

THE STATE UNIVERSITY OF ZANZIBAR (SUZA)



THE SCHOOL OF NATURAL AND SOCIAL SCIENCES DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY FINAL YEAR PROJECT DOCUMENT REPORT

STUDENT NAME:	MWANAISHA HAMAD JUMA
REGISTRATION NUMBER:	DIT/11/21/016/TZ
COURSE NAME:	FINAL YEAR PROJECT
PROJECT TITLE:	HOUSE ADVERTISEMENT
SUPREVISOR NAME:	MR. SULEIMAN HAMAR

DECLARATION

First of all, I take this opportunity to thank ALLAH making me selected and be among the students of SUZA.

Secondly, I would like to thank my parents for motivating me to take this course (DIT) and I am very happy that until now I have done very well for my first year and I hope the second year will be better than the first one in sha Allah.

I would like also to express by special and sincere gratitude to Project Supervisors for accepting my project title. Special thanks to Project Supervisors for their cooperation, guidelines and instructions they gave me to complete my Final Project as I learned and fulfill the main purpose of the Project to be able to apply what I have been taught in University.

I also should take this opportunity to express my sincere thanks to my lovely Supervisor Mr. Suleiman Hamiar for providing me good knowledge and skills with proper guidance in writing this report.

And lastly, I would like to thank all those who in one way or another contributed to success of my Final Project.

Student

Signature.....

Date.....

Supervisor

Signature.....

Date.....

ABSTRACT:

With House Advertisement, you can easily showcase your property to a wide audience of potential renters and buyers, reaching individuals who are actively searching for their dream home. Whether you're a homeowner, real estate agent, or property manager, our system offers a comprehensive set of features to help you effectively market your house.

Join House Advertisement today and experience the convenience, efficiency, and effectiveness of our platform. List your house for rent or sale, connect with potential tenants or buyers, and take control of your property journey like never before

Make your house stand out and attract the right audience with House Advertisement. Start maximizing your chances of renting or selling your property today

TABLE OF CONTENT

Table of Contents

CHAPTER 1:	7
DISCRIPTION OF THE PROJECT	7
Problem statement	7
Objective –	7
PROJECT BACK GROUND AND MOTIVATION	8
MOTIVATION	8
BACKGROUND	8
Technical feasibility:	8
Economic feasibility:	8
Operational feasibility	8
Legal feasibility	8
CHAPTER 2: Methodology	9
Software development approach	9
System Architecture	9
Software development tools	10
CHAOTER 3:	11
Requirement determination	11
Information gathering techniques	11
FUNCTIONAL REQUIREMENT	11
NON-FUNCTIONAL REQUIREMENT	11
Performance	11
Usability:	11
Security:	11
REQUIREMENT STRUCTURE	12
Process Modelling	12
Use case description	12
USE CASE DIAGRAM FOR SYSTEM PROPOSE	12
USE CASE DIAGRAM FOR CURRENT SYSTEM	13
Data Modelling	14
CHAPTER 4 :	16
Architectural design: a description of the architecture of the program	16

Database Design.....	16
Data Description	17
User Interface Design.....	18
Forms and Report	18
Interface design sample.....	19
CHAPTER 5:	20
Technologies	20
Database implementation	20
Internal schema of database (database schema)	20
Data Dictionary	21
Testing.....	22
User Interface-	22
Strength	29
Limitation of the system	29
What is covered from requirement	29
What is non covered	29
CHAPTER 6:	30
Conclusion.....	30
Recommendation.....	30
Challenges	30
References	30

TABLE OF FIGUR

Figure 1 agile.....	9
Figure 2three tire achitecture.....	10
Figure 3use case diagram for system proposed	12
Figure 4use case diagram for current system.....	13
Figure 5class diagram.....	14
Figure 6 erd diagram.....	15
Figure 7relational model.....	16
Figure 8customer form	18
Figure 9house form.....	18
Figure 10customer table	19
Figure 11login form.....	19
Figure 12internal schema of database.....	20
Figure 13user info table	21
Figure 14customer info table.....	21
Figure 15owner table	21
Figure 16appointment table	22
Figure 17 term table	22
Figure 18dashboard table	23
Figure 19house list.....	24
Figure 20house list.....	25
Figure 21registration form.....	26
Figure 22login form.....	27

CHAPTER 1:

DISCRIPTION OF THE PROJECT

With House Advertisement, you can easily showcase your property to a wide audience of potential renters and buyers, reaching individuals who are actively searching for their dream home. Whether you're a homeowner, real estate agent, or property manager, our system offers a comprehensive set of features to help you effectively market your house.

Problem statement

The brief investigation of the current problem is that there is no specific system that the owner of house can advertise his/her house for selling or rent his house, and buyer / renters get a long process for searching house.

Problem solution and the scope

Due to this problem, I have decided to introduce an HOUSE ADVERTISEMENT that will be able to gather all the people that advertise their house in one place and they will be able to post their own houses. And the tenant or buyer will be able to choose the house he wants according to the specification he wants and then to order. This is better than current situation because it will eliminate the long process that tenant and buyer get through in search for a house

Objective –

The main objective is to reduce the long process during the tenant and buyer search for house and avoid fraudulent brokers.

Specific objectives

To collect owner information

Owner can see customer order

To view customer specification

To provide feedback to the customer

To allow customer to order

To allow owner to post his house

PROJECT BACK GROUND AND MOTIVATION

MOTIVATION

The proposed system enables the owner to post his house in the system

The proposed system enable customer to choose house and booking through the system

The proposed system enable owner to get more customers

BACKGROUND

Current system is that there is no specific system that the owner of house can advertise his/her house for selling or rent his house, and buyer / renters get a long process for searching house.

Feasibility study report-operational, economic, legal and technical feasibility

Technical feasibility:

- This involves analyzing the technical aspects of developing and implementing the online house broker system. The system will require a database to store the data, phone. Additionally, the system must be able to handle a large number of users, data, and transactions while maintaining the security and privacy of user data.

Economic feasibility:

- This involves analyzing the cost-effectiveness of the online house broker system. This includes the cost of software development, hardware infrastructure, and ongoing maintenance and support costs. To ensure the economic feasibility of the project, it is important to ensure that the benefits of the system outweigh the costs.

Operational feasibility

- This involves analyzing the day-to-day operations and management of the online house broker system. The system should be easy to use and navigate, and users should be able to access the system from different devices and platforms.

Legal feasibility

- According to the laws, policy and Zanzibar government regulations its legal to have such a system of online house broker as its insure environmental safety regulation

CHAPTER 2: Methodology

Software development approach

On my project I decide to use Object Oriented approach because is high demand in today's technology-driven society, having knowledge of object-oriented programming (OOP) can be valuable when developing and maintaining software and also to ensure the efficiency of my work.

Software development life cycle model(SDLC)

In my project I decided to use Agile then other because Agile In an agile method of software development, The project is divided in to smaller subpart and is delivered in the iterations.



Figure 1agile

System Architecture

Systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. Also, I decided to use two-tier architecture in order to implement

the data in our project.

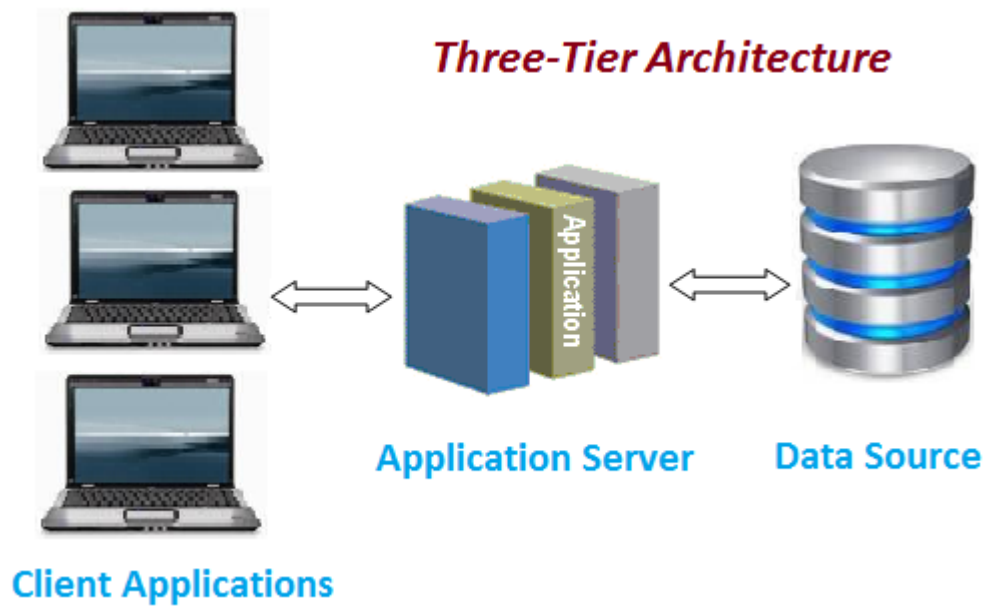


Figure 2three tire architecture

Software development tools

Visual Studio Code

MySQL

Bootstrap 4

PHP PDO

Java

CHAOTER 3: Requirements Analysis and Modeling

Requirement determination

Information gathering techniques

The information gathering techniques are repeated processes that are used to create and organize data across different kind of sources. In my application I perform the *interview* to get the information that are being relevant and helpfully to perform my activity well.

FUNCTIONAL REQUIREMENT

The system should allow customer to make registration

The system should allow customer to login in the system after make registration

The system should allow customer to booking house by make appointment with owner

The system should allow customer to view house from owner

The system should allow owner to view his or her customer details or information address

The system should allow owner to post his house

The system should allow the admin to access and manage all system users.

NON-FUNCTIONAL REQUIREMENT

Performance: The system should be fast and responsive, with quick loading times and minimal downtime. It should be able to handle high traffic volumes without slowing down or crashing.

Usability: The system should be easy to use, with clear navigation, well-designed forms, and helpful feedback messages. It should be accessible to users of all skill levels, including those with disabilities.

Security: The system should be secure and protect user data from unauthorized access, use, or disclosure. It should use encryption, firewalls, and other security measures to prevent cyber-attacks and data breaches.

The system should allow customer to change their password.

REQUIREMENT STRUCTURE

Process Modelling

Use case description

USE CASE DIAGRAM FOR SYSTEM PROPOSE

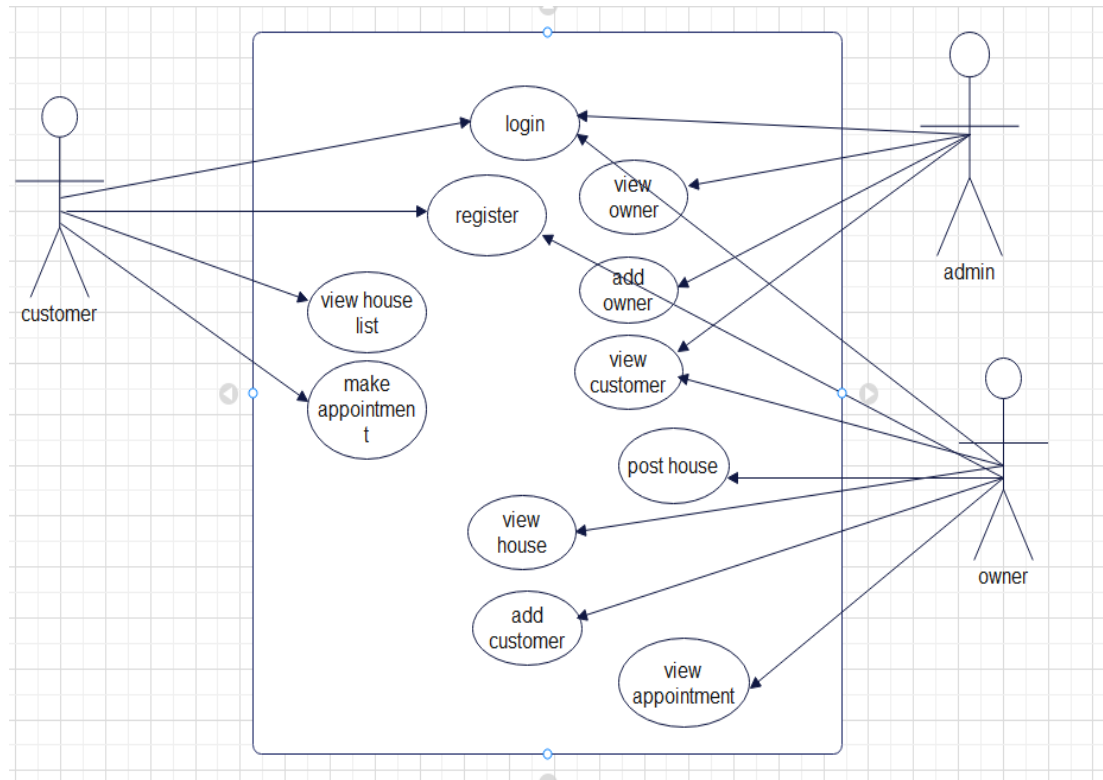


Figure 3 use case diagram for system proposed

USE CASE DIAGRAM FOR CURRENT SYSTEM

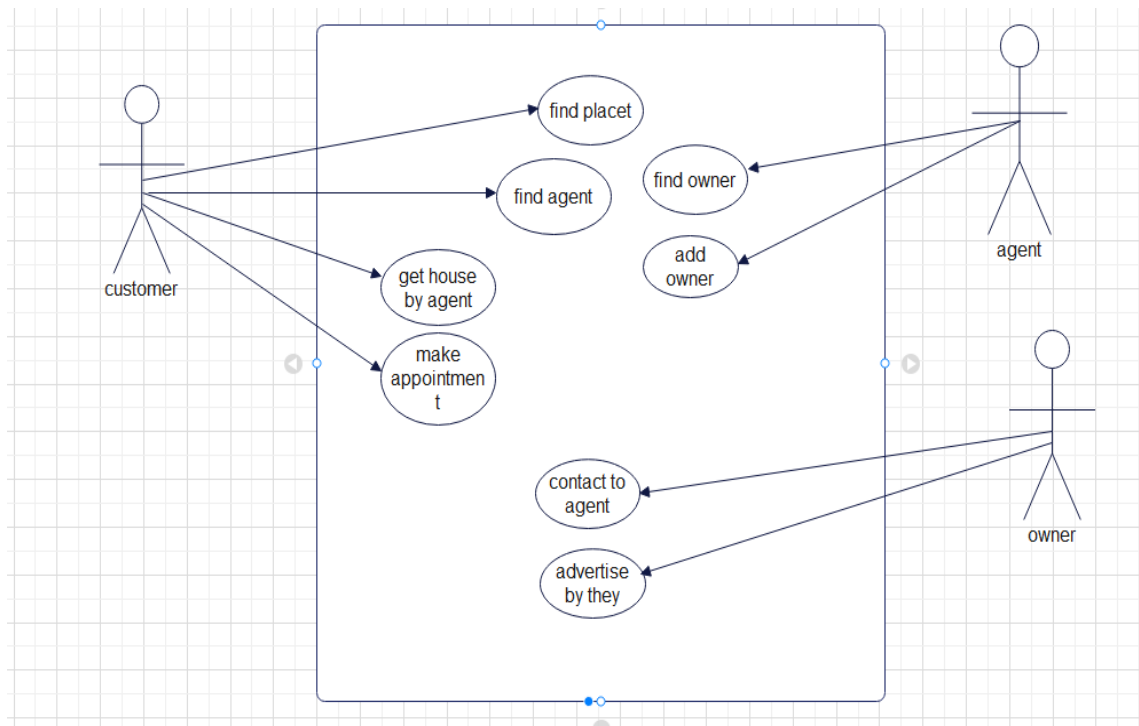


Figure 4 use case diagram for current system

Data Modelling

Class diagram

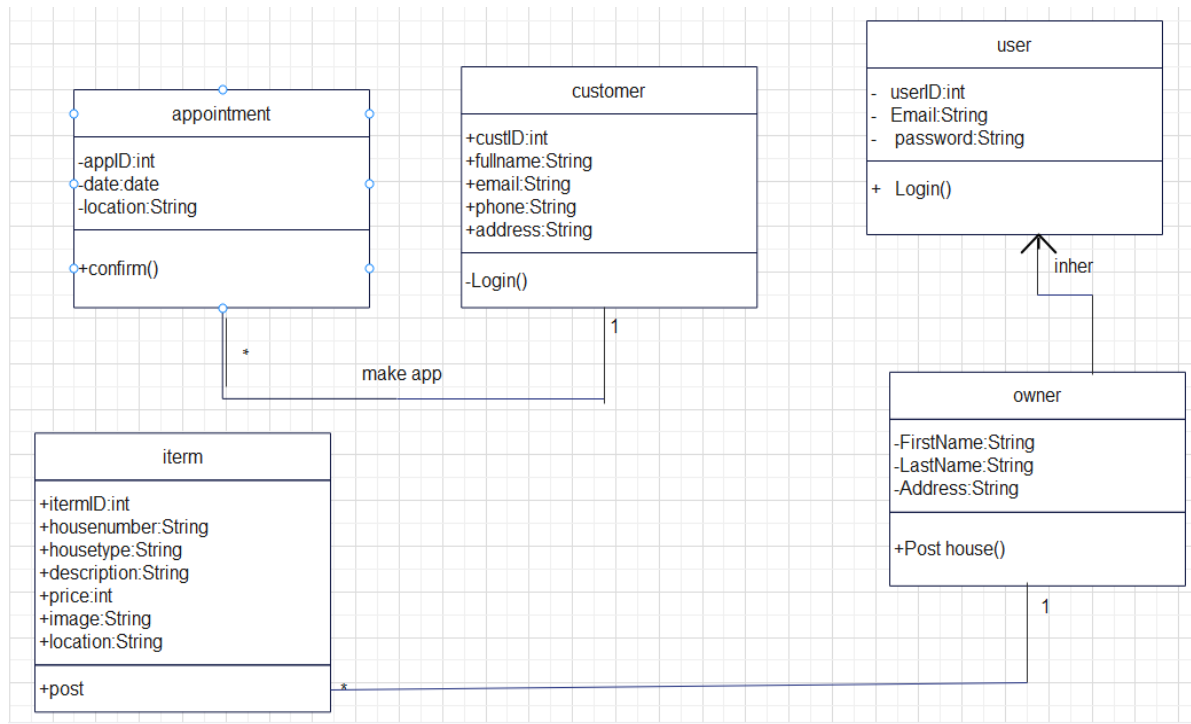


Figure 5class diagram

Entity relationship diagram

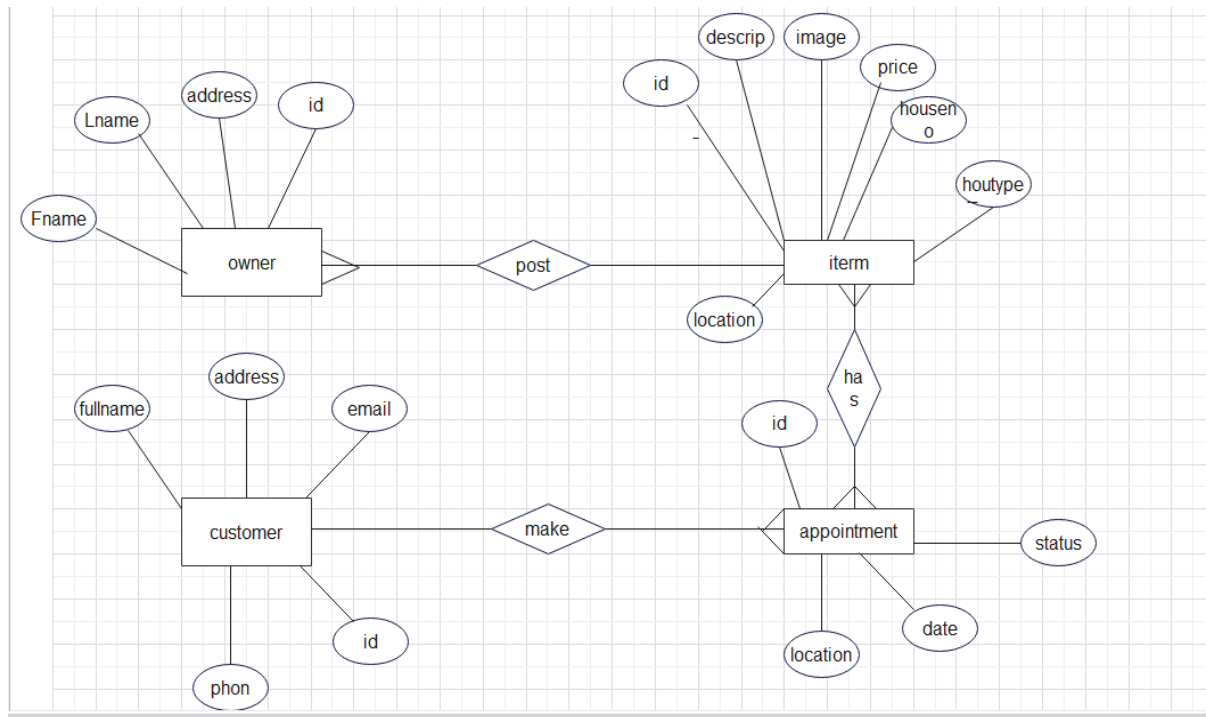


Figure 6 erd diagram

CHAPTER 4 : System Design

Architectural design: a description of the architecture of the program

The system architecture used for my proposed system is Three-tier architecture because this is a software architecture design pattern that divides an application into three logical tiers: presentation tier, logic tier, and data tier.

Database Design

Relational Model

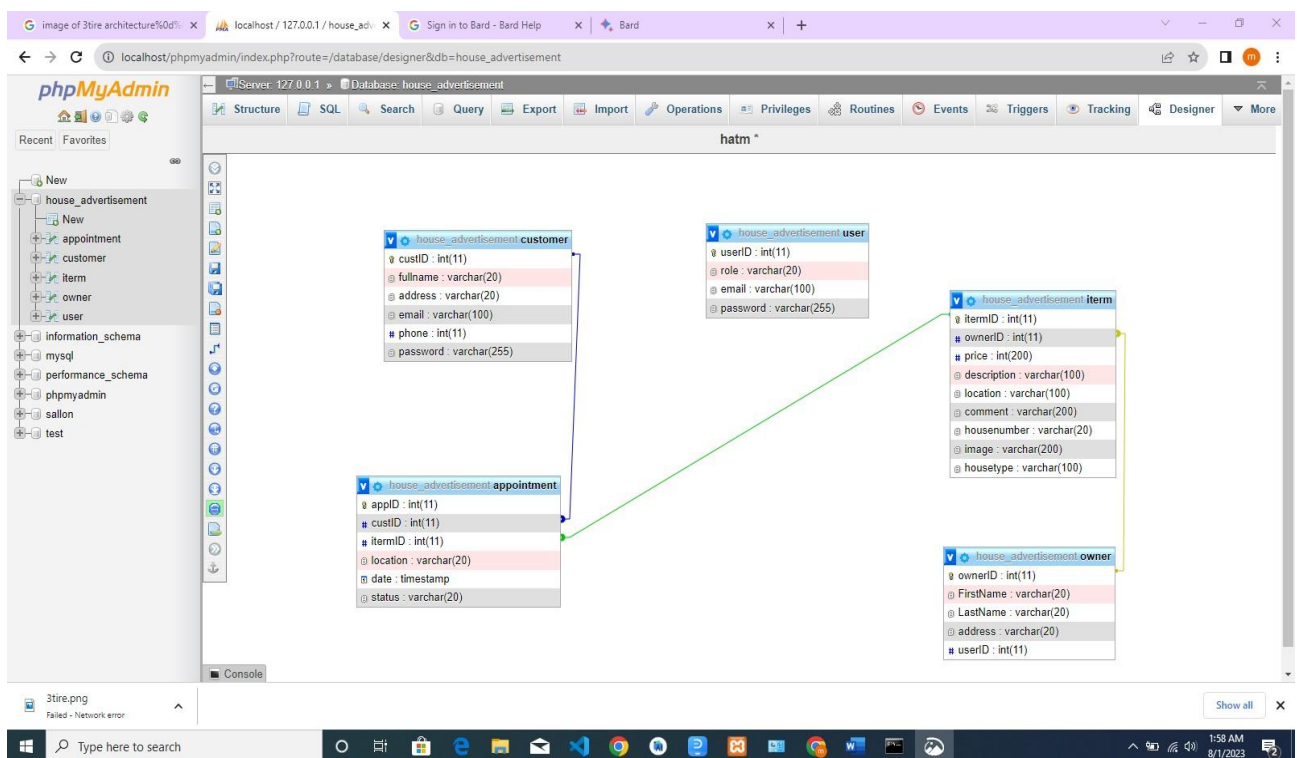


Figure 7relational model

Data Description

Attribute	Description
userID	Identify the user
email	It define the email of customer
ownerID	It define the owner of the house
FirstName	It define the fist name of the owner
LastName	It define the last name of the owner
Address	It define the address of the user
Itemid	It define the item (house)
Price	It define the price of the house
Description	It define the description of the house
Image	It define the image of the house
Housenumber	It define the number of the house
Location	It define the location of the house
Housetype	It define the type of the house
custID	It define the customer
fullname	It define the full name of the customer
phone	It define the phone number of the customer
appID	It define the appointment
location	It define the location of appointment
date	It define the date of the location

User Interface Design

Forms and Report

ADD CUSTOMER INFORMATION

Full Name:

Enter full name

Email

Enter email

Phone Number

Enter phone number

Password

Enter password

Address

Enter address

Save

Cancel

Figure 8customer form

ADD HOUSE INFORMATIONS

House Number:

Enter House Number

House Type

Enter House Type

Price

Enter Price

Location

Enter Location

Description

Enter Description

Picture

Browse...

save

cancel

Figure 9house form

CUSTOMER LIST








No	Full Name	Email	Phone Number	Address	Action
1	Ali Juma	ali@gmail.com	777123272	Mombasa	 
3	Mukhtar Mohammed Sal	mukhtarim918@gmail.com	622203508	Mombasa Zanzibar	 
4	mwanakombo mussa kas	mwanak@gmail.com	772775840	kendwa	 

Figure 10customer table


Interface design sample

WELCOME TO HOUSE ADVAERTISEMENT LOGIN



Email

Password

 send

you have an account ? [Register here](#)

Figure 11login form

CHAPTER 5: System implementation and testing

Technologies

Visual Studio Code

MySQL

Android studio

Database implementation

Internal schema of database (database schema)

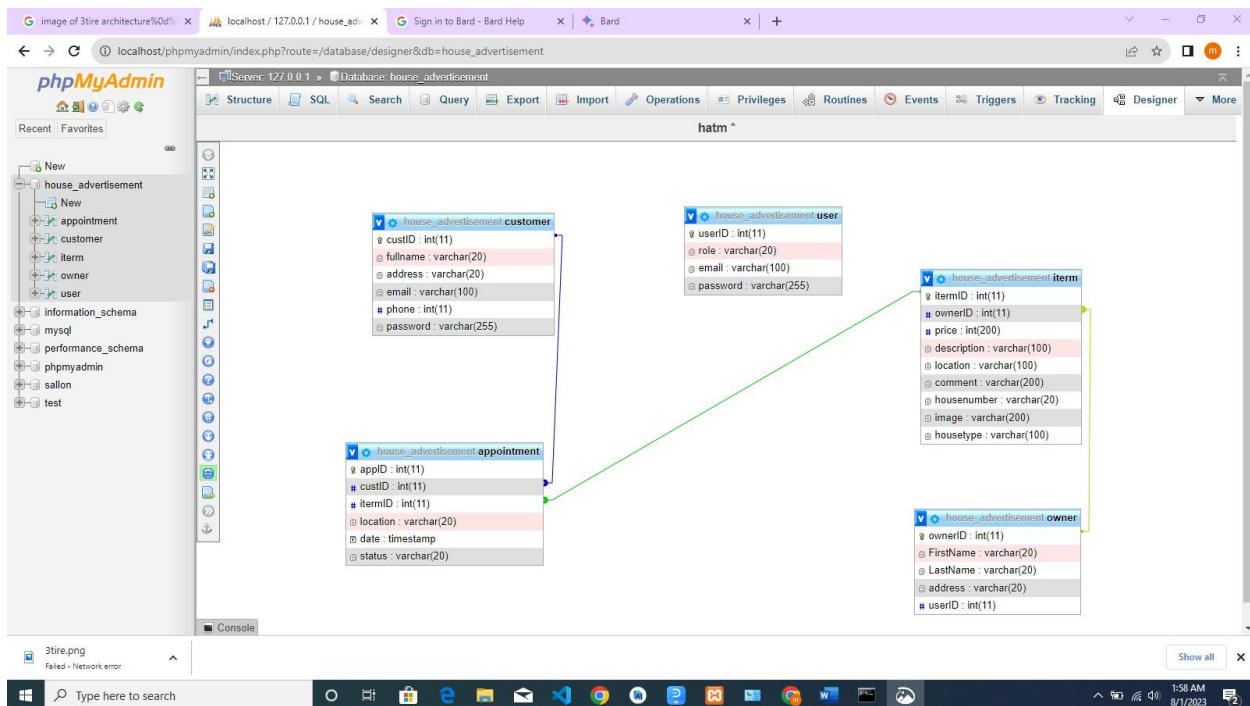


Figure 12 internal schema of database

Data Dictionary

USERINFO

Field	Type	Null	Key	Default	Extra
userID	int(11)	NO	PRI	NULL	auto_increment
role	varchar(20)	NO		NULL	
email	varchar(100)	NO		NULL	
password	varchar(255)	NO		NULL	

Figure 13user info table

CUSTOMER

Field	Type	Null	Key	Default	Extra
custID	int(11)	NO	PRI	NULL	auto_increment
fullname	varchar(20)	NO		NULL	
address	varchar(20)	NO		NULL	
email	varchar(100)	NO		NULL	
phone	int(11)	NO		NULL	
password	varchar(255)	NO		NULL	

Figure 14customer info table

OWNER

Field	Type	Null	Key	Default	Extra
ownerID	int(11)	NO	PRI	NULL	auto_increment
FirstName	varchar(20)	NO		NULL	
LastName	varchar(20)	NO		NULL	
address	varchar(20)	NO		NULL	
userID	int(11)	NO		NULL	

Figure 15owner table

APPOINTMENT

Field	Type	Null	Key	Default	Extra
appID	int(11)	NO	PRI	NULL	auto_increment
custID	int(11)	NO	MUL	NULL	
itermID	int(11)	NO	MUL	NULL	on update current_timestamp()
location	varchar(20)	NO		NULL	
date	timestamp	NO		current_timestamp()	
status	varchar(20)	NO		NULL	

Figure 16appointment table

ITERM

Field	Type	Null	Key	Default	Extra
itermID	int(11)	NO	PRI	NULL	auto_increment
ownerID	int(11)	NO	MUL	NULL	
price	int(200)	NO		NULL	
description	varchar(100)	NO		NULL	
location	varchar(100)	NO		NULL	
comment	varchar(200)	NO		NULL	
housetype	varchar(20)	NO		NULL	
image	varchar(200)	NO		NULL	
housetype	varchar(100)	NO		NULL	

Figure 17 term table

Testing

House Advertisement System now produce an expected output, also it allow owner to post hi/her house, also respond with incorrect login credentials, also am implement the system using the proposed techniques and development approach ,also customer can register well,

User Interface- Provide a pictorial representation of most important user interfaces of the main functionalities of your system

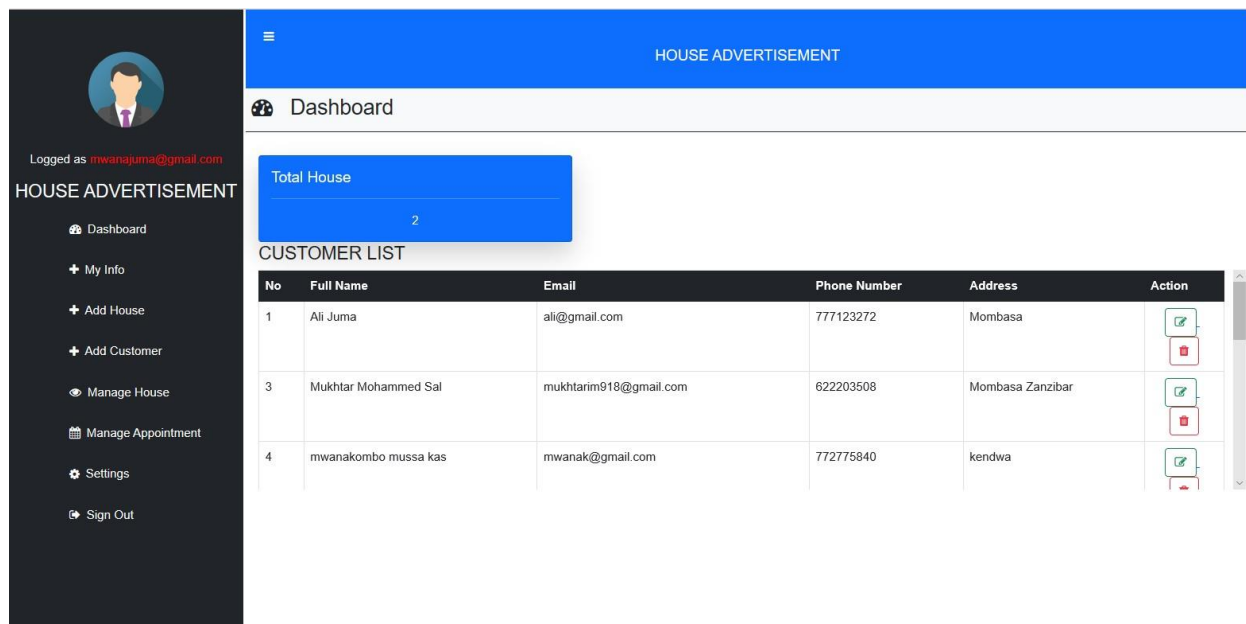


Figure 18dashboard table

HouseAdvertisement

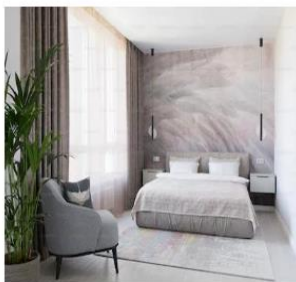
Welcome

HOUSE LIST



Area: kianga

Price: Tsh 1030000



Area: jj

Price: Tsh 1030000



Area: kwerekwe

Price: Tsh 2000000



Area: jj

Price: Tsh 2000000



Area: kwerekwe

Figure 19house list

HouseAdvertisement



ADDRESS : kianga

DATE : 2023/08/01

PRICE : 1030000

HOUSE NUMBER : zone D/200

HOUSE TYPE : yakawaida

DESCRIPTION :

inakodisha yote kwa muda wa
mwaka mmoja

LOGIN TO BOOK

Figure 20house list

REGISTRATION FORM

Full Name

enter email

enter phone number

enter your Address

enter password

REGISTER

Don't have account ? [Signin h](#)

Figure 21registration form



HOUSE ADVERTISEMENT

LOGIN

Don't have account ?

[Signup |](#)

Figure 22login form

APPOINTMENT FORM

Strength

House Advertisement System use PHP pdo, CSS, Android Studio ,Bootstrap 4 and JavaScript.

JavaScript: Used in android to mange all operation

Bootstrap 4 and CSS: Enable the web page to respond with screen in every device .

Android Studio: Enable the user interface in android to respond with screen in every device.

Limitation of the system

It take long time to design interface int two parts web and android and implementation backend

What is covered from requirement

This system most of functional requirement are dome

What is non covered

Owner can't confirm the appointment to the customer

CHAPTER 6:

Conclusion

The House Advertisement System enable the owner of the house to post their house through the system and also to view their customer, appointment online also enable customer to view house, to register, login and make appointment to owner through the system,

So this can reduce the long process when owner wants to advertise his/her houses and also to the customer when found the house.

Recommendation

To the SUZA must allow another student to build the House advertisement system that can fix in all part (customer, owner of the house, needs) to get sufficient system and more compatible in order to operate successfully and met their need .

Challenges

The main challenge when build the House advertisement system are computer requirement to run the system it becomes very slow when running the system.

References

https://www.w3schools.com/html/html5_geolocation.asp

<https://www.w3schools.com/>

<https://getbootstrap.com/docs/4.0/getting-started/introduction/>

<https://datatables.net/examples/styling/bootstrap4>

www.phptutorial.net