# USABILITY TESTING FOR LEARNABILITY AND EFFICIENCY ON UUM DIGITAL LIBRARY SYSTEM

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# USABILITY TESTING FOR LEARNABILITY AND EFFICIENCY ON UUM DIGITAL LIBRARY SYSTEM

A project submitted to the Dean of Research and Postgraduate Studies Office in partial Fulfillment of the requirement for the degree of Master of Science (Information and Communication Technology) Universiti Utara Malaysia

By

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#### ABSTRAK

Kepentingan penggunaan laman web sebagai proses dalam persekitaran pembelajaran di dalam bilik darjah meningkat secara mendadak. Laman web menyediakan sistem perkhidmatan dan sumber untuk mendapatkan maklumat secara pantas dan cekap kepada pengguna. Perpustakaan digital adalah laman web yang memberi perkhidmatan kepada pengguna di seluruh dunia dan diterima secara meluas. Walaupun penggunaan sistem perpustakaan digital semakin meningkat, masih terdapat sejumlah pengguna-pengguna yang membuat rungutan mengenai kebolehgunaan perpustakaan digital. Ujian kebolehgunaan bagi sistem perpustakaan digital adalah salah satu daripada ciri-ciri utama untuk mencapai kejayaan. Projek ini memberi tumpuan untuk mengkaji kebolehgunaan bagi sistem perpustakaan digital di Universiti Utara Malaysia (UUM). Keupayaan untuk belajar dan kecekapan adalah ciri-ciri kebolehgunaan yang telah dipilih bagi projek ini. Ujian kebolehgunaan bagi koleksi data kualitatif dan kuantitatif telah digunakan dalam projek ini. Tugas-tugas untuk mengukur prestasi dan borang-borang soal selidik telah diagihkan kepada responden-responden untuk mendapatkan koleksi data kuantitatif dan kualitatif. Hasil kajian daripada koleksi data kuantitatif dan kualitatif memberi rumusan bahawa sistem ini senang untuk dipelajari dan digunakan.

#### ABSTRACT

The interest in using the Website in the classroom as part of the learning environment increase dramatically. Website provides an efficient and fast access for users to get information and service. Digital library is a website that serving worldwide users and become widely accepted. Although the digital library system increasingly used, there are a number of users complaining about usability of digital library. The usability test of digital library system is one of the key features for its success. This project focuses to look into usability of digital library system in University Utara Malaysia (UUM). Learnability and efficiency are usability attributes that has been chosen for this project. Usability testing on qualitative and quantitative data collection had been applied for this project. Tasks on performance measure and questionnaires had been distributed to respondents for quantitative data collection. The results from quantitative and qualitative data collection showed that the system is easy to use and to learn.

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# LIST OF ABBREVIATIONS

CAS	College Arts and Sciences
FAQ	Frequently Asked Questions
HCI	Human Computer Interaction
HTML	Hyper Text Markup Language
ILS	Integrated Library System
ISO	International Standards Organization
LMS	Library Management System
PDF	Portable Document Format
PUEU	Questionnaire for Perceive Usefulness of Ease-of-Use
QUIS	Questionnaire for User Interaction Satisfaction
UUM	University Utara Malaysia

### **CHAPTER 1**

#### **INTRODUCTION**

Chapter one provides an overview of digital library and the usability issues. It also includes brief explanation of background, problem statement, research questions, objectives, scopes and limitations, and significance of the study.

#### 1.1 Background

The digital library systems are as common as books and serving a worldwide user. Most libraries depend on their website to give services for users when the library's doors closed as well as they are open. The digital library system not only provides hours of operation but it also allows user to search for online catalogs, online thesis, and others. It is user friendly because they can use digital library system service just in the fingertip at anytime and anywhere. It would help to increase the percentage of users.

There are many important benefits for users if they use this digital library system. It creates better and faster resources and information services, unlimited users can use the same resource, free to users, and others. The digital library system will create advantages such as faster resources and information services, unlimited users can use the same resource, free to users, and others. According to Buchanan (2009), usability and the usefulness of a digital library depends on effectiveness and efficiency of the user's experience. It is important that a user is able to accomplish their task goals when acquiring resources in relation to successful completing the task within a reasonable time (Buchanan, 2009).

# The contents of the thesis is for internal user only

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