

DESIGNING MOBILE INTERFACE FOR ELDERLY

NUR RAHMAH BINTI ZULKIFLI

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DESIGNING MOBILE INTERFACE FOR ELDERLY

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By

Nur Rahmah Binti Zulkifli



KOLEJ SASTERA DAN SAINS
(College of Arts and Sciences)
Universiti Utara Malaysia

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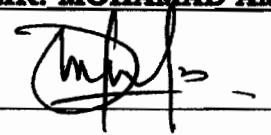
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ABSTRACT

At the moment, mobile phones have becoming necessity used by peoples all over the world. This scenario has been proven by several studies that shown the increment of mobile phones usage. In keeping and increasing the number of mobile phone users, the mobile phone application interface usability is crucial, especially for elderly. Elderly have a difficulty in using a mobile phone application with a design that is difficult to understand. This is due to problems in their vision, motivation, physical and cognitive aspects. Apart from that, other problems that been faced is the sensory impairment. The problems faced by them can be coped through the study in the mobile phone interface design in order to define the suitable interface for the use of elderly. Objective of this study is to define the characteristic in interface for mobile application interface design especially to the elderly. Prototype has been designed according to characteristic that been classified. User Centered Design is been used as the methodology, while usability test have been used as the testing for this study. In order to define the user satisfaction, questionnaires have been given during the testing. The data that been obtained shows the characteristics are important in designing the mobile application interface for elderly.

ABSTRAK

Dewasa ini, telefon mudah alih telah menjadi keperluan utama yang digunakan oleh seluruh masyarakat di dunia. Senario ini telah dibuktikan oleh beberapa hasil kajian sebelum ini yang menunjukkan peningkatan dalam penggunaan telefon mudah alih. Untuk mengekalkan dan meningkatkan jumlah pengguna telefon mudah alih, rekabentuk antaramuka pengguna untuk telefon mudah alih adalah sangat penting terutamanya untuk warga emas. Warga emas umpamanya menghadapi kesukaran menggunakan telefon mudah alih kerana rekabentuk antaramuka yang lazimnya sukar difahami. Ini disebabkan masalah yang dihadapi oleh warga emas berikut masalah kesihatan selain daripada penglihatan, motivasi, masalah fizikal dan kognitif. Selain daripada itu masalah lain yang mereka hadapi ialah penurunan dalam keupayaan sistem deria. Masalah yang dihadapi oleh mereka ini boleh diatasi melalui kajian terhadap rekabentuk antaramuka telefon mudah alih yang bersesuaian untuk penggunaan warga emas. Tujuan penyelidikan ini adalah untuk mengenalpasti ciri-ciri antaramuka pengguna untuk rekabentuk telefon mudah alih terutamanya untuk warga emas. Prototaip telah dibangunkan berdasarkan ciri-ciri yang dikenalpasti melalui penyelidikan yang dijalankan. Rekabentuk Pemusatan Pengguna telah digunakan sebagai metodologi, manakala kaedah kebolehgunaan telah digunakan dalam proses pengujian. Untuk menentukan kepuasan pengguna, soal selidik telah dijalankan semasa proses pengujian. Data yang diperolehi daripada proses pengujian menunjukkan bahawa ciri-ciri antaramuka pengguna merupakan elemen penting dalam merekabentuk aplikasi telefon mudah alih terutamanya untuk warga emas.

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LIST OF ABBREVIATIONS

UCD	- User Centered Design
PRISM	- Providing Innovative Service Models and Assessment
MCMC	- Malaysian Communication and Multimedia Commission
SPSS	- Statistical Package for the Social Sciences

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CHAPTER ONE

INTRODUCTION

Recently, the mobile phones technologies have growing fast in the world. The number of applications that have been developed for the user started from personal until entertainment and business. Until today, it becomes the main item or gadget in Malaysia and all the people for all over the world. Based on the survey by Malaysian Communication and Multimedia Commission as cited by Md Nasir and Hassan(2008), there are 80% of Malaysian aged 20 until 49 who use the mobile phones. As compared, only 20% user with the age 49 and above. Even though, the use of mobile by elderly is still small, several studies have been done focusing to them. It is important for the user need to be the same with the aim of the application to be developed (Bulbrook, 2001). However to develop the right function, it is important to understand the user requirement. In order to understand the user requirement, the study on designing the interface is crucial. It is importance for the mobile application does not only have style but also have the quality(Aubert, 2008). According to Keinonen as cited by Lindholm, Keinonen, & Kiljander (2003), most of developers are not interested in new technologies but the advantages in the products to the actual need.

The contents of
the thesis is for
internal user
only

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