

**OPTICAL CHARACTER RECOGNITION (OCR) FOR MOBILE  
APPLICATION**

**ANAS ABDELSATAR MOHAMMAD SALAMEH**

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**OPTICAL CHARACTER RECOGNITION (OCR) FOR MOBILE  
APPLICATION**

**A project submitted to Faculty of Information Technology in partial  
fulfillment of the requirements for the degree Master  
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**By**

**Anas Abdelsatar Mohammad Salameh**



**KOLEJ SASTERA DAN SAINS**  
**(College of Arts and Sciences)**  
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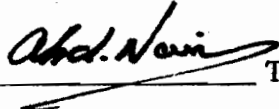
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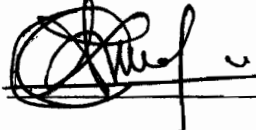
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Tandatangan  
*(Signature)* :  Tarikh (Date) : 19/10/10

Nama Penilai  
*(Name of Evaluator)* : **ASSOC. PROF. DR. ZULIKHA JAMALUDDIN**

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## ABSTRACT

*The usefulness of integrating different techniques in wireless applications has brought the needs for providing better services in different technical sectors. Wireless Application Protocol (WAP) has been widely used for obtaining the required connection between clients via their handheld devices. This study highlights the difficulties that are faced by travelers in understanding foreign text during their journeys to other countries with different native languages. Hence, this study aimed to provide a solution by developing a mobile application based optical character recognition (OCR) for extracting the textual elements from the images. Asprise used in this study to extract the image text contents, meanwhile, Google API translation also used to translate the extracted contents into the selected language. The experiment result indicated that using Asprise OCR in extracting the text elements from the image was high accuracy among the free and simple OCR.*

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.0 Introduction**

Wireless Application Protocol (WAP) is defined by International Engineering Consortium as an application environment and set of communication protocols for wireless devices to communicate with each other and with any external application (Yi, Cerone, & Zhang, 2006). The purpose of WAP was designed to facilitate the manufacturers, vendors and technology users around the world to independently access to the Internet and advanced telephony services. WAP technology can eliminate the gap between the mobile devices and the Internet and then can provides for mobile services. Mobile devices are small handheld devices such as mobile phones, palmtop computers and devices which special operating system.

Mobile devices also include Personal Digital Assistants (PDAs) with or without networking capabilities and mobile phones that may or may not be able to access the web. Handheld computers are mobile, flexible devices that can provide real-time, one-to-one support for students from within the context of their learning. In general, the characteristics of mobile devices convergence of mobile, handheld and wireless communication technologies as the newest technological revolution.

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