INCORPORATING IMAGE IN M-OPAC TO SUPPORT BOOK IDENTIFICATION

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ABSTRACT

The growth and rapid evolution of the wireless technology have created new opportunities for anytime and anywhere library services. As a result, numerous mobile library services have been developed to gain the advantages of it. Nonetheless, there is no research and exploration has been initiated in proposing mobile library application that incorporates images of books to support the identification of the required books. Thus, this work seeks to present M-OPAC, a mobile library application which incorporates images in the book description. The evaluation phase undertaken in this work identifies whether the presentation of images paired with text description could assist users in identifying the exact book. In order to rate the usefulness of M-OPAC, a total of 30 participants were given the opportunity to test the prototype application. Analysis of data gathered from questionnaire given after the test of the prototype application was also discussed in this report. The findings indicate that most of the participants preferred images paired with text result, compared to presenting the search result as a plain ranked list.

ABSTRAK

Percambahan dan evolusi teknologi tanpa wayar yang pantas telah mencipta suatu peluang bagi perkhidmatan perpustakaan yang bersifat bila-bila masa dan di mana jua. Hasilnya, banyak perkhidmatan perpustakaan mobil telah dibangunkan dengan kelebihan yang ada padanya. Bagaimanapun, tiada kajian dan tinjauan yang mencadangkan aplikasi perpustakaan mobil yang mengandungi imej buku untuk membantu mengenalpasti buku yang dikehendaki. Oleh yang demikian, kajian ini cuba memperkenalkan M-OPAC, satu aplikasi perpustakaan mobil yang mengandungi imej di dalam huraian buku. Fasa penilaian yang dijalankan dalam kajian menentukan samada imej yang disertakan bersama huraian teks boleh membantu pengguna dalam mengenalpasti buku yang tepat. Untuk menilai keberkesanan M-OPAC, seramai 30 orang peserta telah diberi peluang untuk menguji aplikasi prototaip. Analisis ke atas data yang terkumpul dari borang soal selidik yang diedarkan selepas ujian ke atas aplikasi prototaip turut dibincangkan dalam laporan ini. Hasil yang diperoleh menunjukkan kebanyakan peserta menyukai keputusan teks berserta imej berbanding keputusan yang hanya memaparkan teks sahaja.

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CHAPTER 1

INTRODUCTION

A library is an institution that houses a collection of information, resources, books, and services. Before the computer age, accessing information in a library is undertaken using card catalogs which are stored in a cabinet. These cards contain information such as title, author, publishing dates, type of book and a pointer to the actual book on the shelf. However, the emergence of the internet, has led to the adoption of electronic catalog databases which allow users to search a library's holdings from any location with internet access. And now, most modern libraries have move from electronic catalog databases to mobile applications (Negishi, 2003). University of Oulu, Finland (Aittola, 2003), Toyama University Library, Tokyo University Library (Negishi, 2003), Athabasca University, Canada (Cao et al., 2006) and Mississippi State University (Satpathy & Mathew, 2006) are among libraries that using mobile application replacing OPAC web-based for their library system.

The use of digital wireless devices such as mobile phones and PDAs have become very popular in recent years (ComScore, 2007). Mobile phones are no longer just phones; they are communication devices capable of running applications and communicating with other devices and applications over a wireless network.

WAP (Wireless Application Protocol) is the technology that enables a slimmed-down version of the Internet to appear on the screen of a mobile phone. A WAP browser

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