WAP-BASED YOUTH REFERENDUM SYSTEM (WYRS)

ATEF HAMZA ELDENFRIA

Universiti Utara Malaysia

2008

WAP-BASED YOUTH REFERENDUM SYSTEM (WYRS)

A thesis submitted to college Arts & Sciences in partial

fulfillment of the requirement for the degree master

(Information Technology)

Universiti Utara Malaysia

By

ATEF HAMZA ELDENFRIA

ATEF HAMZA ELDENFRIA

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)

ATEF HAMZA ELDENFRIA
(800275)

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)

WAB-BASED YOUTH REFERENDUM SYSTEM

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) : _____ Tarikh (Date) : 18/11/08

Nama Penyelia Kedua
(Name of 2nd Supervisor): **MR. HARRYIZMAN HARUN**

Tandatangan
(Signature) : _____ Tarikh (Date) : 19-11-08

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

The WAP-based youth referendum system (WYRS) uses WAP technology that can be obtained easily. It is flexible way to access the information at any time from any location. This research introduces a WAP application that provides the rural people with the avenue for referendum. Many people in these areas do not have opportunity to discuss and vote issues relevant to them. This service will provide people access to information and give them a chance to have a say in polices. Using this technology, rural people can easily get necessary information about the voting information, and get involved in voting on issues, making them part of the nation building.

ACKNOWLEDGEMENT

My gratefulness to my supportive and helpful supervisors, Assoc. Prof. Dr. Wan Rozaini bt Sheik Osman and Mr. Harryizman Bin Harun for assisting and guiding me in the completion of this research. With all truthfulness, without them, the project would not have been a complete one. They have always been my source of motivation and guidance. I am truly grateful for their continual support and cooperation in assisting me all the way through the semester.

Also I would like to thank Madam Norida Muhd. Darus to give me feedback and comments regarding my project. I would like to present my thanks to 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

INTRODUCTION

CHAPTER TWO

LITERATURE REVIEW

CHAPTER THREE

RESEARCH METHODOLOGY

CHAPTER FOUR

ANALYSIS AND DESIGN

CHAPTER FIVE

DISCUSSION AND RESULTS

CHAPTER SIX

CONCLUSION

List of Figure

List of Table

CHAPTER ONE

INTRODUCTION

The online services became the most important services that occupy most of our daily works on the internet, the online services give us the facilities to practice our daily purposes, and one of these practices is the online voting or the referendum services.

However these systems can supply the voter about the altering discussion by give the voter brief information about the voter enquires, and how these systems are working and how they can make their voting using this system. For preventing voters from not electing, they need to make the voters believe that everything works correctly.

As youths are the wealth for a country so it is better to take their opinion before introducing a policy even from a government. To avoid any conflict regarding to any issue youth referendum has been introduced. Nowadays, many countries are applying youth referendum such as Canada and Australia to know how their policy will be accepted to the citizen. Mobile telephone can be found in every one's hand. It is very difficult to find any family or person who does not possess mobile telephone. WAP based youth referendum will be introduced in this project Parikh (2006); Soriano (2005). People can share their opinion through a mobile telephone even with a single short message service (SMS).

The contents of the thesis is for internal user only

REFERENCES

A web/wap-based system for remote monitoring patients with data mining support Retrieved on Jul., 2008, from http://www.iti.gr/files/daras_neurel2002.pdf

Analysis of an Electronic Voting System, Retrieved on 16th Jul., 2008, from http://www.mindfully.org/Reform/2003/Electronic-Voting-System-Analysis23jul03.htm

Ari, J., Dario, C., and Markus J., (2005). Coercion-resistant electronic elections. In WPES '05: Proceedings of the 2005 ACM workshop on Privacy in the electronic society, pages 61–70, New York, NY, USA, 2005. ACM Press

Artikis, J. Pitt, and M. Sergot,(2002), Animated specifications of computational societies. In C. Castelfranchi and L. Johnson, editors, Proceedings AAMAS'02, pages 1053–1062. ACM Press.

B. Sasidhar, (2005) The Effect of Mobile Devices and Wireless Technology on E-Learning retrieved 11 Oct 2008 from http://www.sunway.edu.my/others/vol2/sasidhar45.pdf

Best, J.W. & Kahn, J.V. (2000). Reaserch in education (8th ed.). USA: Allyn and Bacon.

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.

Byoungcheon, L., Colin, B., Ed, D., Kwangjo K., Jeongmo, Y., and Seungjae, Y.,(2003).

California Internet Voting Task Force. A Report on the Feasibility of Internet Voting, Jan. 2000.

Dennis, P.,(2008), Winning Electoral Reform in Ontario, retrieved on 7 Sep 2008, from(http://www.socialistproject.ca/relay/relay19_mmp.pdf).

Darrell barker, requirements modeling technology a vision for better, faster, and cheaper systems, retrieved on 13 Aug 2008, from (www.apl.jhu.edu/classes/notes/schappelle/704/requirementsmodeling.pdf).

Elalfy, E. M. (2005). A General Look at Building Applications for Mobile Devices. Distributed Systems Online, IEEE, 6(9), 1-3. Retrieved June 24, 2008 from: http://csdl2.computer.org/comp/mags/ds/2005/09/o9005.pdf

Harris, R.W., Bala, P., Songan, P., Khoo E., (2001), Challenges and Opportunities In

Introducing Information and Communication Technologies To The Kelabit Community of North Central Borneo, New Media and Society, Vol. 3, No. 3, September 2001.

Heijden, M., & Taylor, M. (2000). Understanding WAP: Applications, devices and services. London: Artech House.

Intel Corporation. (2007).Malinalco, Mexico: Using Innovative Technologies to Improve Learning. White Paper. Retrieved July 22, 2008 from: http://www.intel.com/intel/worldahead/pdf/malinalco.pdf?iid=worldahead_home+body_malinalco

Information Systems on Wireless Mesh Networks (2006), An Opportunity for Developing Countries and Rural Areas, 2 Aug 2006, by worldwide-celluar users.

Jeremy, P., and Marek, S., (2005), Voting in Online Deliberative Assemblies, June 6-11, 2005, ACM

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

Lewis, J. R. (1995) IBM Computer Usability Satisfaction Questionnaires: Psychometric Evaluation and Instructions for Use. International Journal of Human-Computer Interaction, 7:1, 57-78. http://www.acm.org/~perlman/question.cgiAbstract

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.

for PID Controller Tuning, Proceedings of the 2000 IEEE International, Symposium on Computer-Aided Control System Design, Anchorage, Alaska, USA, pp. 168-172.

Mercuri, R. (2000). Electronic Vote Tabulation Checks and Balances. University of Pennsylvania, Philadelphia.

Microsoft.apress.com. WAP-based Application using WML and ASP. Retrieved on 5th Jul., 2008, from Website: http://microsoft.apress.com/?q=WAP.

Margarita, E., (2008), Electronic Voting On-the-Fly with Mobile Devices, 978-1-60558-115 ACM. Margarita Esponda 2008, Electronic Voting On-the-Fly with Mobile Devices, 30 July 2008.

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

National Science Foundation. Report on the National Workshop on Internet Voting: Issues and Research Agenda, Mar., 2001. Retrieved on 8th July 2008, from http://news.findlaw.com/cnn/docs/voting/nsfe-voterprt.pdf

Opportunity for developing economies, Chennai, India, retrieved on 22 Aug 2008, by TeNeT Group.

Parikh, T, & Lazowska, E. (2006).Designing an Architecture for Delivering Mobile Information Services to the Rural Developing World. Retrieved : June 15, 2008. From: http://www.cs.washington.edu/papers/www2006-parikh.pdf

Raffaele Bruno, Marco Conti, and Enrico Gregori, (2005). Mesh Networks: Commodity Multihop Ad Hoc Networks. IEEE Communications Magazine, 43(3):123–131, March 2005.

Requirements Modeling, Retrieved on 11 Aug 2008, from (www.ittc.ku.edu/Projects/rosetta/downloads/barker-viuf00.pdf).

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

Rochford, T. (2001). *The Impact of Mobile Application Technology on Today's Workforce. 4,5,13,14.*

Rubin et al. (2002).Security considerations for remote electronic voting. Communications of the ACM, 45(12):39–44. Retrieved on 8th Jul., 2008, from Website: http://avirubin.com/e-voting.security.html

Rural communities, retrieved on 11 Aug 2008, from Revenaugh, Mickey. (2005) Virtual schooling: legislative update. techLearning. Retrieved March 13,

2008, from: http://techlearning.com/showArticle.jhtml;jsessionid?articleID=160400812

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.

Soriano, C. (2005). WAP and WML. For STR, recto. tribiani. (pp. 4).

Taylor, D. (2006). WAP Review: *Carnival of the Mobilists*, No. 39. Retrieved on 22 May 2008, from Website: http://wapreview.com/blog/?cat=5

The referendum: which way forward for a system of good governance retrieved on 16th July 2008 fromhttp://www.kituochakatiba.co.ug/referendumWorkshop.pdf

Vaishnavi, V., & Kuechler, B. (2007), Design research in Information Systems. Retrieved: June 19, 2008. From: http://www.isworld.org/Researchdesign/drisISworld.htm

Vaishnavi, & Kuechler. (2004). Design research in information system. Retrieved June 15, 2008, From Http://Www.Isworld.Org/Researchdesign/Drisisworld.Htm

WAPForum (2002). WAP 2.0 Technical White Paper. Retrieved on Jun., 16th 2008, from Website: http://www.wapforum.org/what/WAPWhite_Paper1.pdf

WAP Forum (2001). WAP Architecture. Wireless Application Protocol Architecture Specification.WAP-210-WAPArch-20010712. Retrieved: June 25, 2008. From: http://www.openmobilealliance.org/tech/affiliates/wap/wap-210-waparch-20010712a.pdf.

WAP Forum (2000). Wireless Application Protocol White Paper. Retrieved: June16, 2008. From: http://www.wapforum.org/what/WAP_white_pages.pdf

Yang (2003). WAP Application Develop. Mobile commerce and WML. NY.

Yiwei Cao, Martin Krebs, Georgios Toubekis and Sadeq Makram, (2006), Mobile Community