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**MOBILE SYSTEM FOR MANAGING AND MITIGATING THE  
ACCOMMODATION PROBLEMS AMONG STUDENTS IN  
UNIVERSITI UTARA MALAYSIA (UUM)**



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**2016**

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## Abstrak

Sama ada pelajar tempatan atau antarabangsa sering menghadapi masalah penyesuaian yang berbeza dan bergerak dari satu tempat ke tempat lain demi untuk mencari tempat penginapan yang sesuai, dan hal ini memberikan pengalaman yang paling mencabar kepada pelajar tersebut. Walau bagaimanapun, di Universiti Utara Malaysia (UUM), Pusat Penginapan Pelajar masih menggunakan kaedah tradisional untuk mengurus dan memproses hal yang berkaitan dengan penginapan pelajar. Oleh itu, projek ini bertujuan untuk mengeksploitasi teknologi mudah alih untuk meningkatkan proses penginapan dan meningkatkan komunikasi di kalangan pelajar dan pengurusan penginapan pelajar. Projek ini mempunyai tiga objektif utama: mengenal pasti keperluan, menganalisis dan merekabentuk, dan menilai kebolegunaan sistem penginapan mudah alih (MAS). Untuk menilai kebolegunaan MAS, skala kebolegunaan digunakan dan maklum balas penggunaan dikumpul dari 40 pelajar di seluruh kampus UUM. Keputusan kebolegunaan mendedahkan bahawa pengguna amat menerima dan berpuas hati dengan fungsi antara muka, kebolegunaan, integriti dan lain-lain kemudahan yang disediakan oleh aplikasi mudah alih ini. Oleh itu, pelajar dan kakitangan penginapan boleh menggunakan aplikasi ini untuk menguruskan penginapan mereka dengan jayanya.

**Kata kunci:** Pelajar Asrama, Sistem Penginapan, Pencapaian Pelajar, Sistem Berasaskan Mobile, Perisian Aplikasi

## Abstract

Students either local or international experience different adjustment problems while moving one place to another place, and out of those problems, finding suitable accommodation is the most challenging one. However, at Universiti Utara Malaysia (UUM), the accommodation center for the students utilizing the traditional method for managing and processing the issues related to the students' accommodation. Therefore, this project seeks to exploit the mobile technologies to enhance the accommodation process and increase the communication among the students and management of the resident. This project has three core objectives: identifying the requirements, analysis and designing, and evaluating the usability of the mobile accommodation system (MAS). To evaluate the usability of the MAS, a usability scale is used and feedbacks were collected from 40 students around the UUM campus. The results have revealed that the users strongly accepted and are satisfied with the interface functions, usability, integrity and other facilities for the application. Thus, students and accommodations staff can use the applications for managing their accommodation with successfully.

**Keywords:** Student Hostel, Accommodation System, Student Performance, Mobile-based System, Software Application

## Acknowledgement

### **“In The Name of ALLAH the Most Gracious and the Most Merciful”**

(1) In the name of Allah, Most Gracious, Most Merciful (2) Praise be to Allah, the Cherisher and Sustainer of the worlds (3) Most Gracious, Most Merciful (4) Master of the Day of Judgment (5) Thee do we worship, and Thine aid we seek (6) Show us the straight way (7) The way of those on whom Thou hast bestowed Thy Grace, those whose (portion) is not wrath, and who go not astray.

### **“True are the words of God”**

I am very grateful to my supervisor Dr. AZMAN TA'A for his excellent and patient technical assistance, for believing in my potential and for the nice moments we had working together. I am very grateful to Sari, Sana and Saima for their constant motivation, patience, encouragement, and for his love during these years. I also thank my friends, for reading this work and helping me with the latest set ups. Many thanks go to my mother Hasana Abood Alsharif and my father Ali Sari, brothers, sister for their motivation, trust, love, and for feeling so close despite being so far. Of course, I do not forget the rest of my family, who supported me so much during all this time. Last, but not least, I send big thanks to all my friends, who always support me, give me good advice and make my life colourful!

I thank Malaysian society, for supporting me in this thesis.

Finally, I thank the reader for reading my thesis.

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## List of Abbreviations

UUM	Universiti Utara Malaysia
SAC	Student Accommodation Centre
ICT	Information and Communication Technology
WISRAS	Web-based Interactive Student registration and Advising System
UML	Unified Modeling Language
SAS	Student Accommodation System



# CHAPTER ONE

## OVERVIEW

### 1.1 Introduction

Student accommodation plays a significant part in a student's life. According to [Modebelu and Chinyere \(2014\)](#) student learning can be enhanced and made more effective when learning environment is made adequate and appropriate. Previous studies show that accommodation plays a vital role in the physiological needs of the students, and that is considered as a condition for student's quality survival in terms of health, academic performance and learning. [Ezeukwu \(2009\)](#) declared that accommodation is the pivot, around which, all the activities of students revolved. Therefore, a favorable environment plays a significant role to maintain the academic performance of the students.

In general, all students (whether local or international) experience some level of adjustment when relocating to a new environment. However, compared with their local students, the international students often faced higher adjustment hurdles. [Duangpracha \(2012\)](#) stated that, although studying abroad offers benefits to international students, leaving their home country and achieving a degree in another language also carries with it a range of difficulties, including those associated with finding suitable accommodation. Several studies have been conducted on the accommodation and its effects on the student performance in many countries such as Australia and US. For instance, [Duangpracha \(2012\)](#) found that, the international students come to Australia and faced many challenges; one of the challenges is accommodation. In addition, [Yue, Lê and Terry \(2014\)](#) stated that, the educational institution needs to give consideration to security and best options for accommodation to ensure students' lives are in a secure and low-cost environment.

Moreover, [Marginson et al. \(2010\)](#) asserted that many universities in Australia and other English-speaking countries that provide international education have turned away from direct provision of student dormitory accommodation in favour of the



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