Multimedia

MULTIMEDIA
AND ITS APPLICATIONS

Edited by
AKRAM M. ZEKI
Contents

Preface xiii
Acknowledgement xv
Introduction xvii

PART I – OVERVIEW OF MULTIMEDIA

Chapter 1 Fundamentals of Multimedia 1
Akram M. Zeki
Maimona J. Badi
Adamu Abubakar

Chapter 2 Malaysian Multimedia Content Industry 24
Maimona J. Badi
Akram M. Zeki

Chapter 3 Multimedia and its Relevance to Education 41
Akram M. Zeki
Maimona J. Badi
Chiroma Haruna

Chapter 4 Elements of Multimedia on the Internet 53
Akram M. Zeki
Maimona J. Badi

PART II – TEXT

Chapter 5 Text in Multimedia 64
Adamu A. Ibrahim
Zeeshan Bhatti
Akram M. Zeki

Chapter 6 Arabic Text 73
Mustafa Abuzaaraida
Akram M. Zeki
## Contents

### PART III – IMAGE

<table>
<thead>
<tr>
<th>Chapter 7</th>
<th>Digital Graphic Image</th>
<th>93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Zeeshan Bhatti</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Asadullah Shah</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 8</th>
<th>Image Data Types</th>
<th>102</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Zeeshan Bhatti</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Asadullah Shah</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PART IV – AUDIO

<table>
<thead>
<tr>
<th>Chapter 9</th>
<th>Audio File Formats</th>
<th>115</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Mohammed Saleh Atoum</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ala Abdulsalam Soliman Alarood</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 10</th>
<th>Practices of Handling Audio</th>
<th>126</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Adamu Ibrahim</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Asadullah Shah</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Akram M. Zeki</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PART V – VIDEO

<table>
<thead>
<tr>
<th>Chapter 11</th>
<th>Video</th>
<th>139</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Adamu Ibrahim</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Zeeshan Bhatti</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Akram M. Zeki</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PART VI – COMPUTER GRAPHICS

<table>
<thead>
<tr>
<th>Chapter 12</th>
<th>Introduction to Computer Graphics</th>
<th>149</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Akram M. Zeki</strong></td>
<td></td>
</tr>
</tbody>
</table>
PART VII – APPLICATION OF MULTIMEDIA

Chapter 13  Application of Multimedia in Digital Watermarking  
_Akram M. Zeki_  

Chapter 14  Application of Multimedia in Language Self-Learner  
_Athifah Nasfah Nooh_  
_Aisha Hassan A. Hashim_  
_Akram M. Zeki_  

Chapter 15  Application of Multimedia in Learning History Subject  
_Fatin Nudra Syafiqah A. Halim_  
_Akram M. Zeki_  

Chapter 16  Application of Multimedia in Teaching Hajj  
_Hafizuddin Isa_  
_Akram M. Zeki_  

Chapter 17  The High Impact of Using Multimedia in Enhancing Education in Schools  
_Hana J. Badi_  
_Akram M. Zeki_  

_Index_  

159  
178  
185  
192  
198  
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