Requirement Model OF Mobile Examination Result for Student CAS in UUM

Nabil.AB.A.Brebish

Universiti Utara Malaysia

2008

Requirement Model OF Mobile Examination Result for Student CAS in UUM

A Thesis submitted to college Arts & Sciences in partial Fulfillment of the requirement for the degree master (Information Technology)

University Utara Malaysia

By

Nabil.AB.A.Brebish(89022)

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)

NABIL. AB. A. BREBISH

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)

REQUIREMENT MODEL OF MOBILE EXAMINATION RESULT FOR STUDENT CAS IN UUM

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): **ASSOC. PROF. DR. WAN ROZAINI SHEIK OSMAN**

Tandatangan
(Signature) : Rozaini

Tarikh
(Date) :

WAN ROZAINI SHEIK OSMAN, PhD
DIRECTOR AND ASSOCIATE PROFESSOR
TU-UUM ASP CoE For Rural ICT Development,
PUSAT PEMBANGUNAN TEKNOLOGI MAKLUMAT
UNIVERSITI UTARA MALAYSIA
06010 UUM SINTOK
KEDAH DARUL AMAN

PERMISSION TO USE

In presenting this thesis of the requirements for a Master of Science in Information Technology (MSc. IT) 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 any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in their absence, by the Dean of Graduate School. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall 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 make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Graduate School

Universiti Utara Malaysia

06010 Sintok

Kedah Darul Aman

ABSTRACT

Mobile computing today plays an important significant role in our life due to the advances in personal computing and communication technologies. This study use the mobile application to enable students to enquiry their academic results at University Utara Malaysia (UUM) through a hand phone application. The proposed system is developed by utilizing the Wireless Application Protocol (WAP) technology as a protocol and Wireless Markup Language (WML) as a programming language and also Active Server Protocol (ASP) as a tool to connect with the database.

ACKNOWLEDGEMENT

Praise and gratitude to Allah, the Almighty, for bestowing me with great strength, patience, and courage in completing this project.

My gratefulness to my supportive and helpful supervisor, Assoc.Prof.Dr Wan Rozaini Sheik Osman for assisting and guiding me in the completion of this research. With all truthfulness, without her, the project would not have been a complete one. She has always been my source of motivation and guidance. I am truly grateful for her continual support and cooperation in assisting me all the way through the semester. I am grateful to Madam Norida Darus and Dr Norlaily Hashim for their help inmaking my project successful.

I would like to present my thanks to my father, my mother and all my family who has always been there for me. Finally, I would like to express my appreciations to all my friends, colleagues, FTM staff, and everyone who has helped me in this journey.

CHAPTER ONE

CHAPTER TWO

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

List of figure

CHAPTER 1

INTRODUCTION

This chapter introduces the background of the study that is include the wireless and mobile technologies in order to assists the information delivery services in educational environment. This chapter continues on the discussion of the problem statement and objectives of the study. The scope of the study and its significance is explained in the section 1.4 and section 1.5 respectively.

1.1 Introduction

Mobile application can be range from web sites to software that works together with mobile device and services to provide seamless interaction between people and information (Lim, 2004). Hart and Hannan (2004) stated that coupled with the possibility of large fold-away and more versatile screen technology and the ability to deliver faster media and data transfer and 802.11b wireless technologies, mobile computing will become not only more accessible to everyone, but also easier to use. Additionally, Campbell (2007) mentioned that computer mediated communication thus provides the opportunity for individuals to communicate more effectively in situations where they are separated in both space and time.

The contents of the thesis is for internal user only

Reference

Agrawal, D.P. & Zeng, Q.-A. (2003), Introduction to wireless and mobile systems, Brooks/Cole Publishing, Pacific Grove, Calif.

Aleahmad, T. & Slotta, J. (2002). Integrating handheld technology and web-based science activities; new educational opportunities. ED_MEDIA 2002, pp 24 – 29, United States: Association for the Advancement of Computing in Education.

Al-khamayseh, S., Zmijewska, A., Lawrence, E. and Culjak, G. (2007). Mobile learning systems for digital natives, Proceedings of the Sixth ISATED International Conference web-Based Education, Chamonix, France.

Andy Stone, Jonathan Briggs & Craig Smith, (2002). SMS and interactivity – some results from the field, and its implications on effective uses of mobile technologies in education, Proceedings of the IEEE International Workshop on Wireless and Mobile Technologies in Education (WMTE'02) 0-7695-1706-4/02 $17.00 © 2002 IEEE

Annika Hinze & George Buchanan, (2006), The challenge of creating cooperating mobile services: Experiences and lessons learned. Australian Computer Society. Conferences in Research and Practice in Information Technology, Vol. 48. January 2006 Tasmania, Australia.

Bick, A. (2005). The impact of personal digital assistants on academic achievement. Retrieved 31 December 2005 from http://www.millburn.org/science/pda/NatJSHS.pdf.

Biemer, M., J. F. Hampe (2005). A mobile medical monitoring system: Concept, design and deployment. Mobile Business, 2005. ICMB 2005. International Conference on:464-471.

Bojkovic, Z. and Milovanovic, D. (2005). Challenges in mobile multimedia: technologies and Qos requirements. 7th WSEAS Int. Conf. on Mathematical Methods and Computational Techniques In Electrical Engineering, Sofia, pp. 7-12.

Borquez, A. D. (2004). Mobile and wireless technology: The impart in a higher education setting, Faculty of the Rossier School of Education Universtiy Of Southern California.

Bruno Kozina, Vlado Glavinic, & Ljubomir Kraljevic, (2006). Agent-based messaging system for m-learning. IEEE MELECON 2006, May 16-19, Benalmádena (Málaga), Spain

Campbell, M. (2007). Identifying success factors of ICT in developing a learning community, Case study Charles Sturt University, Campus-Wide Information SystemsVol. 24 No. 1, pp. 17-26.

Caspar Ryan & Atish Gonsalves (2005). The effect of context and application type on mobile usability: An empirical study, Conferences in Research and Practice in Information Technology, Vol. 38. V. 2006. Australia.

Centre for Technology in Government, University at Albany. (1998). *Models for Action Project: Developing Practical Approaches to Electronic Records management and Preservation,* A Survey of System development Process Models.

Cooke, Michael. (2004). Clomedia: The evolution of e-learning. Retrieved on January 21, 2008 from http://www.clomedia.com/content/templates/clo_webonly.asp?articleid=571&zoneid=78

Csete, J., Wong, Y. H., Vogel, D. (2004). Mobile devices in and out of the classroom, Educational Development Centre, Hong Kong Polytechic University.

Danesh, A. et al. (2001). Geney: Designing a collaborative activity for the palm handheld computer. *In Proceedings of CHI Conference on Human Factors in Computing Systems, 3(1).* Retrieved 31 December 2005 from http://www.ece.ubc.ca/~elec418/resources/geney.pdf

Elliott, G. & Phillips, N. (2004). Mobile commerce and wireless computing system: Pearson Educateion Limited.

Hasan, A. (2002). The use of mobile-wireless technology for education. US: George Mason University.

Hart, J. and Hannan, M. (2004), The future of mobile technology and mobile wireless computing, Volume 21, Number 5, pp. 201-204, *q* Emerald Group Publishing Limited · ISSN 1065-0741.

Ishii, K. (2004). Internet use via mobile phone in Japan. Telecommunications Policy, 28, 43–58.

Ishii, K. (2006). Implications of mobility: The uses of personal communication media in Everyday Life, Journal of Communication 56 (2006), pp. 346–365.

Kasesniemi, E., & Rautiainen, P. (2002). Mobile culture of children and teenagers in Finland. In J. E. Katz & M. A. Aakhus (Eds.), Perpetual contact. Cambridge, MA: Cambridge University Press.

Kendall, P. A. (1996). Introduction to system analysis and design: A structured approach, Irwin, Times Mirror Higher Education Group, USA.

Korneliya Yordanova. (2007), Mobile learning and integration of advanced technologies in education. International Conference on Computer Systems and Technologies - CompSysTech'07.

Kwok, T., Nguyen, T., Lam, L., & Roy, K. (2004). An efficient and systematic method to generate XSLT Stylesheets for Different Wireless Pervasive Devices, ACM 1-58113-912-8/04/005, New York, USA.

Laroussi, M. (2003). New e-learning based on mobile and ubiquitous computing: UBI-learn project, INSAT Centre Urbain Tunis Nord BP 676 CEDEX 1080 Tunis TUNISIA.Lim, C. C. (2004). Multimodal-based mobile application: a development of prototypes for accessing students academic result at UUM, Malysia

Lee Humphreys, (2008) Mobile social networks and social practice: A case study of Dodge ball. Journal of Computer-Mediated Communication 13 (2008) 341–360 [a] 2008 International Communication Association.

Lim chee chian, (2004). Multimodal-based mobile application: a development of prototypes for accessing students academic result at UUM, Malysia

Lin, H. H. and Wang, Y. S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts, Information & Management, 43, pp.271–282.

Lou, S. J., Yao, S. S., Ru, C. S. and Yi, H. L. (2007). The status Quo and perspectives of mobile learning in Taiwan. Proceedings of the 6th WSEAS International Conference on Applied Computer Science, Hangzhou, China.

Luchini, K., Quintana, C. and Soloway, E. (2004). Design guidelines for learner-centered handheld tools. In Proceedings of the SIGCHI conference on Human Factors in Computing Systems. Pp. 135-142, ACM Press.

Lyytinen, K. (2001). M-commerce-mobile commerce: a new frontier for e-business. MapInfo. Mobile Location services. Retrived from:http://www.mapinfo.com[25 the November 2005]

Maeda, T., Okamoto, T., Miura, T., Fukushige, Y., Asada, T.(2007). E-mail-based education environment using mobile phone communication, Advanced Learning Technologies, 2007. ICALT 2007. Seventh IEEE International Conference, pp427-429.

Mikami, S. (2004). Usage of the internet. Internet usage in Japan: Survey report 2003. Tokyo: Communications Research Laboratory.

Muyinda, P. B. (2007). MLearning: pedagogical, technical and organizational hypes and realities, Campus-Wide Information Systems, Vol. 24 No. 2, pp. 97-104

Nielsen, J. & Landauer, T. (2001). A mathematical model of the finding of Usability problems. In ACM INTERCHI'93. Netherlands: Amsterdam.

Nielsen, J. (2000). *Scenarios in Discount Usability Engineering.* Envisioning work and Technology. Book under preparation. Netherlands: Amsterdam.

Norbayah Mohd Suki and Norazah Mohd Suki (2007). Mobile phone usage for m-learning: comparing heavy and light mobile phone users, Campus-Wide Information Systems, Vol. 24 No. 5, pp. 355-365

Nor Shahriza Abdul Karim, Siti Hawa Darus and Ramlah Hussin (2006) Mobile phone applications in academic library services: a students' feedback survey, Vol. 23 No. 1, 2006. pp. 35-51 Gombak, Kuala Lumpur, Malaysia

Revenaugh, Mickey. (2005) Virtual schooling: legislative update. techLearning. Retrieved January 13, 2008, from: http://techlearning.com/showArticle.jhtml;jsessionid?articleID=160400812

Samir, M. E. (2008). Mobile ticket booking system for Long Haul bus transport, University Utara Malaysia.

Sintiani *et.al.,* (2004). Promoting mobile and interactive learning through the use of MMS Over Wireless LAN, International Conference on Engineering Education October 16–21, 2004, Gainesville, Florida.

Skog, B. (2002). Mobile and the Norwegian teen: Identity, gender and class. In J. E. Katz & M. A. Aakhus (Eds.), Perpetual contact. Cambridge, MA: Cambridge University Press.

Sommerville, 1., (2001). *Sqftware Engineering (6th ed.).* Harlow, England: Addison

Wesley. Sparxsystems's UML Tutorial Page (n.d.). Retrieved from: http://www.sparxsystems.com.au/UML Tutorial.htm *[3rd* March *2006]*

Teng et al. (2007). Mobile G-portal supporting collaborative sharing and learning on geography fieldwork: An Empirical Study, *JCDL'07*, June 18–23, 2007, Vancouver, British Columbia, Canada..

Vahey, P. & Crawford, V. (2002). Palm education pioneers program: final evaluation report. SRI International. Retrieved 28 Novemebr 2005, from www.palmgrants.sri.com/PEP_Final_Report.pdf.

Vaishnavi, & Kuechler. (2006). Design research in information system. Retrieved June 15, 2006, From Http://Www.Isworld.Org/Researchdesign/Drisisworld.Htm

Volpel, A. (2005). *Application tracking system*. Center for Health Program Development and Management University of Maryland, Baltimore County, Retrieved December 10, 2007. From http://www.nashp.org/Files/Ann_Volpel_-_Session_2.pdf

Williams, L. (2006). Insight: Don't call us, *The Sydney Morning Herald*, p.20.

Wireless Application Protocol, Web ProForum Tutorials,Iternational Engineering Consortium.

Wireless Application Protocol Forum (1999). Wireless application protocol, wireless markup language specification Version 1.2. Retrieved Aplril 16, 2007 from: http://www.wapforum.org/what/technical/SPEC-WML-19991104.pdf

WAP Forum (2002). WAP 2.0 Technical White Paper. Retrieved April 6, 2007 from http://www.wapforum/org/what/WAPWhite_Paper1.pdf