

Group 9-10

Household Services Application

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Contents

2. Description of Ideas
3. Literature review
4. The Study and Methodology
5. Outcomes, Analysis and Discussions
6. Implications and Recommendations
7. Conclusion
8. Bibliography

Introduction

Description of Ideas

This application consolidates common household service providing companies and presents information at a glance for users, letting them make informed choices when choosing a service provider. The information presented is a basic description for the company (ie. what is the nature of the company, the service it provides, etc.) Followed by a link to its website, should the user be interested to find out more about it. The price range is also summarised in the app itself.

Rationale of project

The objective of the project is to create a go-to app for family members whenever a common household service is required that is user-friendly, convenient and practical. This app allows family members to select the service the the household requires and the most suitable company that provides this. It is troublesome to search the internet for a suitable company, as people have to visit its website and find out specifically what service it provides and the pricing.

Focus and Significance

The application's significance and relevance lies in its practicality. Its design is simple and it is focused on providing a platform to present the information on companies to the users, such that they would know whether it is suitable for them by just taking a glance at it. The focus is only on apps that provide services that are applicable to common households.

Scope of Project

Categories of household services in our app are Maintenance, Plumbing and Service and Repair. Maintenance covers companies that provide renovation work, while companies that offer repair service such as air-con repair fall under the S&R category.

Literature Review

Case Studies

We have done some research pertaining what could help households best. We researched on most needed mobile apps that cater to households. Ideas we came up with were an elderly app, an app gathers social media platforms, and the Household App. We then decided that the Household App would be most useful and have the most widespread usage.

We then searched up on apps that might be similar to ours and try to find ways to keep our app unique. The result of our research was that most household service apps were of a work-hiring nature. The user would put up a job request on the network, and it is up to the service providers to bid for the job. This requires active involvement from the service providing companies, which our project group is unable to do due to the excessive liaising work that requires. Examples of such apps are PageAdvisor and Kluje.

Practices cited to support ideas

We had assistance from our external mentor Mr Goh. He helped us with some Java coding. He taught us what the specific codes in the wix meant and what it was for. We had to learn the specific functions of JavaScript to use in the website. As for the wix site itself, we watched

tutorial videos in order to create the website. Apart from that, the basic structure of the wix site is similar to that of our previous App Inventor site.

Study and Methodology

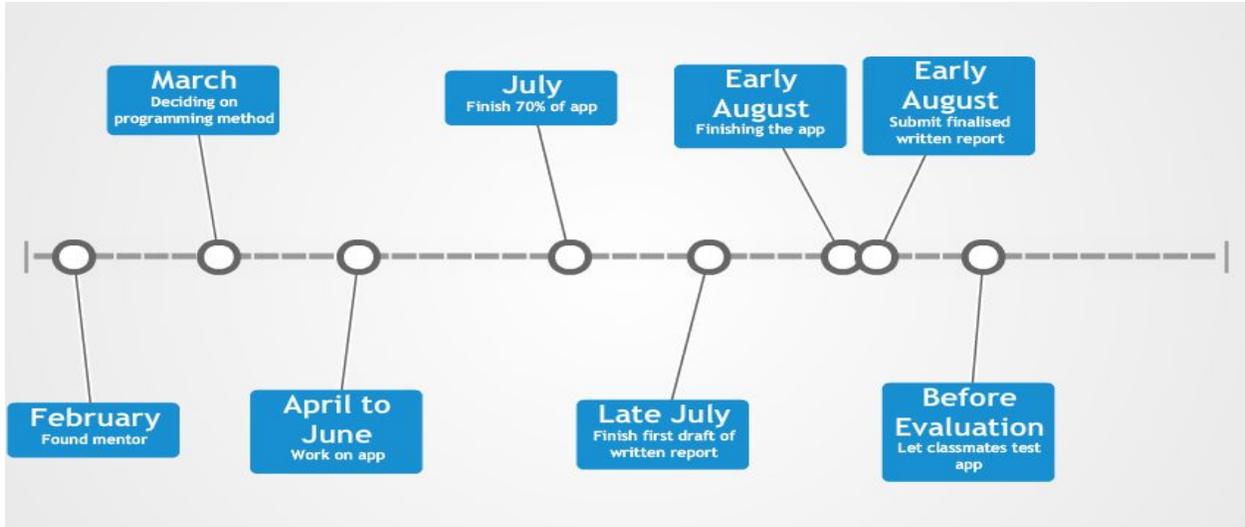
Investigations, survey, research methods

We have conducted an investigation on what might be most useful to households in the form of a survey. We originally intended to develop our app through coding using Ruby on Rails. The development would be Visual Studio Code. Our external mentor, Mr Alvin Goh, a friend of Jerome's father, provided us with the relevant resources for us to learn the language such as books and video tutorials. However, we soon found the learning curve to be steep and decided to use MIT App Inventor instead. After that, we found that we could use Wix to do it better, so we did.

Members' role and job distribution

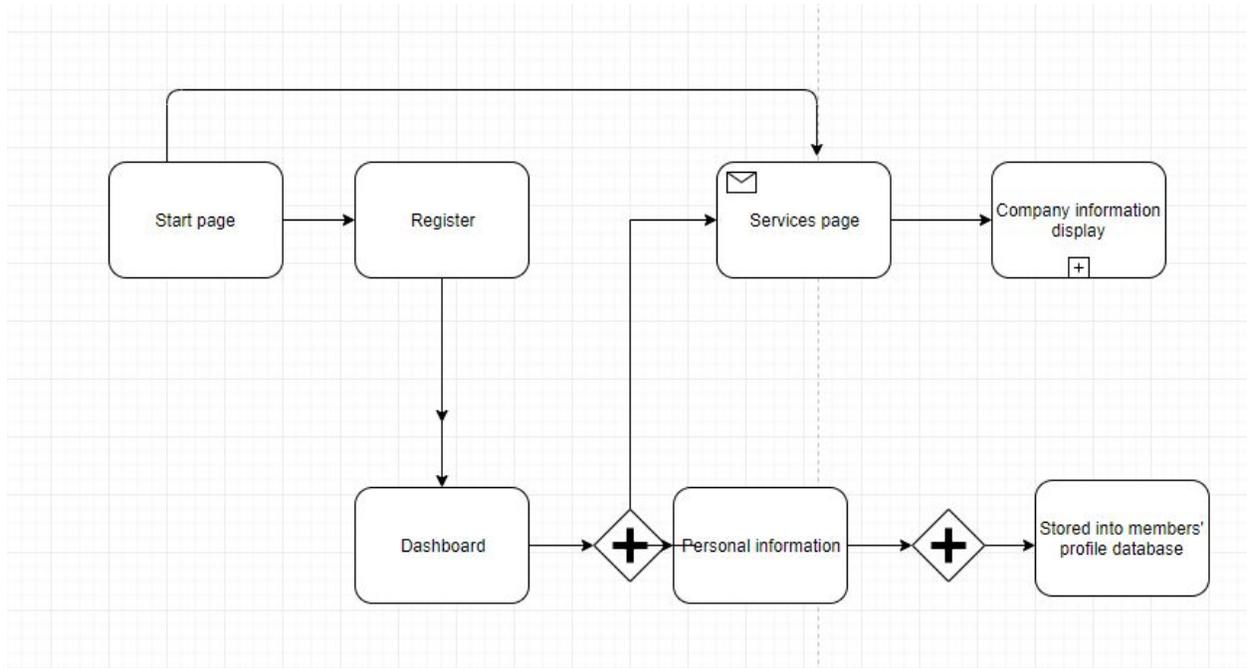
Wu Cheng Ye is the leader and he is in charge of the slides and written report. Jerome Queck is responsible for developing the app. To better distribute and organise the work, we utilised Asana. Asana is a web application designed to help teams organise, track, and manage their work.

Project Timeline

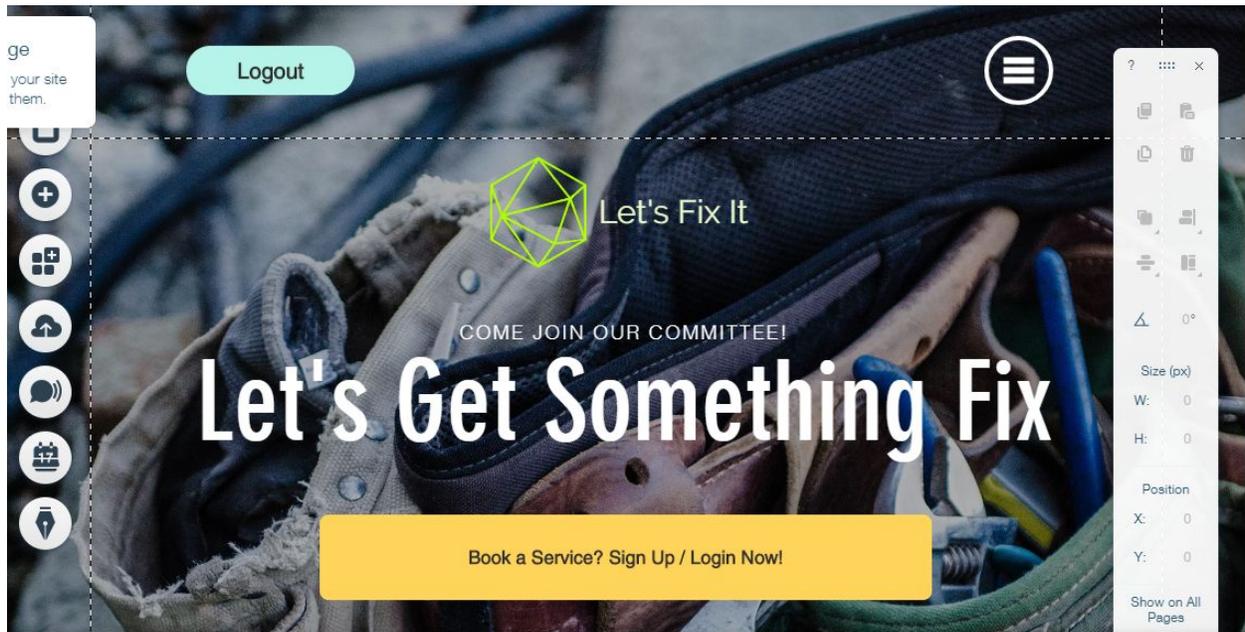


Outcomes, Analysis and Recommendations

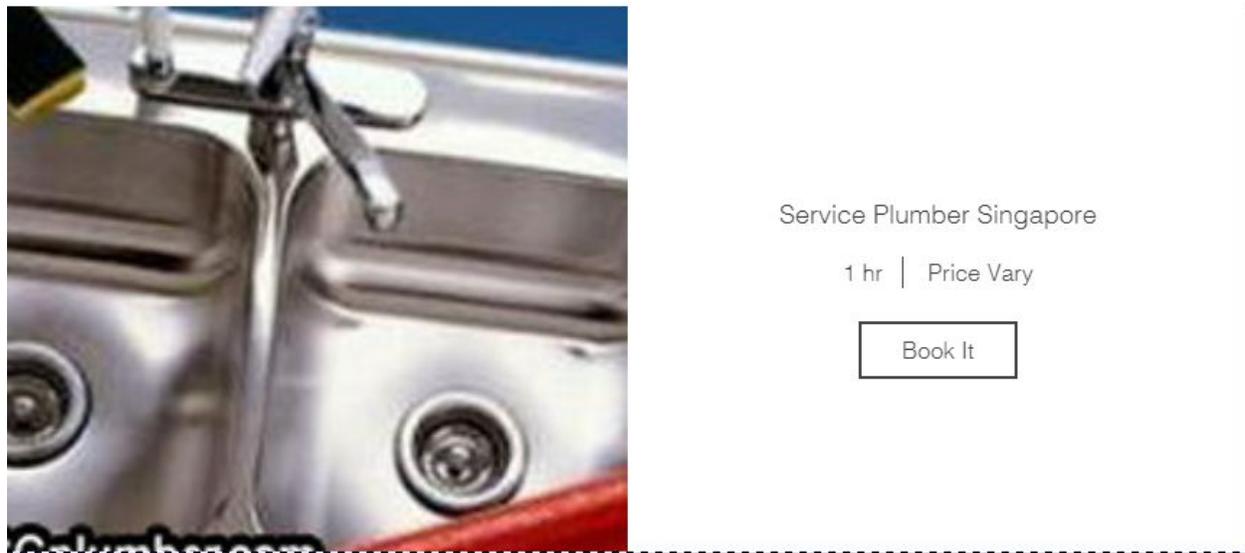
Flowchart of different features



Screenshots and descriptions



This is the main screen, where the user can log in.



A standard service widget.

Services and Repairs.

Implications and Recommendations

Areas for Improvement and future extension

We could improve on the overall user-friendliness of the app as it is now rather unpolished . This could be done by making the buttons bigger and tweaking the overall layout and structure of the app.

Conclusion

Reflections and learning points from development process

Cheng Ye:

I have learnt many things throughout the process of this project. I learnt the importance of teamwork and how cooperation makes a team more productive as Jerome and I separated the work and we each accomplished our tasks. This way, we managed to meet our deadlines despite the small size of the group. I also learnt many IT skills that would surely be useful for me in the future. These include how to use the app inventor, basic Command Prompt operations, basic Rails 5 commands, how to use a development environment, and so forth. I have also learnt ways to make use of technology to be more productive. For example, the use of Asana benefitted us a lot in organising and splitting up the workload.

Jerome:

I have gained a lot from this project. For example, I learned that teamwork is key in projects like these. Moreover, I managed to learn a lot about coding and also more on App Inventor. I learned how to use a database to store values and also learned how the various

functions worked. I realised that we were able to finish this project as we had a plan and did what we were assigned to do.

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Bibliography

Ruby on Rails primary learning resource:

Article title: Ruby on Rails Tutorial (Rails 5)

Website title: Softcover.io

URL: <https://www.railstutorial.org/book/beginning>

Case studies done for ideation:

Article title: 4 home services apps that will help you manage your home easily

Website title: Home & Decor Singapore

URL: <https://www.homeanddecor.com.sg/articles/91664-4-home-services-apps-will-help-you-manage-your-home-easily>