

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

International Islamic University Malaysia

First Edition, 2011
©IIUM Press, IIUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Bibliography p.
Includes Index
ISBN

ISBN: 978-967-418-112-3

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IIUM PRINTING SDN. BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan

CONTENTS

Preface	v
Acknowledgement	vi
1. eSurvia: A Web-based Survey Tool Using Fuzzy Conjoint Analysis <i>Media Anugerah Ayu, Siti Aisyah Ismail, Abu Osman Md Tap</i>	1
2. Hajj Pilgrims Tracking and Monitoring System <i>Teddy Mantoro, Media Anugerah Ayu, Md. Akhtaruzzaman, Murni Mahmud</i>	11
3. Online Student Attendance Monitoring System <i>Murni Mahmud, Zatil Azyyati Mustapha</i>	23
4. Web-based AHP System <i>Media Anugerah Ayu, Fadwa Gamal Mohammed Al-Azab</i>	35
5. A Guideline for Using Web-based AHP System <i>Media Anugerah Ayu, Fadwa Gamal Mohammed Al-Azab</i>	49
6. Al-Islam Hospital Human Resource System <i>Muhd Rosydi bin Muhammad, Fatima Hasan Ali Munassar</i>	58
7. Kulliyah of Information and Communication Technology (KICT) Postgraduate System <i>Teddy Mantoro, Media Anugerah Ayu, Ahmad Haitham Bin Yusop</i>	71
8. A Web for Supreme Judicial Institute Library in Yemen <i>Media Anugerah Ayu, Abdulraoof Mohammed Al-Ghashm</i>	81
9. Course Advisor System <i>Abdul Rahman Ahlan, Nur Farhana Binti Ahmad</i>	91

10. Children Educare Center System	
<i>Murni Mahmud, Muhammad Firdaus B Abd Karim</i>	105
11. Angkatan Belia Islam Malaysia (ABIM) Membership Management System	
<i>Husnayati Hussin, Amila Norjihah bt Musa, Wan Nur Asma bt Wan Ahmad Puad</i>	119
12. Intelligent Public Transport Guide System for Kuala Lumpur	
<i>Media Anugerah Ayu, Mohd Faisal bin Jamil</i>	131
13. E-Government Initiatives in Palestine	
<i>Mohamed Elgharabawy, Media Anugerah Ayu</i>	141
14. An Online Badminton Motion Tracking System	
<i>Normaziah A. Aziz, M. Amar Odenan, Taufiq M. Khadafi</i>	149
15. Web-based Application That Support Active Learning	
<i>Jonathan Mamangkiang Mantikayan, Media Anugerah Ayu</i>	159
16. The Use of SAS for Enterprise Data Management	
<i>Mansur Aliyu, Murni Mahmud</i>	168
17. Open Source Content Management Systems (CMS): Issues and Challenges	
<i>Mohamed Elgharabawy, Media Anugerah Ayu</i>	180
18. Web Application Development Process	
<i>Adamu Ibrahim Abu Bakar, Teddy Mantoro</i>	189
19. Multimedia Elements and Internet	
<i>Maimona J. Badi, Akram M. Zeki</i>	198
20. A Survey on Islamic Websites for Children	
<i>Zaidoon Kh. Abdulatif, Mustafa Nasser Ayif, Murni Mahmud</i>	202
21. Fuzzy Computing with Expressions for Evaluating Fonts Styles on Children Websites	
<i>Murni Mahmud, Noorhazwani Raja Mohd, Abu Osman Md Tap</i>	211

22. A Research Framework for User Centered Web Development <i>Media Anugerah Ayu, Noor Azura Zakaria</i>	219
23. A Framework for Heuristic Evaluation on Islamic Websites <i>Murni Mahmud, Abu Osman Md Tap, Mansur Aliyu</i>	226
24. Web Usability Survey Measurement <i>Media Anugerah Ayu, Noor Azura Zakaria</i>	234
25. Measuring Information Contents Quality of E-Services through Mobile Devices <i>Ikhlas Zamzami, Murni Mahmud</i>	240
26. Verification of Scholars and References in Islamic Websites <i>Murni Mahmud, Rasheed Muhammed Nasser, Abu Osman Md Tap</i>	250
27. Security of Multimedia in the Web <i>Akram M. Zeki</i>	257
28. Web Application - What Makes it Secure or Insecure? <i>Normaziah A. Aziz, Nor Harisah Zainuddin.....</i>	263
29. A Single Door to the Kulliyyah of Information and Communication Technology (KICT) Online Services <i>Media Anugerah Ayu, Mohamed Elgharabawy, Mohammad Al-Mohaifer, Mamdooh Rameez</i>	272

27. SECURITY OF MULTIMEDIA IN THE WEB

Akram M. Zeki

Department of Information Systems, Kulliyah of Information and
Communication Technology, International Islamic University Malaysia,
Malaysia

ABSTRACT

The use of data hiding, as a viable form of communication, has been largely propelled by the growth of the Internet. The Internet offers an opportunity to exchange large amounts of digital information over great distances. The prevalence of media, such as audio, videos, and images, on the Internet provides an ideal channel for data hiding communication. Voice over Internet Protocol (VOIP) became a natural target for data hiding, it is appropriate to enable hidden communication throughout Internet Protocol (IP) networks. VoIP data hiding covers a wide range of information hiding techniques; including popular techniques based on IP. This paper is trying to discover some of the data hiding applications and techniques over internet.

27.1 INTRODUCTION

The digital revolution has brought profound changes in information communication and data processing. Digital media are gradually replacing their classical analog counterparts. The Internet has become the most important source of information, and it offers ubiquitous channels to deliver and exchange information. Digital media can easily be shared via the Internet and conveniently processed for queries in databases. Nowadays, we live in a