The Web
Its Utilisation, Evaluation and Security

Media Anugerah Ayu

IIUM PRESS
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
THE WEB: ITS UTILISATION, EVALUATION AND SECURITY
THE WEB:
ITS UTILISATION, EVALUATION
AND SECURITY

Editor

Media Anugerah Ayu

IIUM Press

Published by:
IIUM Press
CONTENTS

Preface ................................................................. v

Acknowledgement ..................................................... vi

1. eSurvia: A Web-based Survey Tool Using Fuzzy Conjoint Analysis
   Media Anugerah Ayu, Siti Aisyah Ismail, Abu Osman Md Tap ............... 1

2. Hajj Pilgrims Tracking and Monitoring System
   Teddy Mantoro, Media Anugerah Ayu, Md. Akhtaruzzaman, Murni Mahmud
   .......................................................................................... 11

3. Online Student Attendance Monitoring System
   Murni Mahmud, Zatil Azyyati Mustapha ........................................ 23

4. Web-based AHP System
   Media Anugerah Ayu, Fadwa Gamal Mohammed Al-Azab ................... 35

5. A Guideline for Using Web-based AHP System
   Media Anugerah Ayu, Fadwa Gamal Mohammed Al-Azab ................... 49

6. Al-Islam Hospital Human Resource System
   Muhd Rosydi bin Muhammad, Fatima Hasan Ali Munassar .................. 58

7. Kulliyyah of Information and Communication Technology (KICT)
   Postgraduate System
   Teddy Mantoro, Media Anugerah Ayu, Ahmad Haitham Bin Yusop ........ 71

8. A Web for Supreme Judicial Institute Library in Yemen
   Media Anugerah Ayu, Abdulraoof Mohammed Al-Ghashm .................... 81

9. Course Advisor System
   Abdul Rahman Ahlan, Nur Farhana Binti Ahmad .............................. 91
10. Children Educare Center System
Murni Mahmud, Muhammad Firdaus B Abd Karim .................................. 105

11. Angkatan Belia Islam Malaysia (ABIM) Membership Management System
Husnayati Hussin, Amila Norjihat bt Musa, Wan Nur Asma bt Wan Ahmad Puad ................................................................. 119

12. Intelligent Public Transport Guide System for Kuala Lumpur
Media Anugerah Ayu, Mohd Faisal bin Jamil ....................................... 131

13. E-Government Initiatives in Palestine
Mohamed Elgharabawy, Media Anugerah Ayu ...................................... 141

14. An Online Badminton Motion Tracking System
Normaziah A. Aziz, M. Amar Odenan, Taufiq M. Khadafi .................... 149

15. Web-based Application That Support Active Learning
Jonathan Mamangkiang Mantikayan, Media Anugerah Ayu .................... 159

16. The Use of SAS for Enterprise Data Management
Mansur Aliyu, Murni Mahmud .............................................................. 168

Mohamed Elgharabawy, Media Anugerah Ayu ....................................... 180

18. Web Application Development Process
Adamu Ibrahim Abu Bakar, Teddy Mantoro .......................................... 189

19. Multimedia Elements and Internet
Maimona J. Badi, Akram M. Zeki ........................................................... 198

20. A Survey on Islamic Websites for Children
Zaidoon Kh. Abdulatif, Mustafa Nasser Ayif, Murni Mahmud ................. 202

21. Fuzzy Computing with Expressions for Evaluating Fonts Styles on Children Websites
Murni Mahmud, Noorhazwani Raja Mohd, Abu Osman Md Tap ................ 211
22. A Research Framework for User Centered Web Development  
*Media Anugerah Ayu, Noor Azura Zakaria*  
219

23. A Framework for Heuristic Evaluation on Islamic Websites  
*Murni Mahmud, Abu Osman Md Tap, Mansur Aliyu*  
226

24. Web Usability Survey Measurement  
*Media Anugerah Ayu, Noor Azura Zakaria*  
234

25. Measuring Information Contents Quality of E-Services through Mobile Devices  
*Ikhlas Zamzami, Murni Mahmud*  
240

26. Verification of Scholars and References in Islamic Websites  
*Murni Mahmud, Rasheed Muhammed Nasser, Abu Osman Md Tap*  
250

27. Security of Multimedia in the Web  
*Akram M. Zeki*  
257

28. Web Application - What Makes it Secure or Insecure?  
*Normaziah A. Aziz, Nor Harisah Zainuddin*  
263

29. A Single Door to the Kulliyyah of Information and Communication Technology (KICT) Online Services  
*Media Anugerah Ayu, Mohamed Elgharabawy, Mohammad Al-Mohaifer, Mamdooh Rameez*  
272
15. **Web-based Application That Support Active Learning**

Jonathan Mamangkiang Mantikayan and Media Anugerah Ayu  
Department of Information Systems, Kulliyyah of Information and  
Communication Technology, International Islamic University Malaysia,  
Malaysia

**ABSTRACT**

The major use of web-based instruction is to enhance traditional, on-campus courses, where the benefit of Web enhancement as a supplemental resource is less obvious. The competition fostered in today's environment is demanding increased accountability of idealistic teachers and re-evaluation of traditional teaching methods. Without reliable and valid instructional measurement systems, it is virtually impossible to benchmark new techniques. Web based application can be able to support active learning. This study describes different web based application tools that can be utilized to support active learning in the classroom.

**15.1 INTRODUCTION**

Technology has allowed us to redefine and restructure the way information is constructed and communicated, offering new and unique possibilities for students and educators in the teaching-learning process (Avraamidou, 2008). As technology progresses, new systems emerge to assist educators in preparing and managing courses (Banks, 2006). Learning is the consequence of a series of interactions between the learner and his or her environment. Effective teaching can be described as the process of setting instructional goal, conducting a series of process to accomplish these goals,