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**JOHOR
INNOVATION
INVENTION
COMPETITION
AND
SYMPOSIUM
2023**



"Innovation Inspires a Society
to be Critical and Creative"

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Editors-in-Chief

**AHMAD KHUDZAIRI KHALID
NUR INTAN SYAFINAZ AHMAD**



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Preface

In the name of Allah, the Almighty who gives us the enlightenment, the truth, the knowledge and with regards to Prophet Muhammad (peace be upon him) for guiding us to the straight path. We thank to Allah for giving us guidance and strength to write this e-book.

This e-book compiles the extended abstracts that submitted to Johor Innovation Invention Competition and Symposium 2023 (JIICaS2023), where JIICaS2023 is a virtual platform for all creative minds to share and present their invention and innovation. The extended abstracts are divided into two categories, which are Category A (Higher Educational Student/ Any Recognized Institutional Students in Malaysia) and Category B (Primary/ Secondary School Students / Special Education School Students in Johor). Each abstract gives a brief background on the innovation or project.

We hope that this e-book will help the readers to get to know the innovation done by the students from both categories and get some ideas to develop future innovation products.



HOMEAID APPLICATION

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ABSTRACT

HomeAid, offers multiple home maintenance services to users including basic housekeeping, plumbing, lawn mowing as well as wiring. This application enticing to users from different generations due to the new added features and its user-friendliness. Target audience comprises people who have the inability to clean and maintain their house. Other instances would be vulnerable individuals such as the elderly who experienced difficulties in performing house chores mainly due to their physical disabilities. Peoples may possess limited knowledge on home maintenance together with the safety considerations. In addition, they might not own suitable equipment to perform the job. Main purpose is to help and assist users who face difficulties in cleaning and maintaining their house. Meanwhile, the second objective is to provide the best home maintenance services to users in a single application. Last objective is to enable users to unwind and enjoy their free time after an exhausting day. This product increases the services offered including basic housekeeping, plumbing, lawn mowing and wiring which are not available and offered by our competitor. In addition, the details of our helpers including their rating and reviews by previous clients can be seen. In addition, we have also included details of their expertise as well as experiences in the field. It is up to the user to complete their cleaning according to their preferences; hence this application considered to be helpful for the user. The HomeAid application is made to assist users in obtaining help to clean and organize their home.

Keywords: home maintenance, cleaning services, maintenance services, application.

1.0 INTRODUCTION



Regarding this project, our target audience comprises people who are unable to clean and maintain their houses. Currently, people are busy with their schedules and hectic lifestyles such as working adults despite their marital status as well as ordinary college students. Most

importantly it would be vulnerable to individuals such as the elderly who experienced difficulties in performing house chores mainly due to their physical disabilities. Other than that, these people may possess limited knowledge on house maintenance together with the safety considerations. In addition, they might not own suitable equipment to perform the job.

We are actively engaged in the development process of this application to ensure that we cater to all our users' concerns and needs, which would eventually help them achieve satisfaction in using our application. Thus, we have determined and listed down the objectives of this application to steer us in the long run. The first objective is to help and assist users who face difficulties in cleaning and maintaining their house. Meanwhile, the second objective is to provide users the best home maintenance services in a single application. Whilst the last objective is to enable users to unwind and enjoy their free time after an exhausting day, consistent with our motto, "keep your free time free".

Therefore, our final product by the name of HomeAid, is an application that offers multiple home maintenance services to users including basic housekeeping, plumbing, lawn mowing as well as wiring. The application may be especially enticing to users from different generations due to the new added features and user-friendliness.

2.0 OBJECTIVE

The objectives to develop this product is to help and assist users who face difficulties in cleaning and maintaining their house and provide the best home maintenance services to users in a single application.

3.0 DESCRIPTION OF INNOVATION/METHODOLOGY

This project uses several method to get the idea of this product. First method is using use case exploration canvas to identify user problem.

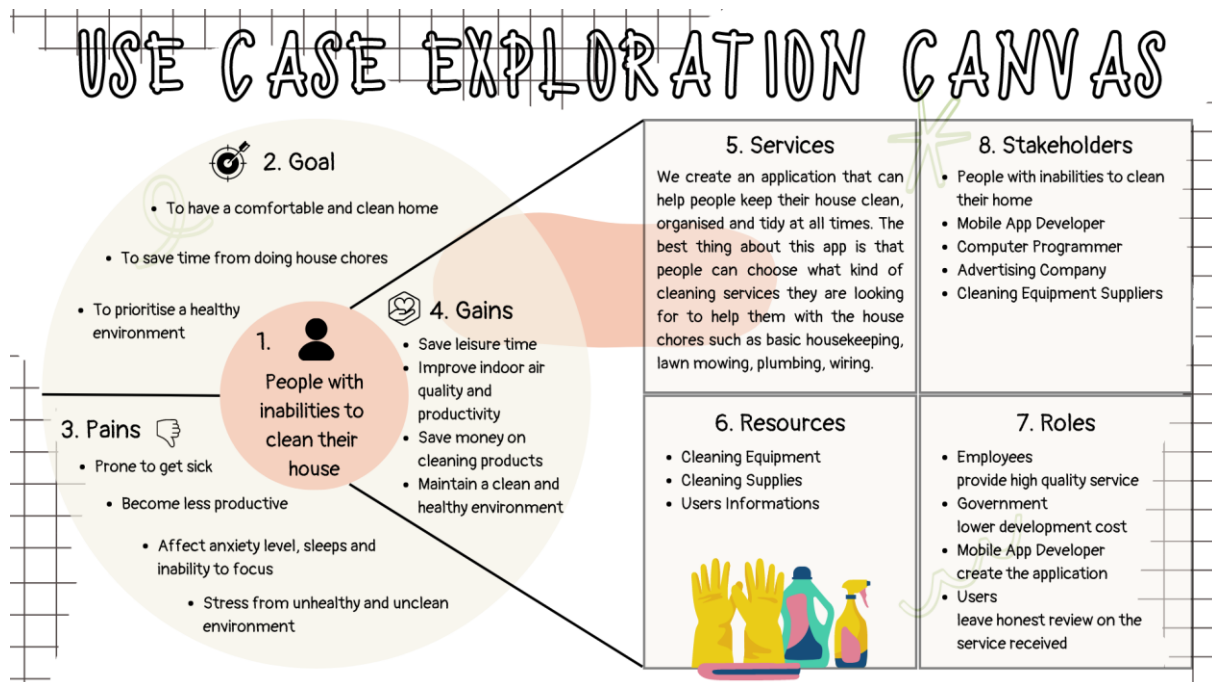


Figure 1: HomeAid Use-case Exploration Canvas

Second approach is implement QaDIM or known as Quick and Dirty Method. This method primarily intended for identify opportunities for incremental innovations on the already existing product.

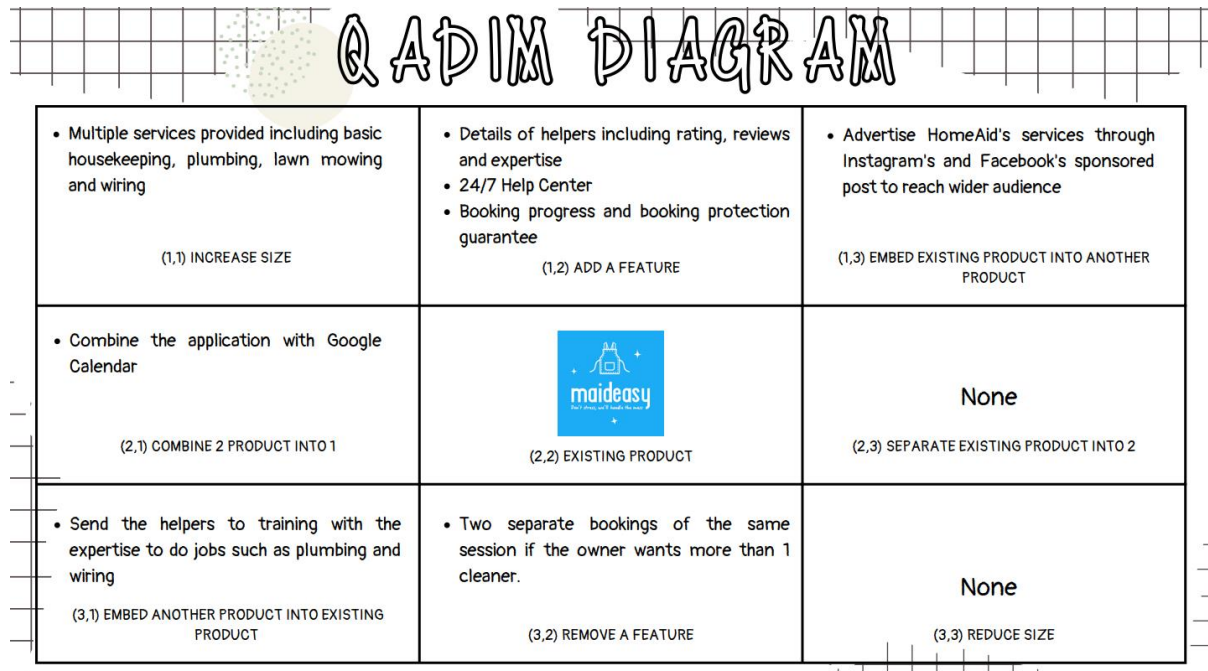


Figure 2: QaDIM diagram for HomeAid

After the intended product is finalized, sketch design for the application is drawn. Lastly, the prototype was develop using Marvel Application.

4.0 ADVANTAGE/IMPACT/RESULTS/NOVELTY

Based on the project itself, feedback from tested users were gathered. The result, are based on the accessibility and user-friendliness of the application as well as the available features offered. Other than that, users are satisfied with the attentiveness of the helpers assigned to them.

5.0 CONCLUSION

Understanding the struggles of peoples nowadays helps to come up with and offer excellent, new, and rare solutions that others would not typically explore. Overall, those who have busy lives or are older may find it challenging to complete tasks around the house including mowing the grass, wiring, plumbing, packing up to move out, and washing clothes. In general, people will inspect a person's home to determine whether they are tidy or not. A person may feel more comfortable exhibiting their home to guests if it is clean and well-organized. Hence, the HomeAid can aid in resolving this issue. It is up to the user to complete their cleaning according to their tastes, hence this application can be considered helpful. The HomeAid app is made to assist users in obtaining help to clean and organize their home.