FACULTY OF COMPUTING

SEMESTER 2 2023/2024

SECV2113 – HUMAN COMPUTER INTERACTION

SECTION 1

ASSIGNMENT 2

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GROUP 8

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Introduction

In assignment 2 of Human-Computer Interaction, we'll be conducting the Heuristic Evaluation of another group's prototype, which is group 10 's prototype. This prototype is designed in Project Part 4 using Figma. Here, we will apply **Nielsen's Heuristic** to evaluate the designed user interface and rate the severity of each issue found. After that, we will create a User Journey Map to demonstrate how the user interacts with the interface of the application.

Nielsen's Heuristic consist of 10 rules:

1. Visibility of system status - provide real-time information to the user.
2. Match between system and real world - use familiar language and concept for user
3. User control and freedom - provide ways to undo and redo action
4. Consistency and standards - follow platform and industry convention
5. Error prevention - provide a prompt to prevent error occur
6. Recognition rather than recall - making it easy for user to recognition
7. Flexibility and efficiency of use - provide shortcut to both user and expert
8. Aesthetic and minimalist design - avoid irrelevant information provided
9. Help users recognize, diagnose, and recover from errors - help users understand and solve the error
10. Help and documentation - help user understand how to perform their task

Severity Rating

1. Cosmetic issue – affects the appearance and should be fixed only if time permits
2. Minor issue – hinders the user's ability to navigate and should be fixed when possible
3. Major issue – Frustrates or confuses users and requires repair as soon as possible
4. Catastrophic issue – prohibits users from performing their given task and requires an immediate modification.

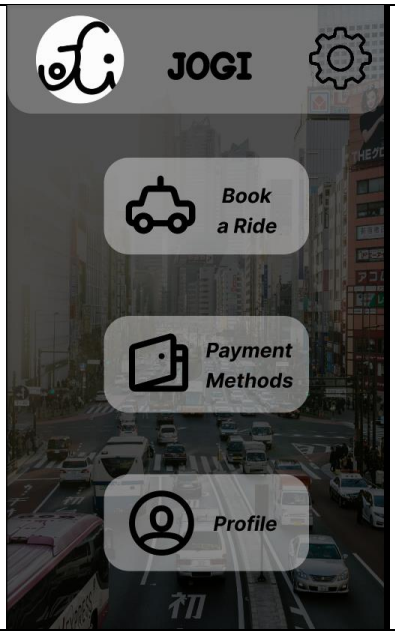
By conducting the Heuristic evaluation to evaluate their prototype, we can identify issues and inform them to revise and improve their prototype.

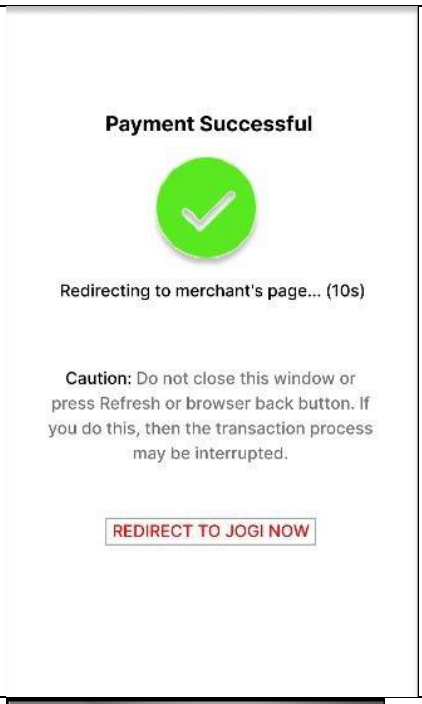
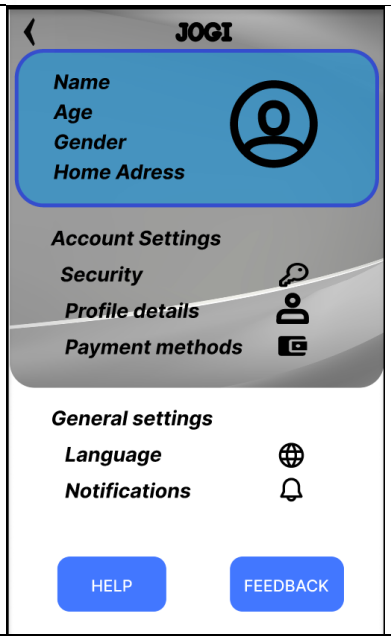
We utilize Group 10's target user, the traveler, to fulfil three user tasks: comparing real-time traffic situations, booking an e-hailing service, and using cashless payment. Mr. Chiew, the traveler, is from Hong Kong. Before his trip from Senai to Guangzhou, Mr. Chiew decides to get a quick bite at the local food court by ordering a taxi with the e-hailing app JOGI.

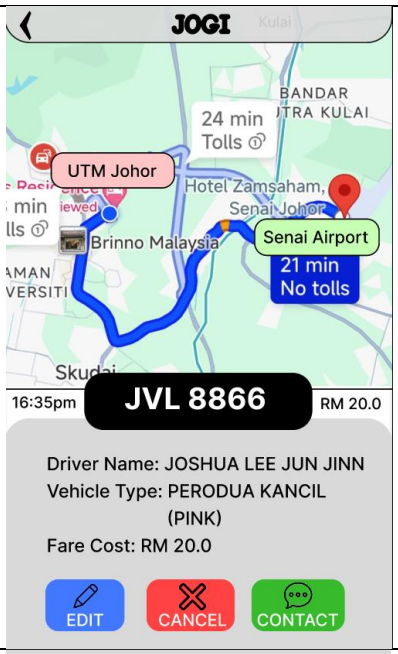
Evaluation Process

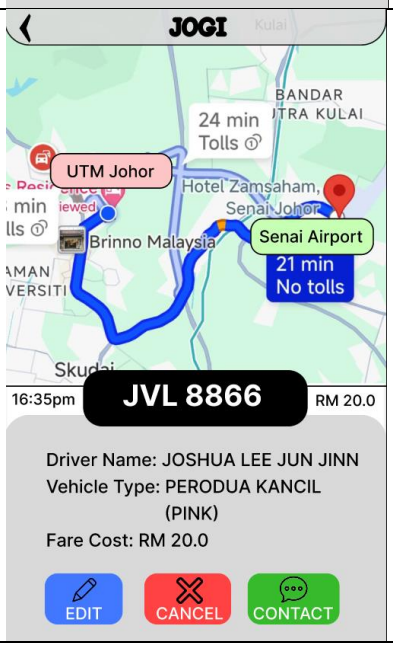
Before we carry out the evaluation, we need to familiarize ourselves with the 10 rules of Nielsen's heuristic. Next, each team member will evaluate the prototype independently and gather all our opinions to compare. After that, we compile all the opinions and create a report to list our findings.

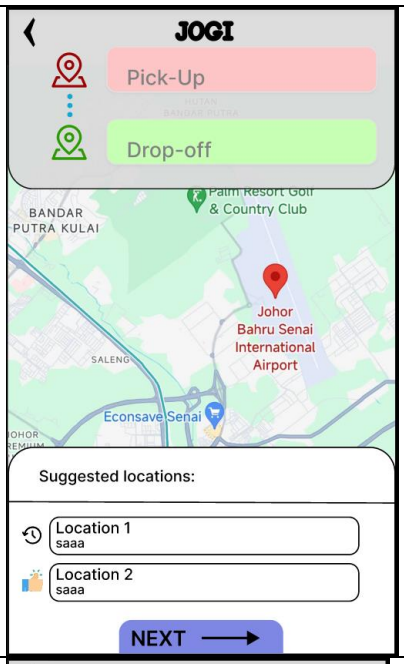
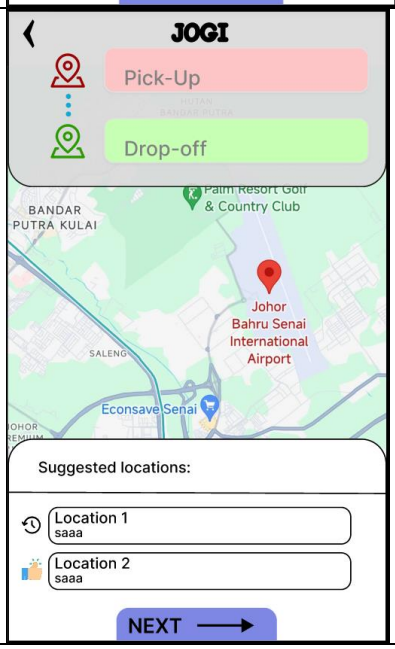
Result

No	Prototype Image	Identified Issue	Heuristic and severity
1		The background's design is very similar to the button's color, so the button's writing is not very clear.	H8: Aesthetic and minimalist design S3: Major issue

2			There is no undo button if I decide not to add a payment method.	H3: User control and freedom H5: Error prevention S2: Minor issue
3			The design layout is not familiar to the user, and is not easy to navigate, unlike the common profile page that is streamlined and easy to navigate. The colour for this page is not attractive.	H2: Match between system and real world H4: Consistency and standards S2: Minor issue

4			There is no explanation to the user on how much time the driver will take to get to the pick-up point.	H1: Visibility of system status S4: Catastrophic issue
5			This page contains an excessive amount of unneeded information at a time, which can overwhelm the user.	H8: Aesthetic and minimalist design S2: Minor issue

6			There is no payment method provided on the booking page. The user must exit the booking page and pay at the payment page.	H2: Match between system and real world H5: Error prevention S3: Major issue
7			There is no explanation to the user about where the current location of the driver. The user cannot know the real-time location of the driver.	H1: Visibility of system status S3: Major issue

8			The word “drop-off” may not be familiar to the user	H2: Match between system and real world S2: Minor issue
9			No shortcuts or quick access for frequent users. Users cannot save their favorite route for quick access.	H7: Flexibility and efficiency of use S3: Major issue

User Journey Map

User Journey Map

Traveler Chiew
Mr. Chiew is a traveler from Hong Kong in his fifties who is visiting his nephew in Malaysia.

Scenario
Before the flight from Senai to Guangzhou departs, Mr. Chiew decided to grab a quick bite at the local food court by calling a taxi using the e-hailing app JOGI.

Expectations
- Accurate real time traffic information
- User-friendly to use
- Variety of payment methods

Task	Comparing real-time traffic situation	Booking an e-hailing service	Using the cashless payment option
User actions	• Click the "Book a Ride" icon on the main page and enters the pick-up and drop-off location. • Check the ETA and costs for each type of transportation.	• After decided to call a taxi, press the "Confirm Booking" icon. • Double check the pick-up point and drop-off location. • Take note the number plate of the taxi.	• After booking the taxi, return to main page and click on the "Payment Methods" icon on the main page. • Select preferable payment method.
User emotions	The booking page has too many unnecessary information such as the unclickable bus and train icon.	The boking page does not provide the location of the driver and the estimated time arriving the pick-up point.	The boking page does not provide shortcut to the payment page. User need to exit booking page then pay at payment page.
Opportunities	Remove the unselected transportation icons and highlight only the selected option with its details.	Add information about the driver's location and the estimated time of arriving the pick-up point.	Create shortcut at the booking page that enable user to redirect to the payment page.