UNIVERSITI MALAYSIA TERENGGANU

FACULTY OF COMPUTER SCIENCE & MATHEMATICS

CSM3123 NATIVE MOBILE PROGAMMING

HOME APPLIANCE ASSISTANT

Prepared by:

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INTRODUCTION

Greetings from the future of home management: a world in which your living area is a smoothly coordinated symphony of efficiency and convenience rather than merely a place to live. We are pleased to present our innovative Home Appliance Assistant, a state-of-the-art program that will completely change the way you use and interact with your house.

Our Home Appliance Assistant is a shining example of innovation in a world where time is of the essence and the responsibilities of daily life may be daunting. It provides a comprehensive solution to streamline, improve, and simplify your home experience. With the help of our Home Appliance Assistant, you may envision a living space that changes to suit your needs and routine tasks that are completed with ease.

PROBLEM STATEMENT

Outdated appliances can present a substantial challenge within modern households, primarily stemming from their inherent lack of energy efficiency. Many older electrical devices were not designed with contemporary environmental considerations in mind, and as a result, they tend to consume more electricity than their newer counterparts. This inefficiency becomes evident in the form of higher electric bills, placing an additional burden on household budgets. Beyond the issue of energy consumption, the warranty duration of these appliances can also become a source of frustration for homeowners. Unfortunately, households often overlook or remain unaware of the warranty's expiration, and even when a claim is warranted, the loss of proof may render the warranty ineffective. This lack of awareness can lead to unexpected expenses and the premature replacement of appliances. Another common challenge arises from the neglect of regular maintenance. With the hustle and bustle of daily life, households may inadvertently overlook the essential maintenance required by their appliances. This negligence can have detrimental effects on the efficiency and longevity of these devices. Late or infrequent maintenance may contribute to a decline in performance, further escalating energy consumption issues and potentially shortening the overall lifespan of the appliances. To address these concerns, it is crucial for households to consider timely upgrades, stay vigilant about warranty durations, and prioritize routine maintenance. By adopting a proactive approach to appliance management, homeowners can create a more sustainable, cost-effective, and environmentally friendly living environment.

OBJECTIVES

Embarking on the development of an application that serves as a comprehensive home maintenance assistant represents a multifaceted solution to address various challenges faced by households. The primary goal is to empower homeowners with a tool that not only keeps track of essential home maintenance tasks but also ensures that these tasks are undertaken at the right time. The application can employ features such as automated reminders and a user-friendly interface, allowing users to input and schedule maintenance activities for different appliances within their homes. This proactive approach helps prevent the inadvertent neglect of essential tasks, ensuring that appliances are consistently well-maintained, thereby enhancing their overall efficiency and longevity.

Furthermore, the application aims to streamline the process of managing warranties by designing a feature that allows users to effortlessly view the availability of warranties associated with their appliances. By enabling users to upload and store digital proofs of purchase, the application safeguards against the loss of such crucial documentation. This not only facilitates easy access to warranty information but also enhances the likelihood of successful warranty claims, potentially saving homeowners from unexpected repair or replacement costs.

In addition, the application seeks to optimize household spending on appliances by incorporating a feature that tracks and analyses expenditure on the same appliances over time. By maintaining a comprehensive record of expenses related to each appliance, users can gain valuable insights into the cost-effectiveness of their investments. This financial transparency enables households to make informed decisions, whether it involves budgeting for future maintenance, planning for upgrades, or assessing the overall value derived from their appliance purchases.

In essence, the envisioned application acts as a holistic solution, not only serving as a scheduler for home maintenance tasks but also providing a centralized platform for warranty management and financial tracking. Through these functionalities, the application aims to empower households with the tools needed to make prudent decisions, enhance the efficiency of their appliances, and ultimately contribute to a more sustainable and cost-effective home environment.
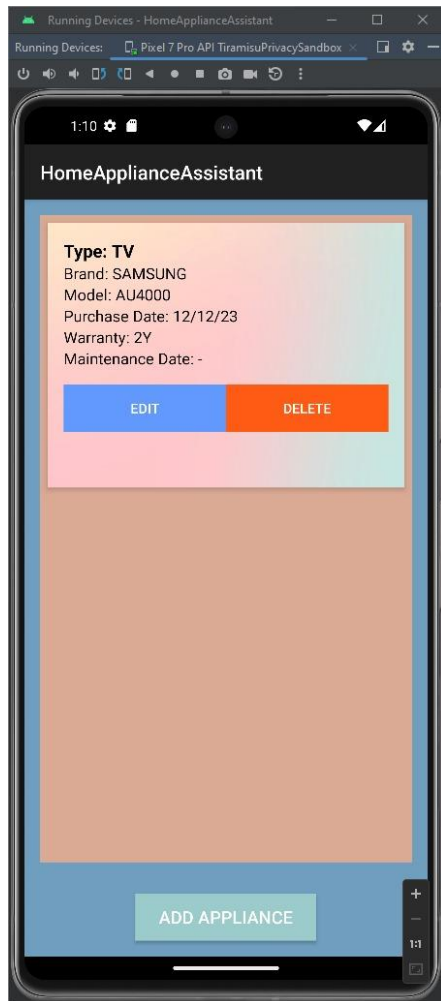
ACTIVITY DESIGN/ WIREFRAME

Figure 1 – Appliance List Page

The Appliance List Page is the page that display all this that user fill in the Add Appliance Page, then user can edit and delete the item is broken. In this page have add appliance that connect to Add Appliance Page to add new thing.
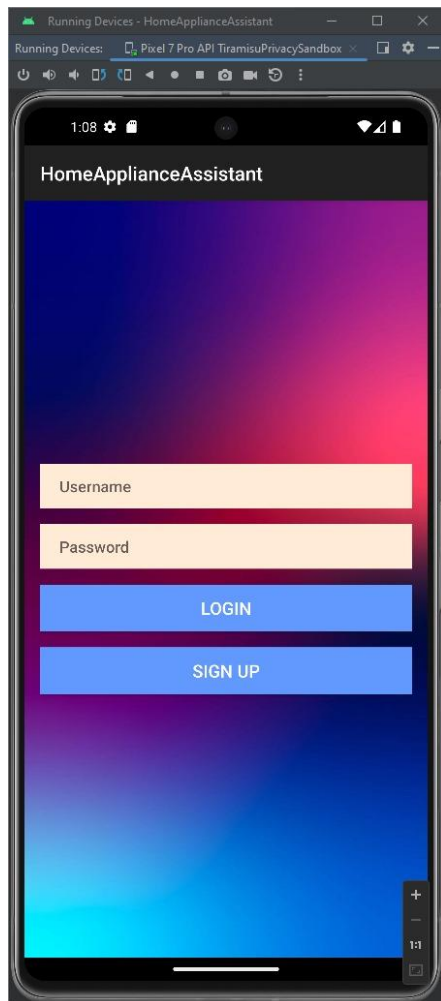
Figure 2 - sign in page

The sign in page have two thing that take data in database from that user register at register page then user can go to home page if the username and password is correct.
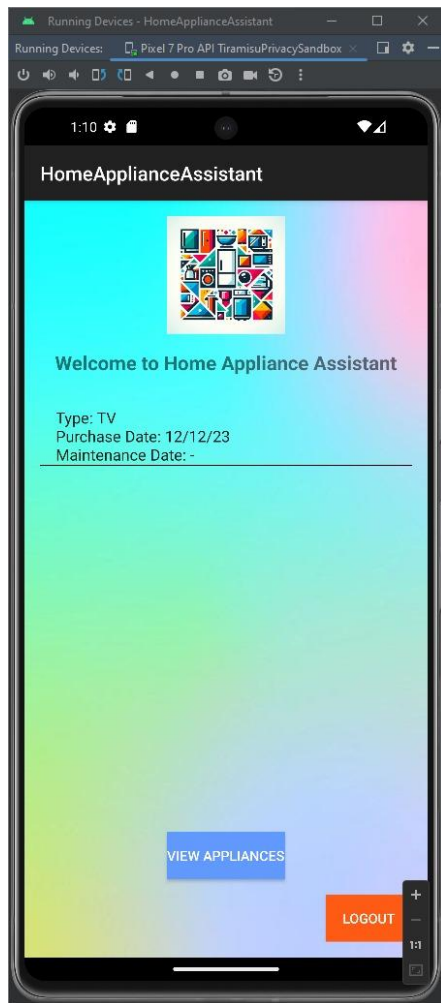
Figure 3 - Home page

Figure 3 that show Home page that user can view appliance, and have log out button if user want to log out.
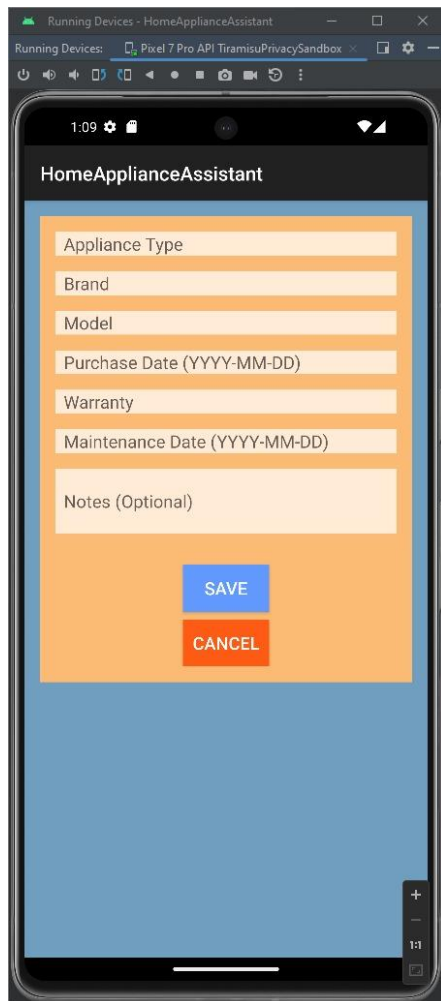
Figure 4 – Add Appliance page

Figure 4 that show that user can add appliance, the user need to fill the box the save if the user want to cancel the add can cancel because have delete button.
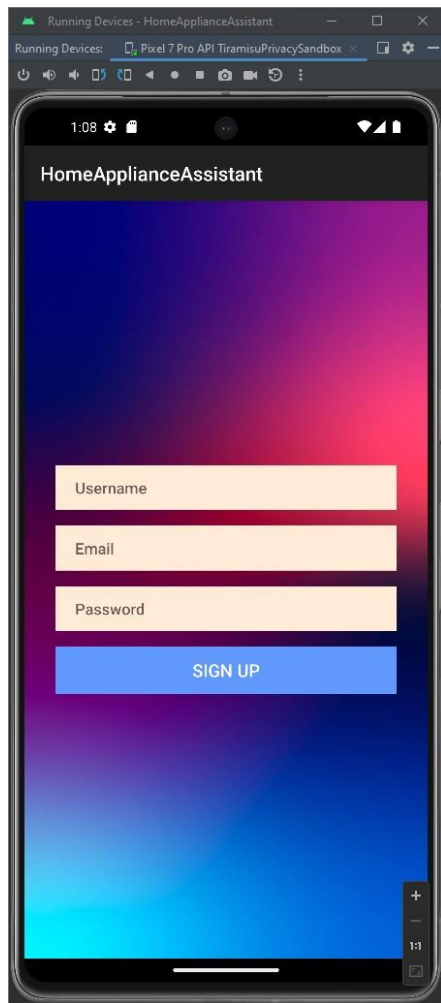
Figure 5 - Register Page

Figure 5 that show register page for user must register first before sign in or add appliance in this app.

Figure 6 - Main Page

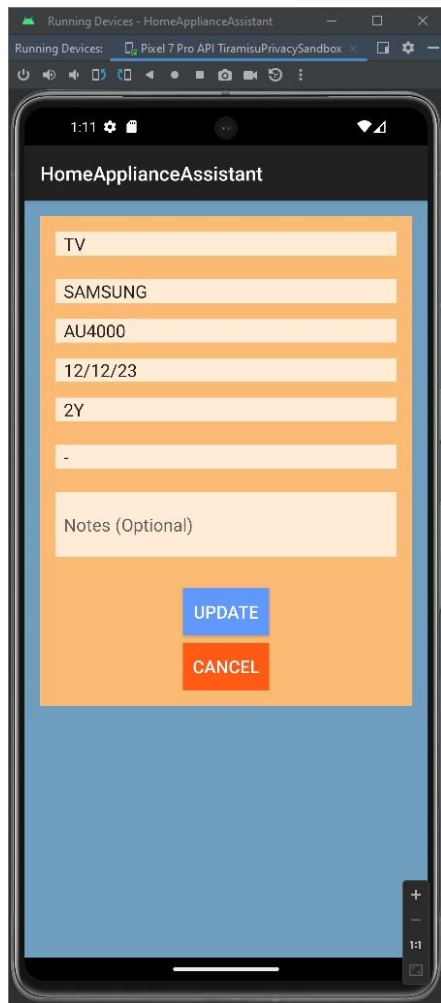Figure 6 that show the main page of the system.

Figure 7 - Edit Appliance Page

Figure 7 that show edit appliance that user can change the information in the list if have any mistake.

CONCLUSION

The Home Appliance Assistant appears as a revolutionary force in the constantly changing world of contemporary living, changing the way we engage with our living environments. The Home Appliance Assistant is a shining example of innovation in a world when smart technologies are making life more complicated. It holds the promise of a time when home management will be synonymous with efficiency, ease, and convenience that cannot be matched.

Our goal was always to solve the many problems that homeowners encounter with home automation and device management as we designed and developed the Home Appliance Assistant. This dedication culminates in a complete solution that enhances the smart home experience overall and unifies control.

Fundamental to the Home Appliance Assistant is the idea of a Unified Control Hub, which provides customers with a single interface to easily control an array of smart devices. Homeowners will find comfort in the simplicity of centralized control that adjusts to their needs rather than having to deal with the challenges of traversing different control systems.

Effective Energy Management is a commitment to cost-effectiveness and sustainability, not merely a goal. The Home Appliance Assistant helps people make informed decisions by giving them access to real-time data and practical recommendations. This allows them to lower their utility costs and carbon footprint without compromising comfort.

REFERENCE

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GitHub Link: https://github.com/ADIBSHAUQI/Home-Appliance-Assistant