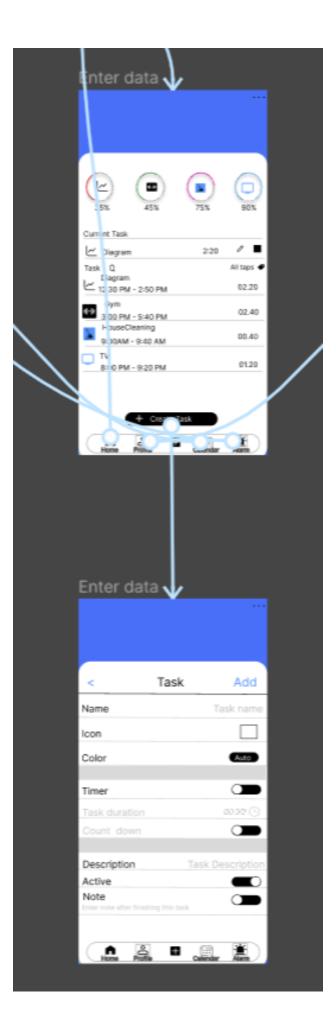




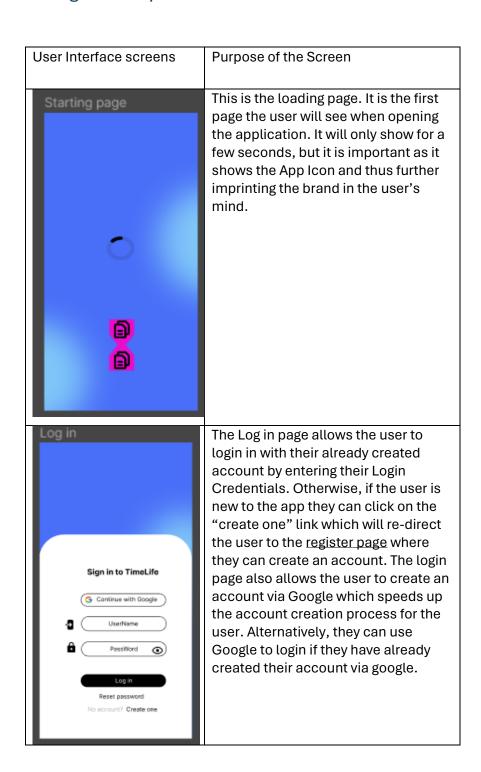


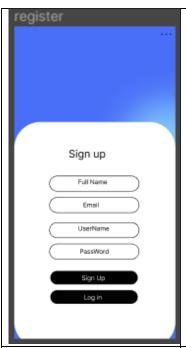






## **UI Page Description**





The Register page allows a user to create an account and allows us to capture their user input details such as their Name, email, and login credentials. Once they have created their account, they can go back to the login page to login with their new account which can be done by clicking the black "Log In" button.



Once the users Login credentials have successfully been Verified, they will be directed to the home page. This will also be the page they see each time they open the app from now on as their login details have been saved and they will not need to login each time. The home page has a bottom bar with five buttons. The home button is to go to the home page (where they are now). The profile button will take them to their profile editing page where they can upload a photo. The plus "+" button takes them to the task page where they can add or view tasks. The calendar button will take them to their calendar. Finally, the alarm button will direct the user to the time page which is a built-in stopwatch feature for the user. The home page also has pop ups which allows for home page customization. A good morning/afternoon message box with a search bar to help with navigation. And a progress report popup.



The timer page is a simple add on feature to the app. It is a built-in stopwatch feature which they can use to time their study breaks. The idea behind this is so that the user does not have to use their clock app on their phone and instead can have everything in one app: stopwatch, calendar etc.



This is the task manager page. This shows the user their current tasks for the day/week. It shows what time of day they should work on each one. It also allows the user to add new tasks and edit their current tasks. It also allows the user to add a photo to their tasks to help them visual their tasks.



This is the add task screen. It can be accessed via the "+ Create task" button on the "task manager" page. On this page the user can add new tasks. The user can name their task, choose an icon to help them visualize their task, they can assign a color to it, give it a time length to be completed as well as give it a description if extra notes or details need to be added. Once the details are filled out the user clicks on "add" and then the task is added to the task manager page where it can be viewed with the rest of the tasks.



The weekly summary page can be accessed from the calendar page. This allows a user to choose a week they would like to get a summary of. They select the week using the calendar button, they then choose in which graph format they would like the visual part of the summary to be in and then they click on the generate summary link which then outputs the written summary with the Visual graph alongside it.

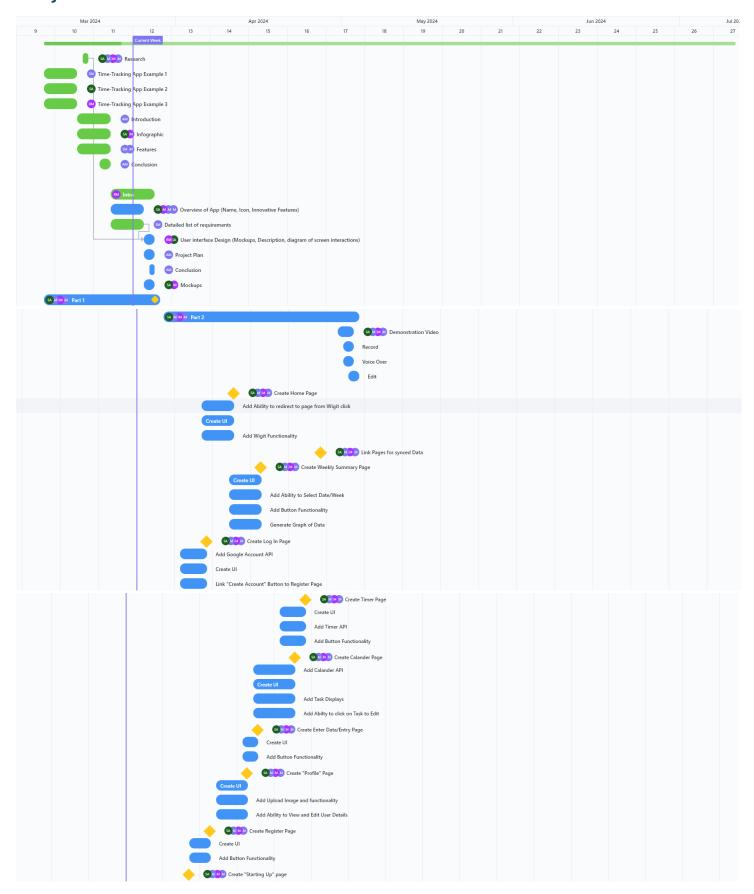


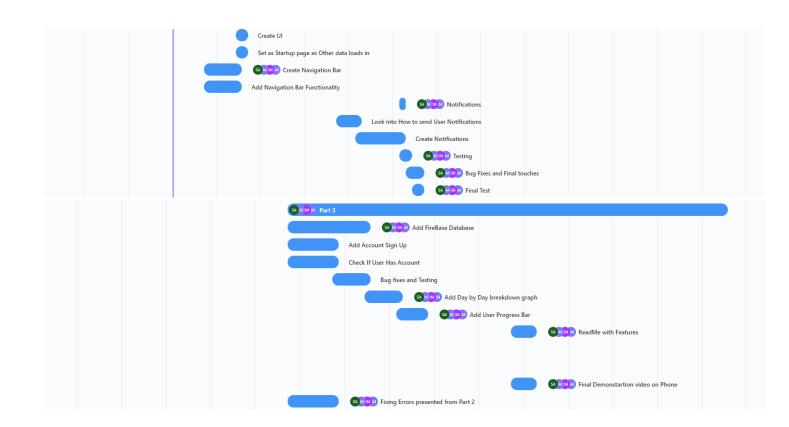
The calendar page is another add on feature which allows the user to view their tasks in a calendar format. Like the stopwatch feature this is so the user does not have to use a separate calendar app and can have all their time-based apps in one app.



The profile page which is accessed via the profile button is where the user can edit their personal details that are stored in the apps database. They can edit their name, email, username as well as view their password if they had forgotten it. They can also upload a profile photo to further personalize their app experience.

# **Project Plan**





## Conclusion

In conclusion, the planning and design document has described the essential functions, specifications, and design components of our mobile application. The app is made to efficiently cater to the needs of our target audience thanks to its innovative features and user-friendly interface. Some of the key features that will improve the user experience are the creation of categories, the secure login feature, and timesheet entry generation. To help with work-life balance and productivity, the app also offers extra tools like goal setting, a timesheet list, and an evaluation of all the hours spent in each category. The software is not only useful but also user-friendly and entertaining thanks to the careful planning and design process. This document will be an invaluable resource as we go with the development process, aiding us in making sure that our app lives up to the promise of offering an exceptional user experience.