

# Software Development for Mobile Devices

## Submission for Assignment A7.2C

### Introduction

The rapid development in technology has led to the increase in the number of the software application. However, not all of these applications can become successful due to lack of user experience and usability. There is, thus, a need for users involving in the development lifecycle in order to improve the usability of the application.

With the purpose of improving the user experience for the sunny application, this paper has been conducted a quick and dirty evaluation method to identify any limitations containing in the sketch. After performing an observation of three participants and collecting the data from the survey, the sketch for task 2 needs to be updated due to the high difficulty.

The paper will start with the introduction of the usability test method. Thereafter, the result of the evaluation process will be illustrated in detail. The report will highlight the importance of the usability evaluation method and how it can help to improve the quality of the application with regard to the usability. After that, I will share my experience from the evaluation so that the future researcher can learn.

### Usability Test Method

In order to improve the sketch in terms of user experience, the author conducted a quick and dirty evaluation of three participants. It is reasonable to use quick and dirty as the test method since it is cheap and does not take a very long time. In addition, it can collect both the qualitative and quantitative data by the observation and the post-questionnaire.

The evaluation commenced with the invitation three participants who do not study in this course. Due to the ethical aspects, participants involving in this evaluation has been signed to the informed consent and has been informed to leave the test anytime. Thereafter, they were given the paper prototype including a use case to follow. During the test, the participants were asked to think aloud so that I can understand how they think about the design. After finishing the test, they were

asked to rate the difficulty of the task. Finally, I collected all of the survey paper and the note to start analyzing the data.

## Findings

Even though the sketch has been modified several times before the test, the user cannot do some simple tasks, especially task 1 in which the user is asked to add the location to check the sunrise/sunset time. However, one participant cannot do it individually and need for the instruction, while two others take quite a few minutes to decide which buttons should navigation to the expected screen. In addition, the difficulty of task 1 – based on a rating scale – is the highest (see Appendix).

With regard to the comments, it seems like people were frustrated with the adding sunset/sunrise function. While doing the research, they keep asking for help in the first two tasks. Moreover, the comment that they provided after doing the test pointed out the need for fixing this task before going to implement it.

## Discussion on Usability Test

After performing the usability test, the results illustrate the need to improve the user experience in the sketch. Also, what I found is that the user experience is typically different from the view of the developer and designer due to a different background, experience, culture. Therefore, Hartson and Pyla (2012) state that the usability test should be conducted in the development phase in order to help the design can be suitable with the primary user of the app

## Summary

By applying the usability test on three different participants, the research paper addresses the need for the usability test in software development. Although the test provided some crucial information that helps improve the user experience of the application, the data was not completely accurate. Due to the limitation of the quick and dirty method and also the selected participants were all students, the result can be biased (Hartson and Pyla, 2012).

## Reference

Hartson, H & Pyla, P 2012, *The UX Book*, Elsevier / Morgan Kaufmann, Amsterdam [etc.], pp. 430-750.

## Appendix

### Survey forms

#### Task 1:

Please read the following task. When you are ready to start please say “Ready”.

As a tourist, Brad wants to know the sun set time in Wellington, NZ so that he can plan his flight times sufficiently.

Note: All fields will be prefilled for you. So just assume that your information has been already entered. Please rate the difficulty of this task:

Very Hard ☐ ☐ ☐ ☐ ☐ Very Easy

#### Task 2:

Please read the following task. When you are ready to start please say “Ready”.

As a religious, Sachin wants to know the generate the table of sun rise/set times for each of his destinations so that he can undertake religious while traveling in different locations.

Note: All fields will be prefilled for you. So just assume that your information has been already entered. Please rate the difficulty of this task:

Very Hard ☐ ☐ ☐ ☐ ☐ Very Easy

#### Task 3:

Please read the following task. When you are ready to start please say “Ready”.

As a happy person, Li wants to know the run rise time on the beach tomorrow morning so that she can watch the sun rise.

Note: All fields will be prefilled for you. So just assume that your information has been already entered. Please rate the difficulty of this task:

Very Hard ☐ ☐ ☐ ☐ ☐ Very Easy

#### Task 4:

Please read the following task. When you are ready to start please say “Ready”.

As some campers, Justin and Marry want to find the sun rise/set times for their location based on GPS facility so that they can share them with other friends.

Note: All fields will be prefilled for you. So just assume that your information has been already entered. Please rate the difficulty of this task:

Very Hard ☐ ☐ ☐ ☐ ☐ Very Easy

## Results and Notes

	Task 1 Difficulty Rating	Task 2 Difficulty Rating	Task 3 Difficulty Rating	Task 4 Difficulty Rating	Comments
<b>P1</b>	3	2	2	1	The first task is not clear. The meaning of those two round buttons is not clear.
<b>P2</b>	4	1	1	1	The design should be more attractive, this was simple.
<b>P3</b>	2	2	1	2	How can I go back after adding a new place?