

SCHOOL OF COMPUTING

Faculty of Engineering

SECV2113 – HUMAN COMPUTER INTERACTION

PROJECT 4

Prototyping & Evaluation

SECTION: 02 – 1SECR

COURSE NAME: BACHELOR OF COMPUTER SCIENCE - COMPUTER NETWORKS & SECURITY

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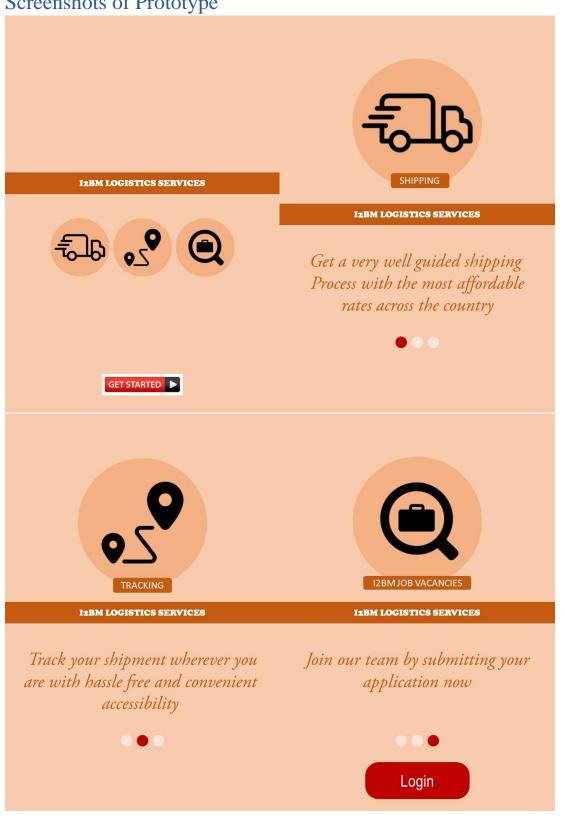
Introduction

This time around we are going to develop our proposed prototype based on our findings and exploration previously in project parts. We came out with an application regarding the logistics services, as we mentioned before in project part 3 that we interpret the idea from current online website. The mobile apps namely 'I2BM Logistics Services' provides the users with multiple services which may require by different persons. The facilities include shipment, tracking, and job vacancies. These are defined in project part where personas are needed to be identified with specific tasks as follows.

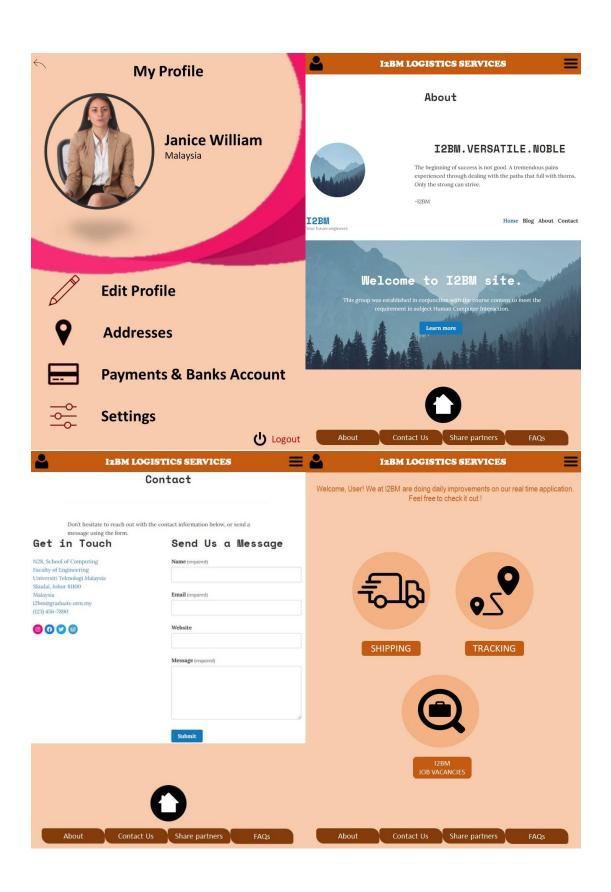
- 1. To provide the real-time tracking identification by the customers
- 2. To offer jobs and vacancies under this logistic company
- 3. To enable online sellers to get pre shipment details before hand

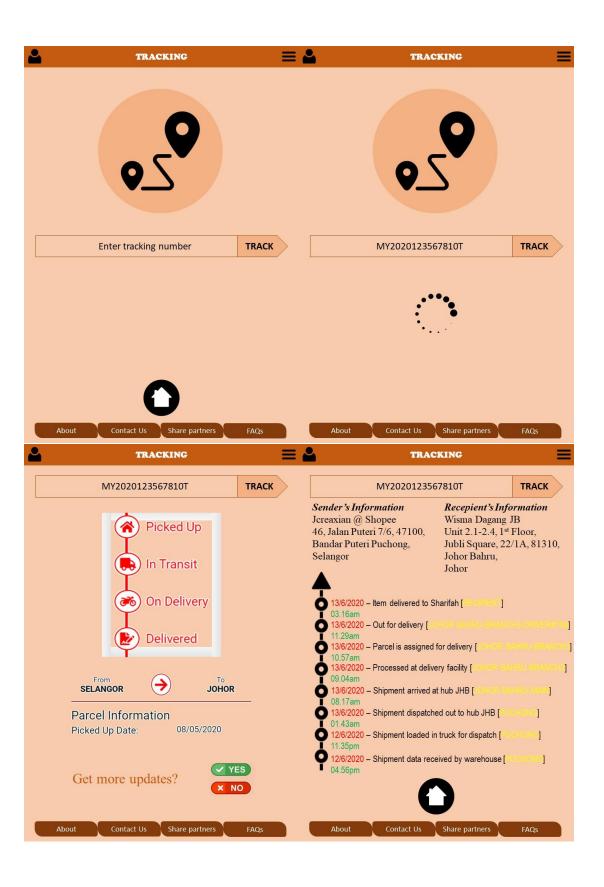
Thus, we now found several people to test our application on them. Upon the completion of project part 4, each of us interviewed one persona to make the proposed tasks done via our created apps. Since that some of us are in campus and some are off campus then we just carry out the interview testing wherever we are with whoever we found. There is no specific equipment that we used rather than our smartphones to record the video of people's opinion as well as a laptop to allow screen recording on the user's navigation. The three tasks are tested with different person to obtain their personal opinions regarding our creation. The tests are then carried out by every each of us.

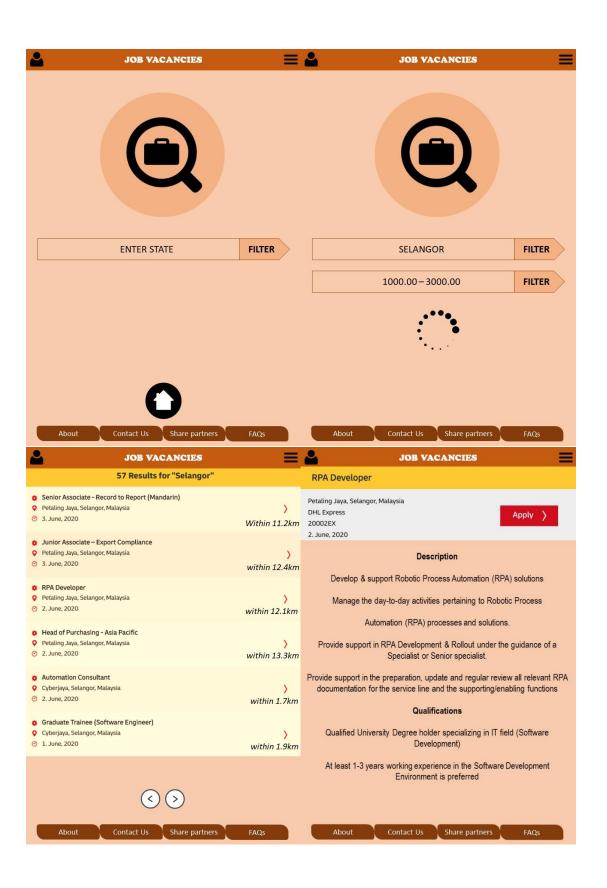
Screenshots of Prototype

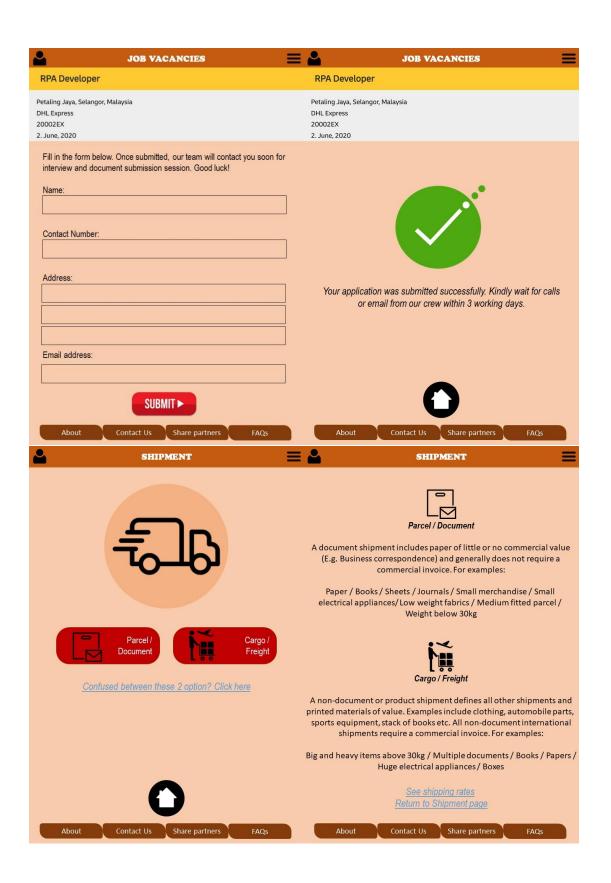




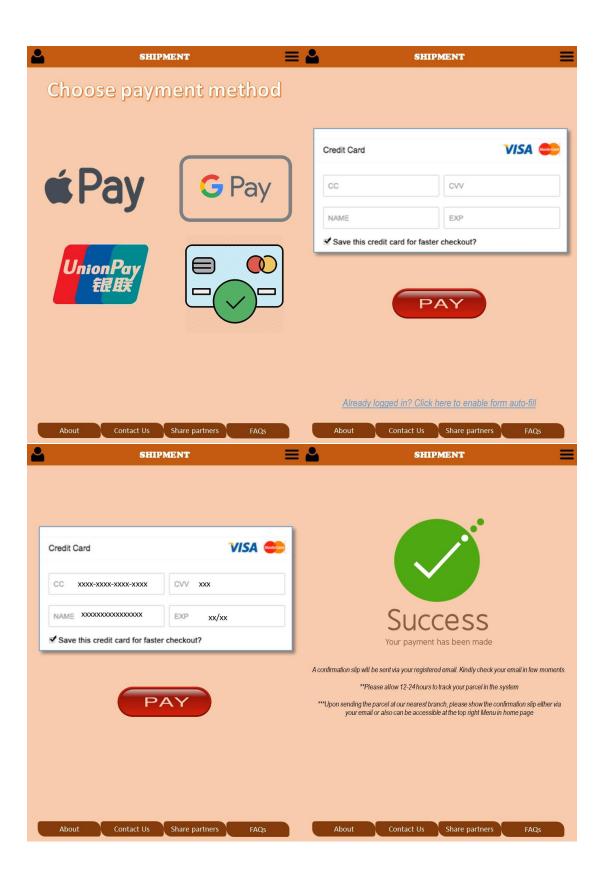












Briefing Notes

At the beginning of the test, we provide the users with sort of introduction and instructions on what they are needed to do. The text is as follows.

"Hye friend. So today I am going to share with you our team creation on an application that we are currently working on it to fulfil our course requirement in Human Computer Interaction subject. The purpose of this project is to expose us with the fundamentals in designing an interactive interface that will include all the necessary element such as usability principles and enhancing user experience. Thus, for now we are needed to test our apps to you, and you will act as a user to complete our proposed task.

In this apps, there will be three task which are shipment, tracking and job vacancies. Let me tell you about it in short. Shipment task is done when a person wants to ship their items to recipients. In this part you will get the estimated amount of shipping rates. Next, tracking task. As we all know tracking is done when users want to check their parcel process until it is delivered. Thirdly, job vacancies. This function allows users to search for job vacancies in their chosen location.

So now, I am going to let you play with our apps, and if there is anything you not understand you can ask. At the end of this session, you will give feedback to our apps. Share your experience while running the apps. If there is anything to improve then just let me know. Ready?"

Testing with Users

Task #1: Tracking

In this first task, user will be able to track the items that are currently shipped with our logistics services. They can know exactly where their parcel is at. The interface will begin with a screen giving three option to be chosen. Users will choose TRACKING option to use the services. Then users will key in their tracking number given by senders and press TRACK button to see the updates. A page showing the information is displayed with more updates option. Users enter YES or NO. If YES, users will be redirected to next page with details info about the item. If NO, then users will be redirected to home page.

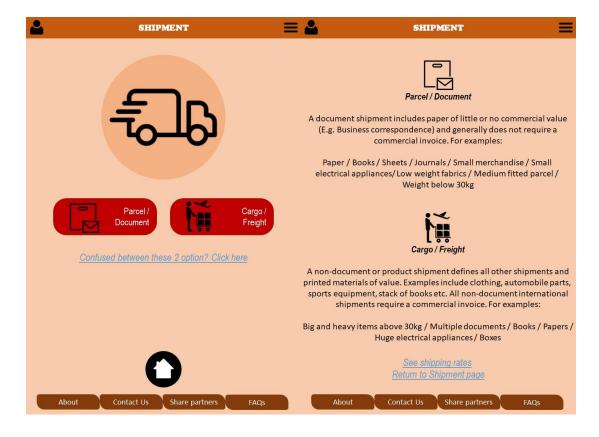
Two video of user testing this first task which is TRACKING as well as their feedback is accessible via https://youtu.be/SqGAtCIcAP and https://youtu.be/Pzcj2KVfLxo.



Task #2: Shipments

Shipments nowadays may become hard as you need to spend more time at the post office just to get your parcel shipped. You will need to queue for parcel checking, weigh the parcel and finally checkout for payments. By our apps, users will just need to choose their parcel type and upload the picture of parcel and you will be redirected to payment page upon checkout. A confirmation slip will be sent to users' email. Just bring the slip and give the parcel to the staffs and you are all set. Skip the queues and spend less time at the post office.

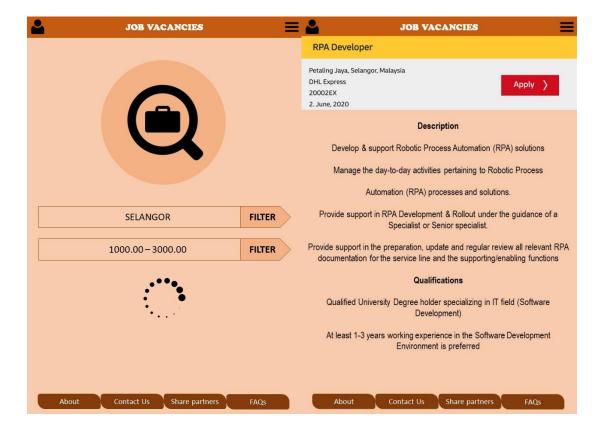
Two videos of user testing this first task which is SHIPMENTS as well as their opinion and feedback is accessible via $\underline{\text{https://youtu.be/AR2mjsUv9r8}}$ and $\underline{\text{https://youtu.be/jBE3RmC4JAw}}$.



Task #3: Job Vacancies

With our apps, user can simply search for their desired jobs based on their position and interests. All the intended factors that are needed to be considered are here like state, position, and salary range. The apps then show a list of available job within your selected requirements. Users may also apply the job via our apps and get the updates via registered email.

Two videos of user testing this first task which is JOB VACANCIES as well as their feedback is accessible via https://youtu.be/KtFDljX1XmU and https://youtu.be/aJp7ZJV12IU



Observations

After we have done with the testing session with a few users, we then record their opinions, observations, and feedback on our apps.

User / Tasks	Feedbacks / Observations	Future Improvements
	Ta: 1 a:	T.1 1
#1 –	- I think this prototype is good because the	I think no improvement is
Tracking	interface does not look like messy like	needed for this app right
	other apps and it is easy to and get every	now and I really like the
	details.	design.
#2 –	- Some of the fonts in this page seems to	Change font colours to
Tracking	be invisible as the colours used were too	comfort users' viewing
	bright.	angle without fatigue eyes.
	- Hard for users to see the wordings.	
#3 –	 No back button to allow users revise 	Add back button to allow
Shipment	their input.	users go to previous page
		and revise their input
#4 –	- More buttons need to be created to ease	Separate the option buttons
Shipment	users' option. Separate the element like	into four different option so
	parcel, document, cargo, and freight.	users may choose the
	- Create an alternative way of showing	demanded option
	shipping fee instead of displaying a long	specifically.
	list. Show only desired weight and price	
	entered by the users.	
#5 – Job	- It was very easy to use the apps and do	A specific fresh graduate's
Vacancy	not experience any difficulties when	application section will be
	using it	introduced in the future to
	- The job vacancies function is very good	serve them with better
	to be included in the apps as it may help	opportunity to find a job.
	people who are seeking job, especially	
	fresh graduates to put themselves in the	
	correct position.	
#6 – Job	- Nothing to comment. Everything is	-
Vacancy	good.	

Findings

Overall, we found out that when we tested our apps to the user, they found out that this application was easy to use on targeted personas. There were no major problems that were told by out tester. All of them mostly commented on a few aspects that we think an improvisation should be done for comfortability. No critical issues found during the test and all went smoothly.

To summarize about the usability principles, we think that we are 80% in achieving the highest score in applying the usability principles. In terms of feedback, constrains, and consistency our tester did not comment on that things too much. Maybe they feel like these elements are well embedded in our system. However, in terms of visibility and mapping, we need to do minor correction on some parts of the apps to avoid displease experience to the users. For example, the font colours and Back button are needed to be included for easy navigation.

Finally, we think that the tasks carried out in our apps is enough to equipped users with their affordance and enhancing user experience on our interfaces.

Conclusion

In conclusion, by doing this project we learned on how people out there who worked in this field brainstorming their ideas to come out with an application or system or interface that may ease people's life. They will stick to some of the fundamentals elements to build an interface. For example, the usability principles and Heuristic's evaluation are two main things that we found very useful when want to start creating an interface. Every single detail is needed to be considered as it might affect the user experience. Next, along the project we were exposed with the proper process of building an application starting from project proposal followed by establishing requirements with identified personas, building a concept and physical design then finally prototyping and evaluations. These procedures somehow taught us to be well organised in developing an approach to be presented to the users. Thus, we are hoping that our knowledge can be applied to everyone out there in the future to make the world full of astounding ideas and innovation.

References

Malaysia, U. T. (2020). Human Computer Interaction. In UTM, *Other Evaluations Type* (pp. 1-26). Johor Bahru: UTM.