DESIGN GUIDELINES FOR ARABIC MOBILE LEARNING APPLICATION BASED ON COGNITIVE THEORY OF MULTIMEDIA LEARNING

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Abstract

Arabic Language has an exceptional position in Islam. As the language of al-Quran, the needs to learn and understand it amongst Muslims is of paramount importance. In countries where their native language is not Arabic, it needs to be introduced to children at their early age such as in primary schools. With the advent of mobile technology, various kinds of multimedia tools have been developed for the purpose of learning language. Since children are attracted to mobile multimedia applications, it could potentially be used in learning Arabic too. Various applications have been available in the market, but most of them do not fully utilize the multimedia elements such as sounds, videos, images, and texts. In response to that, this study aims to design, develop and evaluate a mobile multimedia application. It is called A4Kids, targeted for children between 7 and 9 years old for learning Arabic language based on Cognitive Theory of Multimedia Learning CTML. First, this study initiated an investigation involving multiple fact finding techniques, which are interviews and review of related literatures to get a prototype for stakeholders’ information needs. The preliminary analysis involves interviews with expert teachers who have taught Arabic subject for more than ten years in primary schools. Then, related literatures were reviewed. Further, an application was developed, and tested involving real users. The results of user evaluation on the A4Kids indicate that it is learnable, easy to use, and useful for children. Additionally, it is capable to help them learn Arabic easily, directly, and successfully regardless of location and time.

Keywords: Children, Arabic language, mobile learning, mobile application, CTML.
Abstrak


Kata kunci: Kanak-kanak, Bahasa Arab, pebelajaran mudah alih, aplikasi mudah alih, CTML.
Acknowledgment

“In the Name of God, the Most Gracious, Most Merciful”

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I also dedicate this study to the spirit of my father as well as I would like to thanks my mother for giving me tremendous support throughout my study my goal would not have been achieved without her. She has supported and is continuously praying for me during my studies. And I pray to Allah to keep her safe and well. Special regards to my lovely wife, for giving me tremendous support throughout my study, thank you for always standing by and lifted my spirits.

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</tr>
</thead>
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<tr>
<td>A4Kids</td>
<td>Arabic Language for Kids</td>
</tr>
<tr>
<td>CD</td>
<td>Compact Disk</td>
</tr>
<tr>
<td>CTML</td>
<td>Cognitive Theory of Multimedia Learning</td>
</tr>
<tr>
<td>E-learning</td>
<td>Electronic Learning</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>J-QAF</td>
<td>Jawi-Quran-Arabic and Fardhu ain</td>
</tr>
<tr>
<td>M-learning</td>
<td>Mobile Learning</td>
</tr>
<tr>
<td>MMS</td>
<td>Multimedia Messaging Service</td>
</tr>
<tr>
<td>MoE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>SK</td>
<td>Sekolah Kebangsaan</td>
</tr>
<tr>
<td>SMS</td>
<td>Short Messaging Service</td>
</tr>
<tr>
<td>UML</td>
<td>Unified Modelling Language</td>
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</table>
CHAPTER ONE

INTRODUCTION

1.1 Introduction

The way of life of people in the contemporary societies has evolved, which implicates also their works and the organizational work styles. This is very much influenced by the advancement of the information and communication technology (ICT). As the world develops, the education also gets significantly influenced. In conjunction to that, the way people learn should also be reengineered. This has been seen in learning of various subjects (Kundishora, 2013). In education sector, the emergence of ICT in the last years has become indispensable for both teachers and learners in various fields. In fact, the Internet facilities have influenced the ICT to gradually pushing aside the traditional library from educational scene into digital infrastructure (Jacobsen & Lund, 2015), enabling people to acquire information from a distance.

In regards to that, the Malaysian government believes that the quality of education can be improved by utilizing ICT (Zaki & Danby, 2013). In addition, the education system in Malaysia has also gone through several important stages that feature it in the best way possible to match the emerging and changing needs of the contemporary society by following the trends of new media and technologies (Zaki & Danby, 2013). It is also seen that emerging technologies in the education system is highly sensing for the benefits of students’ experience. With the emerging technologies, the new form of learning in electronic environment or M-learning has grown significantly, especially in training institutions (such as universities and schools).
The contents of the thesis is for internal user only


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