MULTIMEDIA AND ITS APPLICATIONS

Edited by

AKRAM M. ZEKI

IIUM Press

MULTIMEDIA AND ITS APPLICATIONS

Edited by

Akram M. Zeki

IIUM
Press

Gombak • 2015

First Edition, 2015
©IIUM Press, IIUM

IIUM Press is a Member of the Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

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

Akram M. Zeki
Multimedia and Its Applications / edited by Akram M. Zeki.
ISBN 978-967-418-312-7
1. Multimedia systems. I. Title.
006.7

Published by
IIUM Press
International Islamic University Malaysia
P.O. Box 10, 50728 Kuala Lumpur, Malaysia
Tel: +603-6196 5014; Fax: +603-6196 4862/6298

Printed in Malaysia by
NAGA Global Print (M) Sdn. Bhd.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
68100 Batu Caves
Selangor Darul Ehsan
Tel: 03-61881542

Contents

	Preface	*xiii*
	Acknowledgement	*xv*
	Introduction	*xvii*
	PART I – OVERVIEW OF MULTIMEDIA	
Chapter 1	Fundamentals of Multimedia *Akram M. Zeki* *Maimona J. Badi* *Adamu Abubakar*	1
Chapter 2	Malaysian Multimedia Content Industry *Maimona J. Badi* *Akram M. Zeki*	24
Chapter 3	Multimedia and its Relevance to Education *Akram M. Zeki* *Maimona J. Badi* *Chiroma Haruna*	41
Chapter 4	Elements of Multimedia on the Internet *Akram M. Zeki* *Maimona J. Badi*	53
	PART II – TEXT	
Chapter 5	Text in Multimedia *Adamu A. Ibrahim* *Zeeshan Bhatti* *Akram M. Zeki*	64
Chapter 6	Arabic Text *Mustafa Abuzaraida* *Akram M. Zeki*	73

PART III – IMAGE

Chapter 7 Digital Graphic Image 93
Zeeshan Bhatti
Asadullah Shah

Chapter 8 Image Data Types 102
Zeeshan Bhatti
Asadullah Shah

PART IV – AUDIO

Chapter 9 Audio File Formats 115
Mohammed Saleh Atoum
Ala Abdulsalam Soliman Alarood

Chapter 10 Practices of Handling Audio 126
Adamu Ibrahim
Asadullah Shah
Akram M. Zeki

PART V – VIDEO

Chapter 11 Video 139
Adamu Ibrahim
Zeeshan Bhatti
Akram M. Zeki

PART VI – COMPUTER GRAPHICS

Chapter 12 Introduction to Computer Graphics 149
Akram M. Zeki

PART VII – APPLICATION OF MULTIMEDIA

Chapter 13	Application of Multimedia in Digital Watermarking *Akram M. Zeki*	159
Chapter 14	Application of Multimedia in Language Self-Learner *Athifah Nafhah Nooh* *Aisha Hassan A. Hashim* *Akram M. Zeki*	178
Chapter 15	Application of Multimedia in Learning History Subject *Fatin Nudra Syafiqah A. Halim* *Akram M. Zeki*	185
Chapter 16	Application of Multimedia in Teaching Hajj *Hafizuddin Isa* *Akram M. Zeki*	192
Chapter 17	The High Impact of Using Multimedia in Enhancing Education in Schools *Hana J. Badi* *Akram M. Zeki*	198
	Index	*207*

Chapter 16

Application of Multimedia in Teaching Hajj

Hafizuddin Isa
Akram M. Zeki
International Islamic University Malaysia

Introduction

Information and communication technologies (ICT) have provided great changes in all aspects of life nowadays. The technology is developing day by day and ICT has been used widely across the world. In term of education, IT also changes the learning approach in some aspect. ICT infrastructure helps a lot in educational aspect especially in the higher institutions of learning.

This chapter introduces another teaching approach using multimedia technology. This multimedia is about Hajj guideline for pilgrims using 3D animation. This is another method of learning after using booklet, DVD etc.

There are two ways of learning: theory and practical. Usually, the theory comes first before the practical. In learning hajj, pilgrims will be briefed in detail about the hajj activities. It consists of the places of doing hajj, the actions, rules and laws during the hajj. The practical part is about actions that pilgrims need to implement based on the knowledge that they learn before. The best way is practical like the rehearsal on hajj activities before going for hajj to perform the activities in real situation.

The hajj courses, booklet, and speech help a lot to the pilgrims. The hajj courses and speech from the knowledgeable speakers will introduce the first impression of how to perform hajj to the pilgrims. Everything