



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

I. 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

<i>Preface</i>	<i>xiii</i>
<i>Acknowledgement</i>	<i>xv</i>
<i>Introduction</i>	<i>xvii</i>

PART I – OVERVIEW OF MULTIMEDIA

Chapter 1	Fundamentals of Multimedia <i>Akram M. Zeki</i> <i>Maimona J. Badi</i> <i>Adamu Abubakar</i>	1
Chapter 2	Malaysian Multimedia Content Industry <i>Maimona J. Badi</i> <i>Akram M. Zeki</i>	24
Chapter 3	Multimedia and its Relevance to Education <i>Akram M. Zeki</i> <i>Maimona J. Badi</i> <i>Chiroma Haruna</i>	41
Chapter 4	Elements of Multimedia on the Internet <i>Akram M. Zeki</i> <i>Maimona J. Badi</i>	53

PART II – TEXT

Chapter 5	Text in Multimedia <i>Adamu A. Ibrahim</i> <i>Zeeshan Bhatti</i> <i>Akram M. Zeki</i>	64
Chapter 6	Arabic Text <i>Mustafa Abuzaraida</i> <i>Akram M. Zeki</i>	73

Contents

PART III – IMAGE

Chapter 7	Digital Graphic Image <i>Zeeshan Bhatti</i> <i>Asadullah Shah</i>	93
Chapter 8	Image Data Types <i>Zeeshan Bhatti</i> <i>Asadullah Shah</i>	102

PART IV – AUDIO

Chapter 9	Audio File Formats <i>Mohammed Saleh Atoum</i> <i>Ala Abdulsalam Soliman Alarood</i>	115
Chapter 10	Practices of Handling Audio <i>Adamu Ibrahim</i> <i>Asadullah Shah</i> <i>Akram M. Zeki</i>	126

PART V – VIDEO

Chapter 11	Video <i>Adamu Ibrahim</i> <i>Zeeshan Bhatti</i> <i>Akram M. Zeki</i>	139
------------	--	-----

PART VI – COMPUTER GRAPHICS

Chapter 12	Introduction to Computer Graphics <i>Akram M. Zeki</i>	149
------------	---	-----

Contents

PART VII – APPLICATION OF MULTIMEDIA

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

Chapter 2

Malaysian Multimedia Content Industry

Maimona J. Badi
Akram M. Zeki

International Islamic University Malaysia

Introduction

Generally, this chapter discusses issues and challenges of multimedia content industry in Malaysia. Specifically, the chapter provides an overview of the latest multimedia contents, how to implement them in the industry and some examples of industries that has multimedia content in it. This includes education, medical, commercial, entertainment, and communication industries. The chapter is divided into the following sections: introduction which gives general overview of the multimedia content industry, the technological trend towards multimedia, considerable tools for adopting multimedia, development of multimedia content software, models of applying multimedia content across the Industries, differences between multimedia contents and digital contents Industry, and multimedia content industry in Malaysia.

The use of electronic media devices engage the users in experiencing all types of multimedia contents which includes a combination of text, graphics, images, animations, audio, and video. The complexity of creating different version of the same content using different types of media is becoming a challenge in managing multimedia contents for industry. Nevertheless, major industries in the world have their own production efforts working on making high quality multimedia content industry. Similarly, the multimedia content producers around the globe are shifting towards digital technology.