

**EDUCATIONAL DEPARTMENT WEBSITE OF LIBYAN
EMBASSY IN MALAYSIA**

A dissertation submitted to the UUM College Arts and Sciences

In partial fulfillment of the requirement for the degree

Master of Science (Information Technology)

Universiti Utara Malaysia

By

Saleh G S Mazek

2009





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

**PERAKUAN KERJA KERTAS PROJEK
(Certificate of Project Paper)**

Saya, yang bertandatangan, memperakukan bahawa
(I, the undersigned, certify that)

SALEH G.S. MAZEK
(801997)

calon untuk Ijazah
(candidate for the degree of) **MSc. (Information Technology)**

telah mengemukakan kertas projek yang bertajuk
(has presented his/ her project paper of the following title)

**EDUCATIONAL DEPARTMENT WEBSITE OF
LIBYAN EMBASSY IN MALAYSIA**

seperti yang tercatat di muka surat tajuk dan kulit kertas projek
(as it appears on the title page and front cover of project paper)

bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan
dan meliputi bidang ilmu dengan memuaskan.
(that the project paper acceptable in form and content, and that a satisfactory
knowledge of the field is covered by the project paper).

Nama Penyelia Utama
(Name of Main Supervisor): **DR. KANG ENG THYE**

Tandatangan
(Signature)

Tarikh
(Date)

: 7 December 2009

DR. KANG ENG THYE
Penyarah Kanan
Bidang Sains Gunung
Kolej Sastera & Sains
Universiti Utara Malaysia

PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirement for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this thesis in many manner, in whole or in part, for scholarly purposes may be granted by my supervisor or, in absence, by the Academic Dean of UUM CAS. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain should not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Academic Dean of UUM CAS

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

Abstract

The educational departments of the Libyan embassy in Malaysia website plays major role in different fields that explore and become important economic, commerce, military, health, education, diplomatic.

On the other hand many embassies in several countries are facing difficulties in accessing, organizing and collecting the data related to students specifically the registered students in education department of the Libyan embassy in Malaysia, So I studied design website the educational department Libyan embassy in Malaysia, and is interested in opening a file for the student follow-up to the most important news of the educational department, to insert some data, File Number, Student Name, Libyan Address, Phone Number, Support Direction, Current Institution, Scientific Grade, Major, Start Study, End Study, Malaysian Address and Mail's Student, also if there is any problem in the area of study a student can send a message to the educational department website or the consulted educational department e-mail for the consideration and resolution as soon as possible.

Acknowledgments

In the name of Allah.

I would like to express my appreciation to Allah, The most merciful, the most compassionate who has granted me the ability and willing to start and complete this study. I do pray to his greatness to inspire and enable me to continue the work for the benefits of humanity. My most profound thankfulness goes to my supervisor Dr Kang Eng Thye for his scientifically proven and creativity encouraging guidance. I wish specially to thank all my dearest family members, lecturers, and friends for their patience and understanding during this challenging time.

Thank you all.

Table of Contents

CHAPTER ONE

1.1 INTRODUCTION	1
1.2 Problem Statement	2
1.3 Research Objectives	4
1.4 Scope	4
1.5 Significant of Study	4
1.6 Report structure	5

CHAPTER TWO

LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Internet	6
2.3 Web Services	7
2.4 Related Studies in E-government and E- education fields	9
2.5 Summary	11

CHAPTER THREE

RESEARCH METHODOLOGY	13
3.0 Introduction	13
3.1 Conceptualization	14
3.2 Information Gathering	15
3.3 Prototype Design	15
3.4 Prototype Development	15
3.5 Evaluation	15
3.6 Summary	16

CHAPTER FOUR

SYSTEM DESIGN AND RESULT	17
4.1 List of Requirements	17
A. Functional Requirements	18
B. Non- Functional Requirements	19
4.2 Use case diagram	20
4.3 Use Case Description	22
4.4 Sequence Diagram	43
4.5 Database Design	53

CHAPTER FIVE

FINDINGS	55
5.1 Implementation	55
5.2 Interface design for the system	55
5.3 Usability Evaluation	67

CHAPTER SIX

CONCLUSION	69
6.1 Project's Summary	69
6.2 Limitation	70
6.3 Future Work	70

References

Reference	72
-----------	----

APPENDIX

Appendix A	76
Appendix B	78

List of Figures

Figure 3.1: System Development Research Methodology (SDRM)	14
Figure 4.1: Use Case Diagram	21
Figure 4.2: Student Login Use Case	22
Figure 4.3: View Sites Use Case	24
Figure 4.4: Manage Attachments Use Case	26
Figure 4.5: View Important Sites Use Case	27
Figure 4.6: View Announcements Use Case	29
Figure 4.7: Open Files Use Case	31
Figure 4.8: Administrator Login Use Case	32
Figure 4.9: Manage Websites Use Case	35
Figure 4.10: Manage Attachments Use Case	36
Figure 4.11: Manage Important Sites Use Case	38
Figure 4.12: Manage Announcements Use Case	39
Figure 4.13: Manage Students Files Use Case	41
Figure 4.14: Sequence Diagram (View Sites Insert & Update Use Case)	43
Figure 4.15: Sequence Diagram (View Sites Select & Delete Use Case)	44
Figure 4.16: Sequence Diagram (Manage Attachments Insert & Update Use Case)	45
Figure 4.17: Sequence Diagram (Manage Attachments Select & Delete Use Case)	46
Figure 4.18: Sequence Diagram (View Important Sites Insert & Update Use Case)	47
Figure 4.29: Sequence Diagram (View Important Sites Select & Delete Use Case)	48
Figure 4.20: Sequence Diagram (View Announcements Insert & Update Use Case)	49
Figure 4.21: Sequence Diagram (View Announcements Select & Delete Use Case)	50
Figure 4.22: Sequence Diagram (Open Files Insert & Update Use Case)	51

List of Figures

Figure 3.1: System Development Research Methodology (SDRM)	14
Figure 4.1: Use Case Diagram	21
Figure 4.2: Student Login Use Case	22
Figure 4.3: View Sites Use Case	24
Figure 4.4: Manage Attachments Use Case	26
Figure 4.5: View Important Sites Use Case	27
Figure 4.6: View Announcements Use Case	29
Figure 4.7: Open Files Use Case	31
Figure 4.8: Administrator Login Use Case	32
Figure 4.9: Manage Websites Use Case	35
Figure 4.10: Manage Attachments Use Case	36
Figure 4.11: Manage Important Sites Use Case	38
Figure 4.12: Manage Announcements Use Case	39
Figure 4.13: Manage Students Files Use Case	41
Figure 4.14: Sequence Diagram (View Sites Insert & Update Use Case)	43
Figure 4.15: Sequence Diagram (View Sites Select & Delete Use Case)	44
Figure 4.16: Sequence Diagram (Manage Attachments Insert & Update Use Case)	45
Figure 4.17: Sequence Diagram (Manage Attachments Select & Delete Use Case)	46
Figure 4.18: Sequence Diagram (View Important Sites Insert & Update Use Case)	47
Figure 4.29: Sequence Diagram (View Important Sites Select & Delete Use Case)	48
Figure 4.20: Sequence Diagram (View Announcements Insert & Update Use Case)	49
Figure 4.21: Sequence Diagram (View Announcements Select & Delete Use Case)	50
Figure 4.22: Sequence Diagram (Open Files Insert & Update Use Case)	51

Figure 4.23: Sequence Diagram (Open Files Select & Delete Use Case)	52
Figure 4.24: Announcements Table	53
Figure 4.25: Important Sites Table	53
Figure 4.26: Open File Table	54
Figure 4.27: Sites Table	54
Figure 4.28: Attachments Table	54
Figure 5.1: Main Page	55
Figure 5.2: Open File View Page	56
Figure 5.3: Open File Edit Page	57
Figure 5.4: Open File Insert Page	57
Figure 5.5: Open File Update Page	58
Figure 5.6: Consulted Word Page	59
Figure 5.7: Mail of Consulted Page	59
Figure 5.8: Address Education Department Page	60
Figure 5.9: Sites View Page	60
Figure 5.10: Sites Edit Page	61
Figure 5.11 Important Sites View Page	61
Figure 5.12: Important Sites Edit Page	62
Figure 5.13: Announcements View Page	62
Figure 5.14: Announcements More View Page	63
Figure 5.15: Announcements Edit Page	63
Figure 5.16: Attachments View Page	64
Figure 5.17: Attachments Edit Page	64
Figure 5.20: Create User Sits	65
Figure 5.21: General Report Site	65

List of Tables

Table 4.1 Functional Requirements	18
Table 4.2 Non-Functional Requirements	19
Table 5.1 Demographic Data	67
Table 5.2 Descriptive Statistics	68

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In recent years, rapid growth in the volume of data and increasing user requirements, as these regulations no longer deal with the growing volume of data and user requirements. As information is increasingly created, processed, and manipulated, the role of large-scale enterprise storage systems becomes increasingly important. One of the characteristic features of our age is the information society, than means the large number information system is caused (Emejanov, 2002). As information is increasingly created, processed, and manipulated in digital form, the role of large-scale enterprise storage systems becomes increasingly important. Subsequently, to address this drawback, recent efforts have focused on automating the manually tasks many going records.

The Internet has become an ordinary and widely accepted alternative social environment-known as cyberspace-in which many people take part in numerous activities (Barak, 2008). The Internet has had a revolutionary impact on culture, communication and economic development around the world. In their efforts of using this powerful technology as a means for leapfrogging and bridging the gaps with developed nations (Xue, 2005). The Internet is

The contents of
the thesis is for
internal user
only

References

Alan Dennis, Barbara Haley Wixom, and David Tegarden (2003). Systems Analysis & Design with Uml

Almna, S. A. (April/2008).

http://culturalaffairs.libyanembassy.org.uk/lca08/1/main_content/kalemt_mostashar.htm.

Amuntegui, M. (2008). Revista Chilena Fundada, Tomo X: BiblioLife.

Arrington,Syed Rayhan (2003), Enterprise Java and Uml, John Wiley & Sons Inc

Arif, M. (2008). Customer Orientation in e-Government Project Management: a Case Study. Electronic Journal of e-Government, 6(1), 1-10.

Asif, M. M., & Dragnea, R. (2007). Hosting Web Services on Resource Constrained Devices.

Barak, Y. S , A (2008). Internet use and personal empowerment of hearing-impaired adolescents.

Bowers and Krishna Rajagopal, Center for Theoretical Physics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139 , Received 3 May 2002; published 10 September 2002.

Chan, P. P. (2008). Dynamic Web Service Composition: A New Approach in Building Reliable Web Service.

Chen, H. G. (2005). A framework for application server based Web services management.

Crasso Marco A. Z. (2008). Easy web service discovery: A query-by-example approach.

Dustdar S 2005 Architecture and Design of an Internet-enabled Integrated Workflow and Groupware system Business Process Management Journal Special Issue on Internet-enabled Workflow 11 3 pp 275-290 A...

Elliott, G. (2004). Global Business Information Technology.

Emejanov, A.I.; Zhukovskij, O.I. Electron Devices and Materials, 2002. SIBEDEM 2002. The IEEE-Siberian Conference on 19-20 March 2002 Page(s):74 - 76

Endo, M. K. (2006). A proposal of encoded computations for distributed massively multiplayer online services.

Garcia, M. B. (2006). Semantics-enriched QoS policies for web service interactions.

George, J.F. and Carter, P.(2004) "Computer-Based Performance Monitoring." In George, J.F. (ed) Computers in Society: Privacy, Ethics & the Internet. Upper Saddle River, N.J.: Prentice-Hall, 2004, 110-120.

Hufford, K. D. (2001). CS265 web network and web site management development of a core course in the Internet technology minor curriculum.

Hung, P. C., & Carminati, B. (2004). Towards Standardized Web Services Privacy Technologies.

Junping, W. X. (2007). Risk Control and Estimation of Online Services Market Segmentation.

Kamaljeet, S. C. (2003). User attributes in Web-based electronic service adoption model (E-SAM).

Kargar, M. J., Noor, S., & Ibrahim, H. (2007). An extensive review on accessing quality information

Kienle D, H Guo. (2007). First-principles analysis of STM image heights of styrene on Si(100). *Physical Review B* 76:045325..

Konopnicki, D. S. (1996). Early experience with W3QS-a WWW information gathering system.

Labovitz, G. Robert Malan, and Farnam Jahanian(1999). *Origins of Internet Routing Instability*, University of Michigan, Department of Electrical Engineering and Computer Science 1301 Beal Ave. Ann Arbor, Michigan 48109-2122

Liang, G-C (2007). Impact of structure relaxation on the ultimate performance of a small diameter, n-type <110> si-nanowire MOSFET. *IEEE Transactions on Nanotechnology* 6:225.

Lim, C., Hong, K., & Tan, K. (2008). Acceptance of e-learning among distance learners: A Malaysian perspective: Paper submitted to Ascilite08, Melbourne, Australia.

Liu, W. C. (2006). WIP: Web Service Initiation Protocol for Multimedia and Voice Communication over IP.

Lowry Trevor-Deutsch, (2002) *Women and ICTs for open and distance learning: Some experiences and strategies from the Commonwealth /COL1*

McNeal, R., Schmeida, M., & Hale, K. (2007). E-disclosure laws and electronic campaign finance reform: Lessons from the diffusion of e-government policies in the States. *Government Information Quarterly*, 24(2), 312-325.

Mohammad Salam(2008), Master Thesis UM library.

Crasso Marco A. Z. (2008). Easy web service discovery: A query-by-example approach.

Ni, D. M., & Wang, J. (1999). System scaling for large-scale Internet-based online services.

Nunamaker, J. F., Chen, M., and Purdin, T. D., "Systems Development in Information Systems Research," *Journal of Management Information Systems*, Vol. 7, No. 3, Winter 1990/1991, pp. 89-106. (SSCI)

Poynder, R. (1998). Online engineering information.

Sundmacher, K. K. (2007). Analysis, Simulation, and Control. Wiley-VCH, Weinheim.

Thelwall, & M. (2002). Evidence for the existence of geographic trends in university Web site interlinking.

Vrancken, J.L.M., Ottenhof, F., Soares, M.S.(2007) Regional road traffic management in the Netherlands.

Xu, Y. W., & Zhang, W.-b. (2008). Research on a Computing Model for Internet Efficiency Index.

Yang Xiangying, 2005 Ph.D. The University of Texas at Austin,.

Wunnavva, S. V. (1995). Advances in Internet and interconnectivity of networks.

Yong, Xu (2002) Flexible MEMS skin technology for distributed fluidic sensing.

<http://resolver.caltech.edu/CaltechETD:etd-12302004-144248>