



**DEPARTMENT OF ESTATE MANAGEMENT  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA**

**GIS-BASED NR PROPERTY RENTAL INFORMATION SYSTEM  
CASE STUDY: NR MANAGEMENT UNIT, UNIVERSITI TEKNOLOGI  
MARA, SHAH ALAM**

**A dissertation submitted as a partial fulfillment of the requirements for the award of  
the Bachelor of Estate Management (Hons)**

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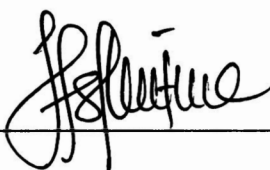
## DECLARATION 1

Research Title:

GIS-BASED NR PROPERTY RENTAL INFORMATION SYSTEM  
CASE STUDY: NR MANAGEMENT UNIT, UNIVERSITI TEKNOLOGI  
MARA, SHAH ALAM

I hereby declare that I have read this research report and in my opinion this research report is sufficient in terms of scope and quality for the award of the Bachelor in Estate Management.

Signature:



Name of Supervisor:

ST. SITI HAFSAH ZULKARNAIN

Date:

5 OKTOBER 2010

## DECLARATION 2

Research Title:

GIS-BASED NR PROPERTY RENTAL INFORMATION SYSTEM  
CASE STUDY: NR MANAGEMENT UNIT, UNIVERSITI TEKNOLOGI  
MARA, SHAH ALAM

I declare that this dissertation is the result of my own research except as cited in the references and all sources of information specifically acknowledged in reference.

Signature:



Name:

ROHANA BT ISMAK

Date:

13 OKTOBER 2010

## **ABSTACT**

This Thesis discuss about a research with the aim of utilizing the Geographic Information System (GIS) in Real Estate sector namely specifically in Field of Estate Agency by design and develop spatial database ( a GIS system) called as GIS-Based NR Property Information System to Non Resident Management Unit or more known as NR Management Unit. The development of the spatial database is using GIS software namely ArcGIS 9.3 and some of GIS operation.

This research commencing with planning stage namely study of user requirement, then followed by implementation stage namely involve process of preparation of software and hardware, data collection and creation of spatial data base. Next, analysis stage namely using GIS function such as “Select by Attribute”, “Select by Location”, and “Intersect”. Finally evaluation stage involves recommendation and conclusion. This research uses an informal method i.e. structure interview and review of existing information system in order to identify problem, selection of thesis title, and lastly decide research objective, significant and scope. There are 2 type of data used in develop this system namely spatial (geometric) and attribute data. Spatial data used is several Maps of Shah Alam areas namely Map of Community Facilities, GPS Map and Street Directory Map. Attribute data used is listing of rental houses that contain information such as type of house, rental price, rental type, contact number, contact person, number of bedroom, number of bathroom and others.

There are 2 objectives that have decided for this research. First objective is to utilize and evaluate the benefits of GIS system to NR Management Units in assist NR Students in searching and selecting the most suitable rental house and also to improve its existing rental house information system and assist the unit in making in-house analysis about matters related to rental house. Second objective is to design and develop spatial database system that called GIS-Based NR Property Rental Information System.

This research is also medium of realizing the important of GIS in real estate sector namely in Estate Agencies field. The application of GIS technology is essential and has becoming one of the better and faster tools to manage resources and help in the decision making process. Since spatial data deals with location and its addresses, and what, where and when questions, both spatial (geometric) and non spatial (attribute) data organized together for the developing this spatial database system or production of the digital map with its information system.

It is believed that the spatial database will serves as a model for decision making to NR students. It then means that the spatial database system generated special for NR Management Unit to assist NR students in searching and selecting the most suitable rental house around Shah Alam area. Besides that, the spatial database also can serve as an assistant to NR Management Unit in providing services to NR Students and as a tool to improves its existing rental house information system and making in-house analysis about matters related to rental house that deemed suitable.