

**Universiti Teknologi Mara**

**ATLAS ENGINEERING  
CONSULTANT (AEC)  
MANAGEMENT WITH ANDROID  
APPLICATION**

**Mohammad Zikri Bin Ahmad Sharif**

**Thesis submitted in fulfilment of the requirements  
for Bachelor of Science (HONS) Programme's  
Name Faculty of Computer and Mathematical  
Sciences**

**JULY 2013**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praise and thank to Allah because His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks go to my supervisor, Pn Siti Arpah Binti Ahmad for his long lasting support and guidance in completing this research.

Special appreciation also goes to my beloved parents En Ahmad Sharif Bin Md Arshad and Pn.Ruzizarirah Binti Isman for their never ending loves and supports towards me to complete my coursework for this semester as without their blessing I might weak to do my work.

Last but not least, I would like to give my gratitude to my dearest friend, Zaid Bin Ariffin and my fellow classmates for sharing knowledge and strive together with me in completing this research.

## **ABSTRACT**

Atlas Engineering Consultant (AEC) is an engineering company that provides building consultancy services business for customer. Currently that company is using manual system using Microsoft Office Excel to write down the proposal project information. To handle AEC using system manually is hard and not efficient. This project develops mobile application for customer request proposal by using mobile phone view at anywhere. That development will use PhoneGap and Java Eclipse programming language. AEC Management with android application is mobile phone application base on android environment that will develop as client application. That application also work as hybrid application category which means combination of native and web-based application that work on client and server side. That application will make user more easily to interact by using mobile phone application. That application able user to register for new user to enter the application. That mobile phone application able to propose project into database server to approve by staff.

## **TABLE OF CONTENTS**

<b>CONTENTS</b>	<b>PAGE</b>
<b>SUPERVISOR'S APPROVAL</b>	ii
<b>DECLARATION</b>	iii
<b>ACKNOWLEDGMENT</b>	iv
<b>ABSTRACT</b>	v
<b>TABLE OF CONTENTS</b>	vi -ix
<b>LIST OF FIGURES</b>	x-xi
<b>LIST OF TABLES</b>	xii
<b>LIST OF ABBREVIATIONS</b>	xiii
 <b>CHAPTER ONE: INTRODUCTION</b>	
1.1 Background of Study	1-2
1.2 Problem Statement	3
1.3 Project Aims and Objective	3
1.3.1 Aim	3
1.3.2 Objective	4
1.4 Project Scope	4
1.4.1 The application is for AEC company only.	4
1.4.2 The application development Programming	4
1.4.3 The Limitation of Application	5
1.5 Project Significant	5
 <b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.1 Introduction	6
2.2 AEC Management with Android application	6-7
2.3 Mobile Usage Among People	7-8
2.4 Mobile Application	8
2.4.1 Definition	8
2.4.2 Type Of Mobile Application	8
2.4.2.1 Native Application	8

	2.4.2.2 Web Base Application	9
	2.4.2.3 Hybrid Application	9
2.5	Android Operating System	10
	2.5.1 Definition	10
	2.5.2 Advantages Android OS	10
2.6	Problem When Developing Mobile Application	11
	2.6.1 Screen Size And Resolution	11
	2.6.2 Transfer Data To Server	11
2.7	Related Of Existing Work	11
	2.7.1 Design and implementation of Android Phone Based Group Communication and Navigation System	12
	2.7.2 Design And Development Of Android Application To Process And Display Summarised Coperate Data	12
	2.7.3 Industrial Software Monitoring System Extension for Mobile Devices Based on Glass-Fish and PhoneGap	12-13
	2.7.4 Development and Implementation of Eclipse-based File Transfer for Android Smartphone	13
	2.7.5 The Discussion of Cross-Platform Mobile Application Based on Phonegap	13-14
	2.7.6 Distributed Integrated Development Environment for Mobile Platforms	14