The Usability Test Of Green P Application

Evaluating and Improving The Efficiency Of Search Parking and Access Parking Information

INTRODUCTION

The Green P application from the Toronto Parking Authority is an application that assists users to find and pay for their parking spots in Toronto through mobile devices. The main functions of this application are finding available parking spots, and paying for the parking spot. This usability test is conducted to evaluate the efficiency of search parking function and accessing parking information function with the Green P application.

OBJECTIVES

The objective of the user research is to evaluate the efficiency of search parking function and accessing parking information function. The research is working on learning the answers of questions listed below:
Questions to explore:

- 1. Are search parking function and access parking information efficient during finding parking spots with different needs?
- 2. Is it easy and fast for users to access and compare the parking information through the application?
- 3. Are there any obstacles or errors that interfere users to achieve their goal of finding a parking spot?
- 4. What are obstacles or errors that the users have during accessing the parking information and using search parking function?

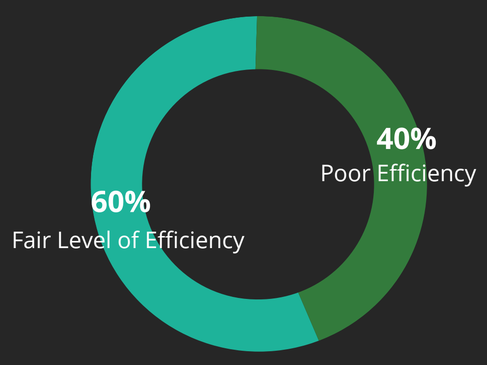
METHODOLOGY

The usability test is conducted with the walk through methodology. During the test, participants are encouraged to think loud. This is a discount usability test with 5 participants contribute data in the test. The test approximately takes 20 minutes.
Test procedure:
There are three tasks in the usability test, after each task users need to finish the corresponded post-task

- Task 1: Participant needs to find parking spots around the designated location.
- Task 2: Participant needs to find an available parking spot surround the designated location.
- Task 3: Participant needs to find the cheapest parking spot surround the designated location

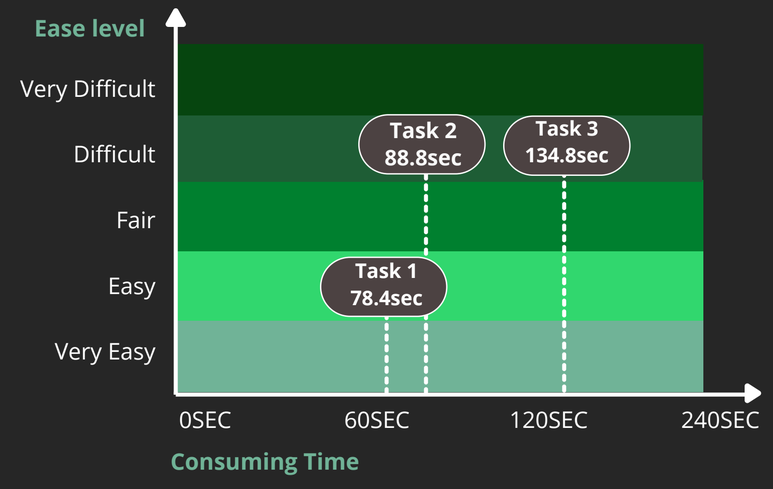
DATA ANALYSIS

Efficiency Evaluation



In general, majority of participants think the efficiency of search function and access parking information function is fair. 40% of the participants evaluate the application with poor efficiency. None of the participants agree that two evaluated functions are high efficiency.

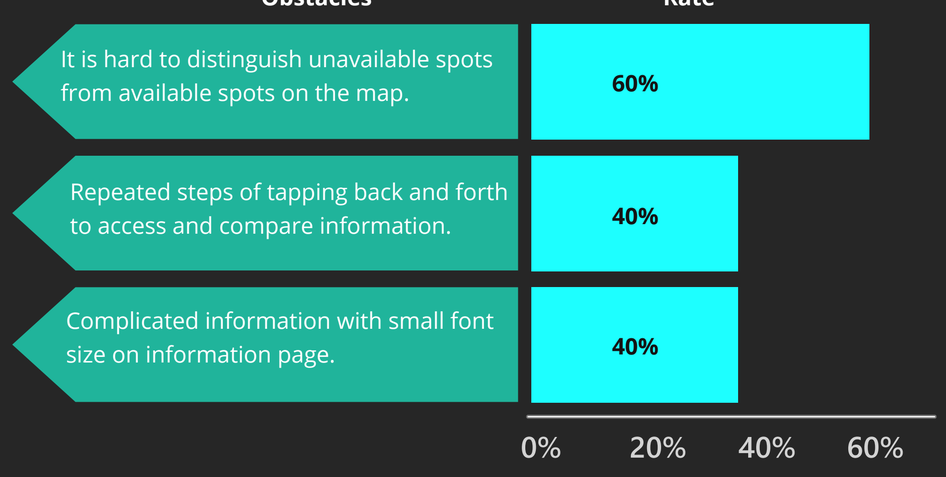
Ease Level Evaluation



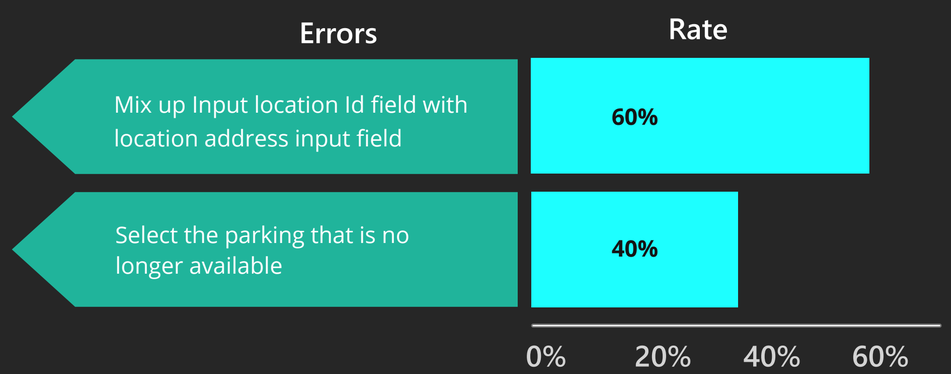
In the individual task, participants evaluate the difficulty level of each task to show how difficult they feel of completing the task. Task two and task three are evaluated as difficult level. Task three takes the longest time to finish.

Only 20% of participants agree that the evaluated functions are easy to learn and use.

Obstacles and Errors Rate



The Errors and Frequency Of Occurrence



CONCLUSION

1. The efficiency of the evaluated functions is below high level based on the reviews from participants. 40% participants think the evaluated functions are low efficient. It implies that there are some issues in the evaluated functions influence the efficiency.
2. In the ease of use survey, it shows that average ease level is evaluated as fair. In all three tasks, task two and task three need to access and compare parking information. These two tasks are time consuming. Effective solutions may help to shorten the time and improve the efficiency.
3. The obstacles and errors are existing and interfering the efficiency of the evaluated functions.

SUGGESTIONS

Based on the pain points and errors, there are serval solutions for improvement:
1. Simplify the repeated steps in accessing information, and visualize the important information on the map.
2. Distinguish the available and unavailable parking spots with different colours labels.
3. Redesign the home page by adding the find parking nearby function.
4. Enlarge the font size in information page.
5. Redesign the information display with information hierarchy.