

**MULTIMEDIA UNIVERSITY OF KENYA**

**FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY**

**BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

**GEOGRAPHIC PROPERTY SEARCH INFORMATION SYSTEM**

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# DEDICATION.

I solemnly declare that the project proposal report entitled property search and information system, is based on my own work carried out during the course of our study under the supervision of my lecturer. I assert the statements and conclusions drawn are an outcome of my research work. I further certify that:

Name: …………………………………………………………………………………......

Signature:.............................................................................................................................

# DECLARATION.

This thesis work is dedicated to my friends and family who have been a constant source of support and encouragement for the challenges I faced during my research time. I am truly thankful for having you in my life.

# ABSTRACT.

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# CHAPTER ONE INTRODUCTION

#### 1.1 **Introduction**

As a result of the massive population growth, urbanization and development; societal demand for better and affordable housing facilities has grown at an alarming rate. In the past, several towns were still underpopulated and had housing infrastructure that were enough for its population but this has changed over the past few years. Lack of adequate information on property to clients has led to a blind and misguided house search expedition that comes at a huge cost.

For the past decade, people in search of property have faced a lot of difficulty when it come to finding a perfect match for their desired dream house.The hustle of having to pay visits to the new area of residence in advance, having to go door to door in search of information concerning the property and even going through the hands of a pyramid scheme of brokers. Due to this, the need for better innovative ways of offering services in the property and housing sector is very essential.

#### **1.2** Background study.

Traditionally property search has been a nightmare for most people since it involves moving from place to place so as to get a property of one’s comfort. Factors such as job transfers, student enrollment in universities and the desire to move from a certain location to a new one are some of the reasons that property searching has become a very critical part of us. In such times the client is very desperate and stressed trying to find a property within their geographical and amenities requirements.

Lack of adequate information about the desired properties makes it hard for clients to search for properties with ease. Clients often have to go physically on the property hunt expedition. The act of having to go to the desired place of relocation prior to the date of relocating is very tedious tedious and time consuming. Most times clients spend about weeks if not days moving to and from contacting brokers, friends, landlords inquiring about vacant properties in their desired areas. Sometimes clients are extorted by brokers and even having encounters with corn artist who corn them by malicious means. This happens due to a lack of direct communication between the clients and property owners.

Sometimes such expeditions cause harm to the clients. For instance, clients who visit ghettos or rather areas with high crime rates ending up being mugged, beaten up by thugs and even falling into mistaken identity cases. Similarly, property owners lack a way of advertizing for vacancy in their property units. They mostly use advertisements by means of word of mouth and posters that are very inefficient and have a limited outreach hence, most properties remain vacant for a long while and this affects the landlords financially.

The stated problems prompted the proposal of this project which will be a solution to many clients and property owners.

#### 1.3 Problem Statement.

Without the propose Geographic Property Search Information System, clients and property owners will have a hard time accomplishing tasks. Some of these problems are:

* Clients have to move from place to place either on vehicles or on foot in search of their desired specifications of a property. This is as a result of the lack of a Geographical information system on properties that provides information on various needs such as the property location, property information such as type, services and other essential property factors. The proposed system will be able to provide this information to clients via an online platform hence cutting off the need of moving from place to place.
* Some clients end up in the wrong hands of corn artists and exploitative brokers. They are either charged excess service fees or even robbed of all their money in the name of settling payments for the property. The proposed system can prevent this by establishing a direct client owner relationship through the platform where the client is able to communicate with the owner or property manager directly. This will help establish trust between clients and property owners.
* Clients will cut down property search cost by about 90% because there will be no need of hiring vehicles for navigating the area and paying an extra fee to brokers to help in the property search expedition. The proposed system will allow clients to pay a small affordable fee so as to access the Geographic Property Search Information System. Furthermore, the system will provide security for both the clients and property owners all round because their official credentials will be stored in the system securely.

To use the system, all one will need is a smart phone or computer with GPS capabilities. At the comfort of wherever they are, they will be able to access the platform and search for their desired place of relocation. A map will be displayed with different property locations populated on it. On click of a property, a dialog box containing more information about the clicked property will be displayed such as type of the property, pictures of the property, services offered, vacancy status, amenities around and most importantly, the landlords contact information.

The proposed software platform will be able to make the searching of properties during relocation an easy task for all.

#### 1.4 Aims of the study.

The main objective of this study is to develop and implement an Android/Web based Geographic Property Search Information System that will replace the manual property search and thus making it easier for clients to search for properties of their choice from the comfort of their devices.

#### 1.4.1 Other Objectives.

* To establish a clear client-landlord communication protocol. Where information will not be misleading but accurate and legitimate for business.
* To develop a platform that reduces the cost of traditional property search and all the draw backs that come with it.

#### 1.5 Scope.

The Geographic Property Search Information System is a system that is meant to be used by millions of clients all over the country but for this case I decided to lower the scope to the following:

#### 1.5.1 Geographical scope.

For the geographical scope, I decided to lower the scope to Rongai town for easy and convenient data collection. More so, Rongai town is densely populated by mostly locals and students from the following universities: Nazarene University, Co-operative University,Catholic University and majorly Multimedia University.

#### 1.5.2 Time scope.

The study was conducted for a duration of six weeks from 5th of January to 20th February 2022. I was able to conduct research on the need of a digital system that could aid in the property search expeditions for university students and natives who were looking for affordable property to rent in Rongai town. I was able to collect several pieces of data concerning my research in the six weeks study.

#### 1.6 Assumptions.

I made the following assumptions during the study:

* Every client using the system will have a smart phone and an internet connection to access the platform and have knowledge of operating a smart phone.
* The landlords will be able to update their property occupation status every time a tenant leaves or enters the property.
* The GPS cc-ordinates taken will be 99.99% accurate so as to offer better precision on the property location useful during navigation.
* The piece of software will reach people and start using it extensively so that they can gain from it.

#### 1.7 Limitations of the study.

During the study I faced the following limitations:

* Time constraints – if i had enough time to conduct critical research on property search in the

#### 1.8 Justification of the study.

This project is interesting because it presents a challenge to us. Integrating maps to include possibly remote properties is exhilarating as is listing closely located properties. Also designing a good platform that will handle thousands of users concurrently is an extreme sport and this forces us to think outside the box to handle such traffic.

Advantages of this project are;

# **CHAPTER TWO : LITERATURE REVIEW**