

**DIGITAL REAL ESTATE AGENT MANAGAEMENT SYSTEM
(DREAMS)**



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS LAPORAN

JUDUL: [Digital Real Estate Agent Management System (DREAMS)]

SESI PENGAJIAN: [2020/2021]

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DIGITAL REAL ESTATE AGENT MANAGEMENT SYSTEM
(DREAMS)

MOHD ASYRAF BIN MOHAMED HANIF



This report is submitted in partial fulfillment of the requirements for the Bachelor of [Computer Science (Software Development)] with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

DECLARATION

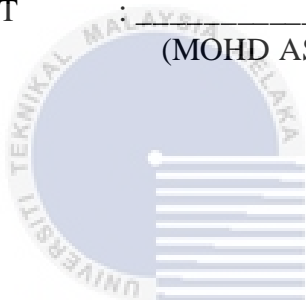
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DEDICATION

I would like to dedicate this project to my respectable Father and Mother for always support me in whatever I do and always stay behind me in whatever situation that I face. Besides that, I want to thank you to my Honorable supervisor who are always dear and near to me and without whose patience, care, understanding and support it would not have been possible to come up to this position.



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Alhamdulillah, first and foremost thanks to Almighty Allah S.W.T for the endless blessing who gave me the opportunity, capability, spirit, and patience to complete this project.

It is my great pleasure to express my profound sense of gratitude to my Supervisor Assoc.Prof. Dr Sabrina Ahmad for the academic advice, guidance, and support that she gave to me towards the completion of this project. I am really benefiting from his excellent supervision.

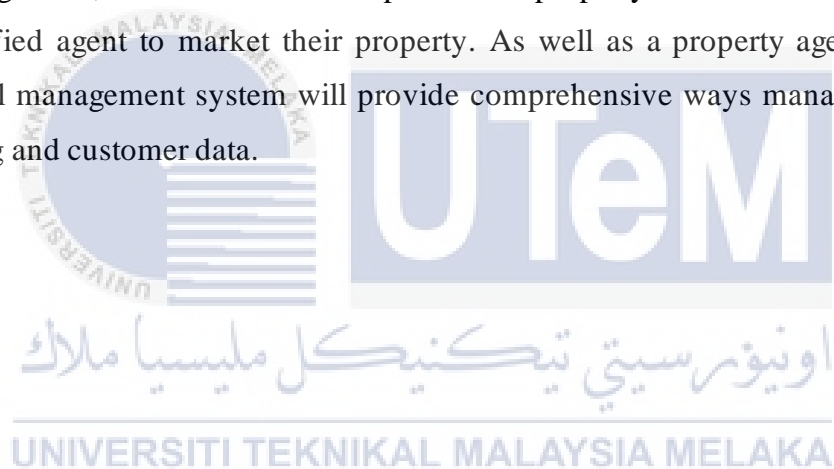
Besides that, a big thank you to my beloved parents who have been giving me the encouragement and motivation throughout the course of this project. Without them it is quite impossible for me to get to this stage.

Finally, I would like to thank all my friends who helped me directly or indirectly to complete this project.



ABSTRACT

Today we are living in the world of internet and digital era. Most economic sectors, especially in Malaysia has implemented internet technology and digitize their business process. Today's real estate industry faces several challenges, including a scarcity of skilled labour, data loss and duplication, slow access to information, and the use of antiquated methods of data analysis and storage. Without a proper management tool, the real estate agent will be facing difficulty to access customers data and high potential of data loss. Besides that, in this era of pandemic Covid-19, the owner of the property having difficulties to market their property without appoint of a property agent. Furthermore, with the advent of digital systems in property management, it will facilitate the process of property owner to find and assign a qualified agent to market their property. As well as a property agent, the use of digital management system will provide comprehensive ways manage their active listing and customer data.



ABSTRAK

Hari ini kita hidup dalam dunia internet dan era digital. Sebilangan besar sektor ekonomi, terutamanya di Malaysia telah menerapkan teknologi internet dan mendigitalkan proses perniagaan mereka. Industri hartanah pada masa kini menghadapi beberapa cabaran, termasuk kekurangan tenaga mahir, kehilangan data dan penduaan, kelewatan mencapai maklumat, dan penggunaan kaedah analisis dan penyimpanan data yang lemah. Tanpa alat pengurusan yang betul, ejen hartanah akan menghadapi kesukaran untuk mengakses data pelanggan dan potensi kehilangan data adalah tinggi. Selain itu, dalam era pandemik Covid-19 ini, pemilik hartanah itu mengalami kesukaran untuk memasarkan hartanah mereka tanpa melantik ejen hartanah. Tambahan pula, dengan adanya sistem digital dalam pengurusan hartanah, ini akan memudahkan proses pemilik hartanah tersebut untuk mencari dan menetapkan ejen yang berkelayakan untuk memasarkan hartanah mereka. Begitu juga terhadap ejen hartanah, penggunaan sistem pengurusan digital akan menyediakan cara menyeluruh untuk menguruskan penyenaiaan aktif dan data pelanggan mereka.

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LIST OF ABBREVIATIONS

DREAMS	- Digital Real Estate Agent Management System
DB	- Database
ERD	- Entity Relationship Diagram
REA	- Real Estate Agent
REN	- Real Estate Negotiator
UI	- User Interface



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CHAPTER 1: INTRODUCTION

1.1 Introduction

Digital Real Estate Agent Management System (DREAMS) is a digital platform that facilitates the Real Estate Agent (REA) agency to manage their clients and property information. DREAMS will act as an intermediate platform between the property owner and real estate agency. By using DREAMS, the Real Estate agency able to manage and store all the information regarding clients and property information in a centralized database system. With the increasing of clients, a company needs to have a systematic system to manage their client's data. The use of manual process is inappropriate to manage a huge data. DREAMS will also provide a dynamic report regarding property information to estate agent. Furthermore, DREAMS this system consists of three users, which are an Administrator, Real Estate Negotiator and Property Owner. With a centralized model of property management, Real Estate Agent agency can assure the clients that they are offering the most efficient management available.

1.2 Problem statements

There are many reasons this project was developed. This is because there are a few problems that happen to the user which are:

- I. Lack of computerized system - Currently most of Real Estate Negotiator (REN) do not have a specific system for storing and recording their customer data.
- II. Lack of data accessibility – Without a proper data management platform, Real Estate Negotiator (REN) facing difficulty to access customers data and high potential of data loss.
- III. Lack of monitoring – Property owners have difficulty to monitoring and keep track assigned agent's progress.

1.3 Objectives

The objectives for this project are:

- I. To develop a digital management tool for Real Estate Negotiator (REN) to manage their active listing and customers data.
- II. To provide a centralized database system that can stored customer information and easily access by Real Estate Negotiator (REN).
- III. To provide a digital monitoring tool for property owners to keep track the assigned agent's progress.

1.4 Project Scopes

1.4.1 Module Developed

I. Manage User Module

Manage user module including management of user authentication and user registration process.

II. Real Estate Negotiator Module

This module allows property owner to assign Real Estate Negotiator through the system. This module including the management of active listing record and potential client status.

III. Property Management Module

This module including property management that will be manage by property owner. In this module allows property owner to manage property owner and property information.

IV. Reporting Module

This module will provide a dynamic report according to the data obtained from the user.

1.4.2 Target users

The target users for this system are:

- I. Estate Agent Agency
- II. Real Estate Negotiator
- III. Property Owner

1.5 Project Significance

The real estate industry is one of the slowest industries that transition into advance technological software. Most of the property management companies are still using spreadsheets, papers, email, and other manual recording software to compile important information. As a real estate negotiator that work at real estate agency, they might be working with multiple clients and need to manage a lot of data. DREAMS are developed for real estate negotiator to manage their active listing and customers data. Real estate negotiator can facilitate their work because of the dedicated design and key features that are needed for the property management business. DREAMS also provide two-way connection between a property owner and their assigned agent to keep track the progress about the status of their property.

1.6 Expected Output

The expected outputs for this system are:

- I. Increase efficiency – Digital Real Estate Agent Management System be able to increase the efficiency of REN to manage all the data regarding to property in a centralized way.
- II. Data accessibility – With the use of centralized database management system, the user can access the data easily at anywhere and anytime.
- III. Report accuracy – The implementation of centralized database will help to the estate agent to store accurate information and generate an accurate report.

1.7 Conclusion

As a conclusion, from all the details in this chapter, the project developed follow as a planning. The system has four modules which are Managing user module, Real Estate Negotiator module, Property Management module and Reporting module. All the hardware and software mentioned were used to make sure the project meet the requirements.



CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

The purpose of this chapter is to describe the implementation of digitalization systems in the real estate industry by gathering the information through the website and research that has been done. It has played an important role as the early phase in developing this project. The literature reviews phase were completed based on the observation of the current system regarding to Real Estate industry especially for property management.

This chapter contains all the surveys measured on existing systems on the internet, including reviews of the system's features, features and capabilities. In order for this project to overcome any weaknesses of the current or existing system will be identified and the strengths of the existing system will be investigated so that they can be implemented in the proposed system.

A software development methodology is a procedure of how to build software. A methodology contains of various phases as recommendation and suggestion that needs to be followed in order to achieve the objectives of the project. Besides that, the system requirement and project milestone also will be briefly described in this chapter.

2.2 Fact and Findings

Fact-finding techniques is the procedure and operation of collecting the data and information based on the approach that been used before developing a system. The aim of this technique is to discover the accurate fact and information before starting to develop a system. All the gathered information will be supported by an analysis of the existing system and research on the internet and books.

2.2.1 Domain

DREAMS are developed to be used by real estate agency to improve their business process from day-today. DREAMS will act as management tools by focusing on Real Estate Negotiator to manage their customer information including property and property owner information in a centralized way.

DREAMS offers a full authority to the Real Estate Agency to use and manage the system. By using this platform, property owner be able to review the registered agent profile before deciding to assign on specific agents. DREAMS provide an additional feature to owner which allow property owners to view potential client that listed by the assigned agent who are interested on their property.

By using this system, all the suitable information will be stored in a centralized database system that can easily access by the user of the system.

2.2.2 Existing System

This subchapter describes the existing system functionality, features and capabilities for my observation to determine the appropriate requirements and needs on my project.

2.2.2.1 Property Guru

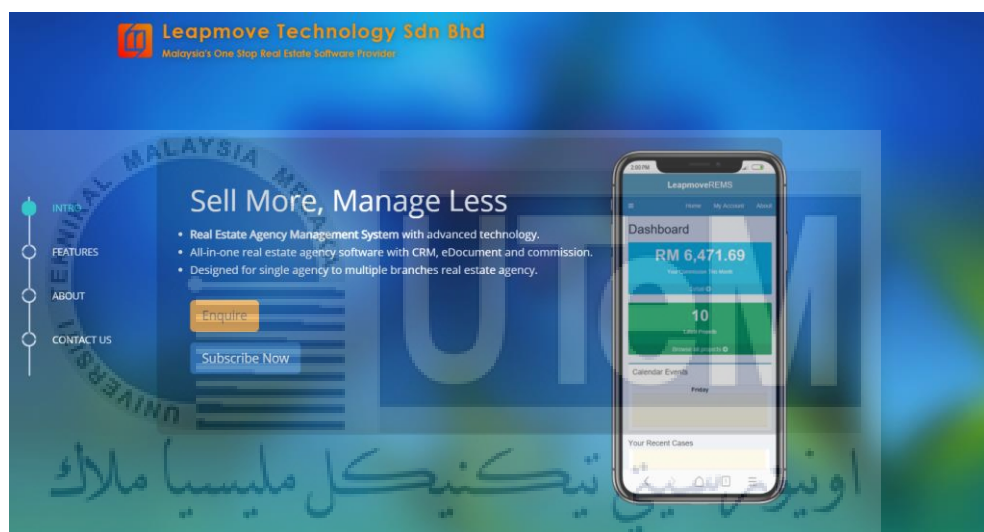
The screenshot displays a user profile for Helmut Schleich on the Property Guru platform. The profile header includes a photo, name, title (Senior Consultant), company (MERIDIN PROPERTIES SDN. BHD.), and registration number (REN: PEA2006). There are buttons for 'Call' and 'Visit Agent Website'. Below the header is an 'Introduction' section where the agent describes his 20+ years of experience as a German Civil Engineer and Real Estate Agent. A 'Specialties & Services' section lists various services with checkmarks, including Apartment Rental, Landed House Rental, Commercial Property, Relocation Services, Apartment Sales, Landed House Sales, and Mortgage Advisory. On the right side, there is a contact form with fields for Name, Mobile Number, and Email, a message box containing a personalized greeting, a checkbox for 'Yes, keep me posted on new launches, property digest and partner offers', and a red 'Contact Agent' button.

Figure 2.1: Find property agent on Property Guru

Property Guru is a well-known company that help people to find property and also property agent. Through a developed portal, they allow people to find and view property agent profile. For those who are interested to assign on selected agent, they need to fill in the required form and click “Contact Agent” button to notify the agent.

By using this method, property agent only gets the information about the property owner, but not the information about the property to be sale or rent. This method is difficult to identify whether the individual that contacted the agent actually owns the property or otherwise.

2.2.2.2 Leapmove



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Figure 2.2: Leapmove Software

Leapmove is a mobile application that has been developed by Leapmove Technology Sdn Bhd. Leapmove provide Real Estate Agency Management System with advanced technology. This system was designed for single agency to multiple branches real estate agency.

There are some features available on the application are Auto-commission calculation, Subscale, rental and project sale and also Agent self-service portals. By using this system, the agent needs to fill in the property details, owner/tenant/buyer information and also price or deposit for closing details. Then, the system will automatically calculate the agent commission.