### THE STATE UNIVVERSITY OF ZANZIBAR



### SCHOOL OF COMPUTING AND MEDIA

### DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

## **DESIGN DOCUMENT**

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PROJECT TITLE: HOUSE HOSTING MANAGEMENT SYSTEM

PROJECT TYPE: WEB BASED AND GIS PROJECT

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## HOUSE HOSTING MANAGEMENT SYSTEM

# 1.0 INTRODUCTION

This is a project that will enable people who would like to host their houses online for guests to book especially foreigners or travelers who are seeking for accommodation to stay for their short term vacation.

Not all travelers prefer to book in hotels for their short stay, reason being booking in hotels may be very expensive or they enjoy staying in a prime location.

The guest can log into the system and book for the house they want. The owner can host any number of houses they want.

The purpose of this project is to simplify the hosting and renting process of the houses for the hosts and the guests.

# 2.0 RATIONALE

The project is very important because it will help the house owners to easily host their houses and to be easily recognized by the guests who are having difficult time looking for places to stay to enjoy their vacation.

This will also help the company to promote its name and to be known and recognized world widely.

### 2.1 SPECIFIC OBJECTIVES

- To generate a system that will list down all the houses hosted by the owner available for booking.
- To make it easier to retrieve the guests and owner information.
- To simplify the guest choice for the house.
- Making the booking and hosting process easier.

## 2.2 GENERAL OBJECTIVES

- To provide a user friendly system for the users to interact with.
- To simplify the manual labor work to a fast computerized system.
- To reduce cost and budget of using papers.
- Reduce data errors caused by manually data entry.

#### 2.3 CHALLENGES OF THE CURRENT SYSTEM

The current system does not give an opportunity to the guests to see all the available houses for renting, and also it does not provide any information concerning the house features and locations.

The current system is done manually, any person who wants to host their houses has to fill the form and their information on a paper and also the payment is done manually.

### 2.4 SOLUTION TO THE PROPOSED SYSTEM

The proposed solution to the existing system is aimed at: -

- Simplifying the listing of all the hosted houses available for renting.
- To see the information of the houses and their attributes.

# 3.0 METHODOLOGY USED

# 3.1 OBJECT ORIENTED PROGRAMMING (OOP) FOR SOFTWARE APPROACH

I chose to use OOP because:

- I can easily upgrade my system.
- I can eliminate the redundant code of my system when using the java code.
- OOP has the principal of data hiding that will help me to secure the system.

# 3.2 Disadvantages

• It is very complex to create programs based on the interaction of objects. Some of the keys of programming techniques such as inheritance can be a big challenge.

## 3.3 AGILE FOR SOFTWAREE DEVELOPMENT LIFE CYCLE

I chose to use agile because:

- I can easily test my system thoroughly for errors during the entire life cycle.
- I can frequently communicate with the manager face to face and he can also participate throughout the project.
- I can welcome change from the customer.

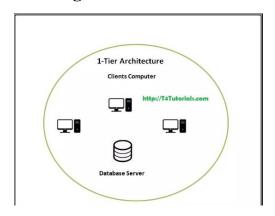
## 3.4 Disadvantages

- Sometimes the agile methodology requirements is not very clear hence it is difficult to predict the expected results.
- The starting of the software development life cycle it is difficult to the actual effort required.

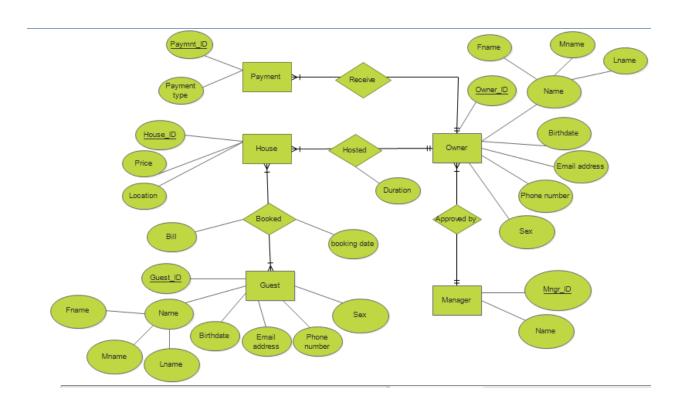
# 4.0 SYSTEM ARCHITECTURE

The system architecture used is a single tier architecture, the client, server and the database all reside on the same machine. This architecture is easy to use and it optimizes the performance, the cost of deployment is also less like development and management cost.

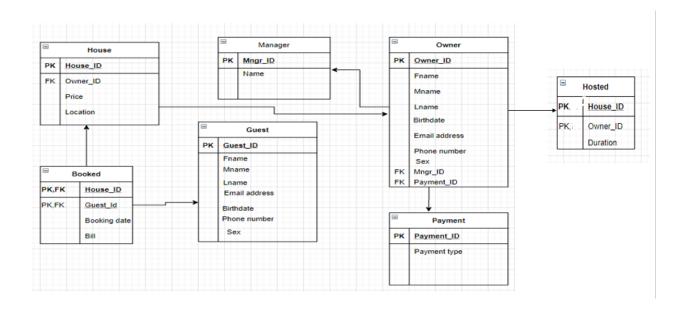
# The single tier architecture



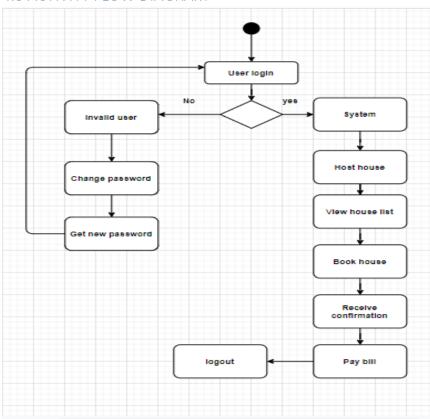
## 4.1 CONCEPTUAL DESIGN OF THE SYSTEM



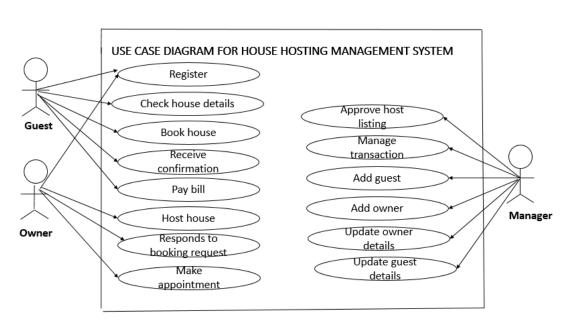
## 4.2 DATABASE DESIGN OF THE SYSTEM



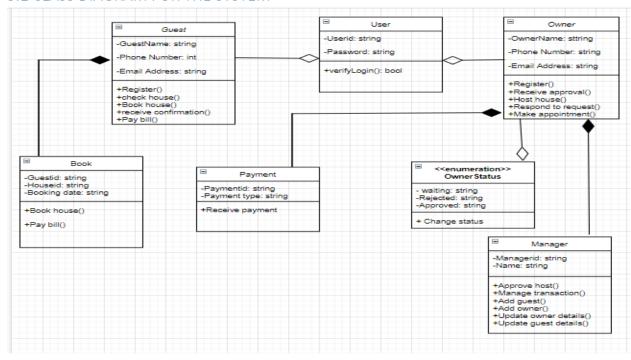
## 4.3 ACTIVITY FLOW DIAGRAM



# 5.0 USE CASE DIAGRAM



### 5.1 CLASS DIAGRAM FOR THE SYSTEM



### 5.2 DEVELOPMENT TECHNOLOGY

The development technology to be used for the system is the java programming language, this language enables to write down the system code only once and set up the appliance code address on many platform without any extra effort.

### **5.3 USER INTERFACE**

The guest user interface sample for the system

	Create An Acco	unt	
Guest Name:			
Guest Email:			
Guest Password:			
Guest Image:	Choose File No file chosen		
Guest Country:	Select a Country 🗸		
NID:			
Guest Contact:			
Guest Address:			
	Create Account		

The owner user interface sample for the system



## 5.4 CONCLUSION

In this project I highlighted the need of house hosting management system which is time saving process for the people who are looking for houses to rent. It also provides good communication between the owner and the guest and escalates their relationships for better living and sharing information.

This project also helps to maintain security and providing scalability for number of users to access data without redundancy.