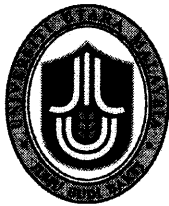


**FUNCTIONALITY OF WEB-BASED E-JOURNAL  
PUBLISHING ENVIRONMENT**

**AINNECIA YOAG**

**UNIVERSITI UTARA MALAYSIA**

**2004**



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# **FUNCTIONALITY OF WEB-BASED E-JOURNAL PUBLISHING ENVIRONMENT**

A dissertation submitted to the Faculty of Information Technology in partial  
fulfillment of the requirements for the degree  
Master of Science (Information Technology),  
Universiti Utara Malaysia

By  
Ainnecia Yoag

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## **ABSTRAK**

Jurnal telah menjadi satu sumber maklumat yang penting dan boleh diperolehi dalam pelbagai bentuk termasuk cetak dan digital. Penerbitan jurnal elektronik (e-jurnal) menyediakan pelbagai kebaikan dan faedah termasuklah sebagai satu kaedah dalam mempercepatkan proses penerbitan jurnal. Ia juga menjadi satu cara untuk menyelesaikan masalah yang dihadapi dalam kaedah penerbitan jurnal bercetak. Projek ini mengenal pasti dan mengesahkan fungsi-fungsi dalam persekitaran penerbitan e-jurnal berasaskan Web dari tiga perspektif iaitu pembaca, penulis dan editor.

Satu prototaip telah dibangunkan dan direka bentuk dengan menggunakan bahasa pengaturcaraan PHP dan MySQL sebagai pangkalan data. Seterusnya prototaip ini telah diuji dan disahkan oleh bakal pengguna. Sembilan belas fungsi utama telah disenaraikan, di mana dua fungsi untuk pembaca, sembilan untuk penulis dan lapan untuk editor.

Komen yang diperolehi daripada penguji menunjukkan prototaip yang telah dibangunkan menyediakan fungsi-fungsi seperti yang diharapkan. Cadangan juga diterima dan diperolehi daripada penguji yang mana akan diambilkira dalam meningkatkan sistem pada masa hadapan.

## **ABSTRACT**

Journal has become important information sources, and can be found in many forms including printed and digitized. Electronic journal (e-journal) publishing provides lots of advantages such as a solution to expedite the journal publishing process. This project identifies and validates the functionalities of a Web-based e-journal publishing environment in three different perspectives: readers, authors and editors.

A prototype was built and further tested by potential users to validate the identified functionalities. The prototype was developed using PHP programming language together with MySQL as its database. Nineteen main functionalities were listed, of which two are for the readers, nine for the authors and eight for the editors.

Comments from participants indicate that the prototype performed accordingly to their expectation and the provided functionalities managed to expedite submission and publishing process. Few recommendations to enhance the system were also noted.

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## **LIST OF ABBREVIATIONS**

HTML	Hypertext Markup Language
JAIRS	Journal of Advancing Information and Management Studies
MB	Megabyte
PDF	Portable Document Format
PHP	Personal Home Page / PHP: Hypertext Processor
UML	Unified Modeling Language
WWW	World Wide Web

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## CHAPTER ONE

### PROJECT BACKGROUND

#### 1.1 Introduction

Journal has become important information sources, and can be found in text form and printed journal. Recently, journal publishing process has gained attention. With growing specialization and continuing pressure to publish, academics have been producing ever-greater numbers of articles every decade of twentieth century (Roberts, 1999). Most authors and publishers want the articles published in short term process in order to ensure their articles are widely used and accessed by the community around the world.

The traditional journal publishing process is printed journal publishing. In this publishing method, many problems are faced by the publishers and also authors. Printed journal publishing needs a long-term process in reviewing, editing, publishing and distributing. Some of the delays associated with this method arise from the distinctive character of scholarly publishing, which is peer review process that takes a long time (Roberts, 1999). Other than that, printed journal distribution is limited and the price is greater (Odlyzko, 1997).

In electronic publishing environments, there are many advantages for the users especially for the authors, publishers and also readers. The costs of electronic publishing are fairly low in consideration to those of print (Barnes, 2001). There are no printing costs, which are usually print publishers' biggest expense, nor the waste of large amounts of paper that go along with printing. Another advantage of electronic publishing when compared to printed publishing is the possibility of a greater timeliness of publication (Martellini, 2000). The advantages in electronic



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only

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