



HOUSE RENTAL MANAGEMENT SYSTEM

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Department of Software Engineering

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APPROVAL

This thesis titled “**House Rental Management System**”, submitted by **Hayad Mohamud Abdi**, ID 173-44-164 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Software Engineering and approval as to its style and contents.

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DECLARATION

It hereby declare that this **project “House Rental Management System”** under the supervision of **Mr. Iftekharul Alam Efat, Lecturer, Department of Software Engineering, Daffodil International University**. It also declares that neither this **project** nor any part of this has been submitted elsewhere for award of any degree.

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ABSTRACT

We are screwed over thanks to innovation when what we truly need is simply stuff that works. With the present change in outlook in mechanical field, there is an earnest need to grasp and welcome the intensity of innovation. Lodging division stays watchful to confront the difficulties of progress by utilizing another technique that encourages simple administration of rental houses. Henceforth there is have to build up a rental house the executives framework that can improve work for the rental chiefs with the goal that all their work can be productive and compelling. The Rental Management System is based on the Owners and the Customers .The Owner is updated the house details. The Customer is details about the Room space, House rent and the Address Details also. The House Rental Management System is best Suitable the owners because time save and the only contact the eligible person and there is no need to explain the House details the speak, The House Rental Management System is best application in the city place the customer contact the easily search the suitable place of house. The House Rental Management System is save the time also. The House Rental Management System is used to easily identify the suitable place in save time, cost also. The House Rental Management System is best way to search the house.

Chapter1

Introduction

1.1 Project Overview

This section plate about house rental administration framework, which is a mainstream technique for leasing houses and its rooms by utilizing on the web security to ensure their protection and budgetary data, this venture is planned to be utilized by House Rental Company represent considerable authority in leasing houses to clients. It is an online framework through which clients can see accessible House, enlist, see profile and book house.

This project is created by utilizing PHP as the programming dialect and MySQL as the database. To build up the genuine framework, plans had been made that covers the framework engineering, UIs, and database structure. This framework is would have liked to help the house Online Company in dealing with the house rental administration system..

This online system will give the office to administrator to include another House, erase a house or booked a house to the client. A client can get a house on lease online by online installment. It will encourage the individual in their much bustling life. This framework will likewise exceptionally supportive to the clients of rental association. As each association need to fulfill their clients, so framework will give a criticism zone to get inputs from the clients. The principle motivation behind a house Rental System to be actualized is to oversee data about House, Customers and the system clients identified with the organization

.1.2 Project Purposes

The main purpose of this project named “house rental system” is to make an automation system which might be helpful for millions of users from different perspective by solving their a few problems. So that’s why we are going to develop such a project.

1.3 Background

Houses have been around for a very long time, before the emergence of modern house renting system, renting operations was manually done which lead to a slowdown in completion of transactions. This manual system involves admission of a New Customer, Assign a house, and finally compute the bill posting transactions which human handles However, for the effective functioning of the renting system, the process must be safe and efficient; otherwise they can be a channel for the transmission of instability from one part of the renting process to others. This is why hotels have been dynamic in promoting sound and efficient reservation system and in seeking the means to reduce risks associated with the system. (Licata, 2009).

House Rental system is a online system to find a house to rent and for the house owner to advertise their house. Student can search a house base on the house benefit such as price range, available item and number of room using TOPSIS technique. The house owner can set their house specialty to attract student to find it. This mobile application can help student and owner to manage and find house to rent or for rent.

1.4 Project Schedule

We need to prepare a scheduling plan to complete the project on time. It also refers to make communication with what task need to get done within timeframe.

1.4.1 Gantt Chart

Gantt chart is mainly a production control tools. It remained us to complete our assigned tasks within a certain period of time. For developing software, it is mostly used. Now I will show a Gantt chart for our project.

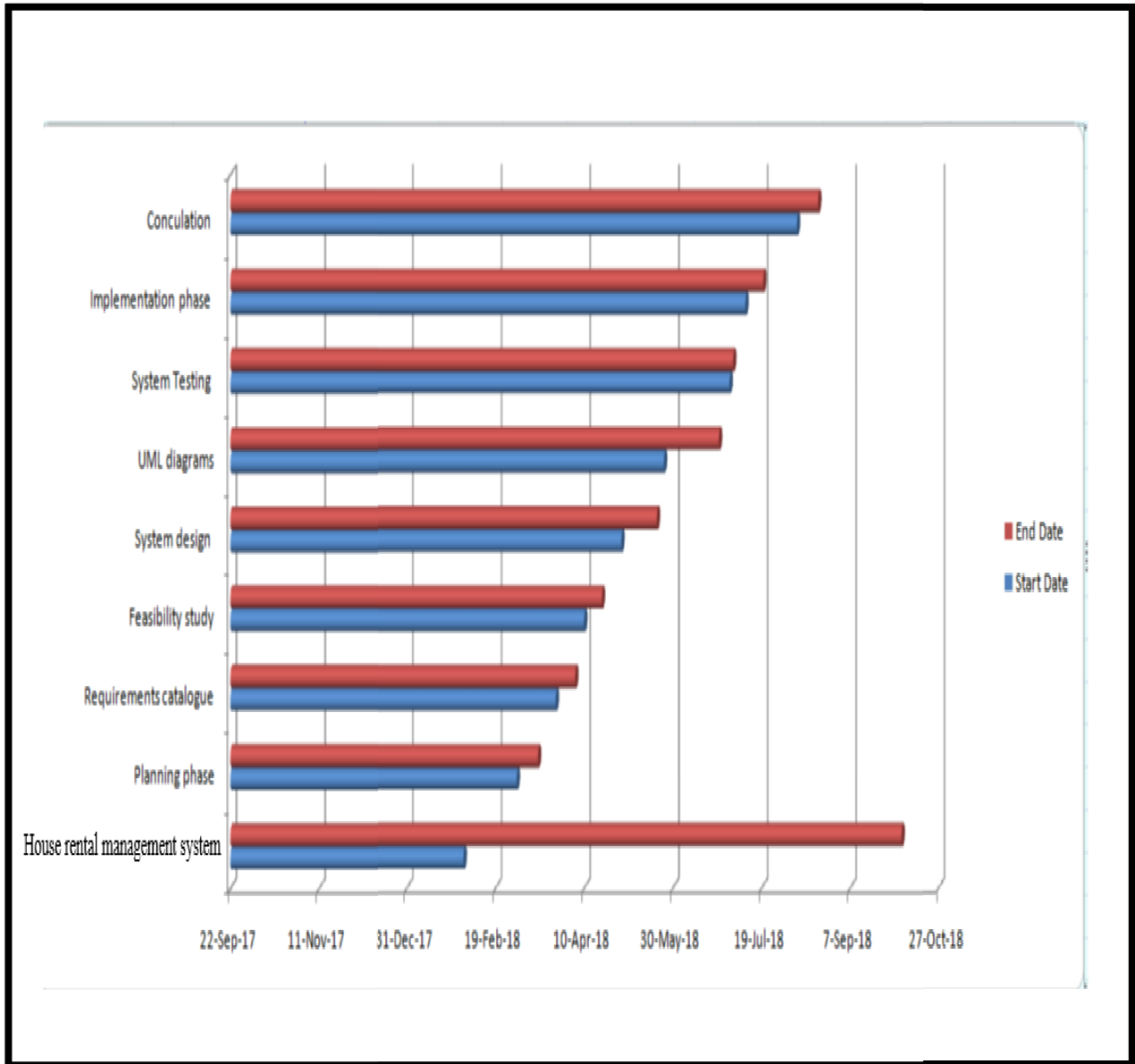


Figure 1: Gantt chart

Chapter2

Initial of the study

2.1 Project proposals:

Project title: House Rental system

Project created by:

Hayad Mahmud Abdi

Student Id: 173-44-164

Project area:

Company name: Garowe Housing

Garowe, Somalia.

Project duration: Six months.

2.1.1 Current system

Garowe Housing is the Oldest Companies in Garowe Area also is the one of the famous in Garowe and people are living in Mogadishu happy in all their activities and also orders it based on paper work. Previously, this company never adopts in computer system everything it was paper work. They are facing different problem such as data lose increasing the customer needs. Therefore they agreed to adopt a computer system to decrease their workload and continue their activities, of course, in order to overcome problems.

2.1.2 Justification of frameworks and methods:

This framework will be created with lightweight yet straightforward plan which centers the basic substance. For growing effectively this framework should be separated into little parts which empowers iterative and gradual advancement. So unmistakably the improvement procedure completely pursues and meets the Agile Methodology. So spry standards will be pursued amid this improvement,

Light-footed spotlights on clients require and accomplishing those necessities. It underpins iterative and gradual improvement. It likewise underpins changes amid improvement

.2.1.3 Projects aims and objective

The main aims and objectives of this project are to develop a modern secure web application. It will be operated via online. The aims and objectives are as follows:

2.1.4 Aims of this project

In view of current issues the point of this undertaking is to build up a site for commercial and build up a safe web framework for conquering the present issues.

2.1.5 Objectives

The objectives of these project areas follow

- To facilitate client's assignment at whatever point they have to lease a house
- User can register new users.
- User friendly interfaces.
- List houses.
- User can book a house.

2.2 Applications of the project

- This system requires low assets and framework will work in all arrangements. It has the accompanying things.
- Ensure data accuracy
- Proper control of higher officials
- Reducing paper work
- Reducing wasting time
- High services
- Easily can understand
- Less time
- Provide security

2.3 Technologies used in this project

- HTML5
- CSS3
- JQUERY
- BOOTSTRAP
- JAVASCRIPT
- PHP
- MYSQL

2.4 Operation Environments

Processor	Core i5 7generation or core i7 / i3
Operation system (OP)	Windows 10, windows 8, Windows 7Or Linux Ubuntu
Memory	1GB or 2GB or more than
Hard disk drive	Minimum 3Gb or more than.
Back end – Database	MySQL

Chapter 3

Literature review

3.1 Talk on issue area dependent on distributed articles

The house rental administration framework should be automated to diminish human mistakes and to expand the proficiency.

The proposed House rental administration framework in this proposition will be a mechanized administration framework created to keep up all the everyday work.

House rental administration frameworks are intended to store all the data about leasing and individuals with the goal that will at that point be validated and the application will email the affirmation of the House lease database as needs be.

The proposed administration data framework requires the beneath things:

- Building a site to speak to the House rental administration framework.
- Allow clients to see essential data, for example, leasing and exercises on the site.
- Store and keep up all data.
- Change and make appealing structure for clients.

3.2 Discussion on problem solutions based on published articles

There are several ways to solve the above problem domains. Developing the system with proper development approach will make the system efficient otherwise the proposed system might be end as failure project. One of the best approaches is developing system from our core needs that can provide support our particular necessity.

The accompanying methodologies are as per the following:

- System advancement ought to be inside time and quicker with the best quality. Forefront innovations ought to be utilized for driving execution.
- Right strategy ought to be decided for this sort of task that can quicker the improvement and bring the best arrangement.

- Verified organized methodology ought to be executed amid improvement for getting the correct component that can stimulate the execution and fill client's requests.
- Developing and testing ought to be arbitrary, so any blunder amid advancement would be discovered and settled quickly. Also, it won't influence the framework later.
- Building site that ought to incorporate with the framework. So basic data can be given to clients on site.

3.3 Best features:

- Home page is attractive.
- Search houses.
- Outlook is impressive and anyone can get the information easily.
- User friendly.

Chapter 4

Methodology

4.1 Types of Methodology

There are many software development tools to choose the best way for your software here I am choosing one of them

4.1.1 Rapid Application Development (RAD)

RAD is an effective methodology for delivering much faster results of development and higher results than those achieved with other software development methodologies. It is designed in a way it easily takes the highest advantages of software development

The main objective of RAD methodology is to accelerate the entire software development process. The goal can be easily achieved because it allows for effective participation of users in the development process.

4.1.1.1 Advantage of RAD model

- The rapid application development model helps reduce the risks and efforts required by the developer
- This model also helps customers to take quick reviews for the project
- This methodology encourages customer feedback that always provides an area of improvement for any software development project.

4.2 Chosen Methodology

RAD methodology is chosen methodology this methodology is suitable for the project considering the fact that its requirements are easy to understand and are well suited for smaller Projects until the time for the project will be short.

This methodology is also appropriate given the fact that the test will be done accordingly. This methodology is also suitable for a smaller project as it is easy to follow in accordance with most developers.

Chapter 5

Feasibility Study

Practicality consider characterizes that an examination on the current framework for the proposed framework to decide is it doable to build up the framework from specialized, moral, asset and operational factors inside dispensed spending plan and time. In this way, all these achievability factors are vital to create this house rental administration framework. These all possibility factors are portrayed underneath

5.1 All possible type of feasibility

- **Technical feasibility:** Specialized achievability concentrated on specialized assets that are accessible in this System. What's more, the specialized group can change over the thought into a working framework. It likewise assesses all the equipment and programming expected to build up this proposed framework. The plausibility fixates on the current PC framework (programming, equipment) and to what broaden it can bolster the proposed expansion.

In the proposed framework, information can be effectively put away and overseen in the database the board framework programming. The consequences of various inquiries can be made effortlessly. Accordingly, the framework is in fact doable.

- **Economic feasibility:** Monetary attainability concentrated on ascertains the suitability and cost and advantages of the proposed house rental management framework. It additionally assesses this framework positive monetary profit by the proposed administration framework. Monetary examination is the most usually utilized technique to contrast cost and intrigue or anticipated pay from a created framework. In the present framework, numerous individuals take an interest simultaneously yet in the proposed framework, the quantity of individuals included is altogether diminished.

The proposed framework is consequently financial. In the present framework, every one of these records ought to be put away and security accommodated records. In the proposed framework, there is no requirement for a different security course of action in light of the fact that the program basically gives security and support and needs a couple of individuals to work the framework.

- **Operational feasibility:** Operational feasibility focuses how these rental system business requirements will be fulfilled by using this proposed management system. Generally it is a measure that how well this proposed management system will solve these system problems and take advantage of the opportunities that are identified in the scope definition. For ensuring success some operational outcomes such as reliability, maintainability, supportability, usability, sustainability etc. must be instructed during design and development.

5.2 Cost Benefit Analysis

The primary reason for money saving advantage investigation is to assess the cash an incentive with the business advantages of this proposed administration data framework.

Existing manual system cost:

Name	Number	Cost (USD)
Staff	3	(monthly)
Utility cost		
Blank Paper		30 (monthly)
Other utilities (Pen, file paper etc.)		10 (monthly)
Total		40 USD (monthly)

The above determined expense is a persistent procedure for every month. This house rental needed to spend pretty much 40 USD every month and 480 USD every year to look after data.

Proposed system cost:

Name	Number	Cost (USD)
Computer	1	500
Printer	1	100
Total		600

Others Cost		
Domain Registration Cost		10 (Yearly)
Hosting Cost		50
Staff	1	200 (Monthly)
Maintenance Cost		2400 (Yearly)
Internet Bill		10 (Monthly)
Total Cost	3270 USD per year	

Next four years cost & saving analysis:

Year	Existing System Cost (USD)	Proposed System Cost (USD)	Savings (USD)
2016	4000	4850	1500
2017	4000	4850	1800
2018	4000	4850	1800
2019	4000	4850	1800

As per money saving advantage examination, it tends to be said the underlying venture is somewhat higher. Be that as it may, it is a onetime expense for executing and running the framework except if that gear's are harmed or lost. From the above expense and advantage examination, we can see that quite a long time, the proposed framework diminishes their yearly costing. Along these lines, in the wake of sending the framework by and large it decreases an immense measure of their month to month spending and the remaining task at hand.

Chapter 6

Software Requirements Specification (SRS)

6.1 Descriptions

House rental system is electronic systems which supports Customers on the way to achieve of the system everyday movement a computerized format. Its decreases the danger of papers to work like files missing, life harms and times overriding. It can support customers to achieve the transactions or record more successfully and period saves.

6.2 Functional Requirements

Functional Requirements For the proposed system is As Follows. There will be two kinds of users.

- **Administrator**
- **Customer**

6.2.1 Admin Module

This module helps admin in following things:

- Adding new house for rent.
- Add Tenant.
- Add invoice.
- View list of members who registered to the system.
- Delete authority.
- Admin can check all of these.
- Admin can also sign out.

6.2.2 Customer Module

This module helps customer in following things:

- Customer can register.

- Customer login.
- Searching Houses.
- View list of houses.
- View tenant.
- The customer can pay the payment
- Student can edit his profile.
- Student can change his password.
- Student can also sign out.

6.3 Non- Functional Requirements

6.3.1 Performance

- All pages on House rental system should load and render in under five seconds
- Internationalization
- In the House rental system all users' interfaces text will be presented in
- English Only.

6.3.2 Browser Compatibility

The House rental management system should work consistently across the following

- browser Safari
- Firefox
- Chrome
- Internet Explorer 7(and above).

6.4 Hardware and Software requirements.

Here we will discuss hardware and software system will work correctly or requirements.

6.4.1 Software Requirement

- Operating system : Windows 7 , windows 8 , Windows 10 , also you can use Ubuntu OS
- Database is MYSQL used as Database its easy maintains and save records is by using simply queries.

- Programming Languages and Tools: Hyper Text Markup Language, JavaScript, Cascading Style sheet, back-end we will use hypertext preprocessor (PHP).

6.4.2 Hardware - Requirements.

a) Processor:

- Core i7 Generation 7 because its fast and then other processors also it can good core i5 / Core i3

b) Random Access Memory (RAM):

- DDR4 Typical standard right now
- 2133MHz vs. 2400MHZ
- 2GB / 4G OR 8GB

6.4.3 Software Tools

This system will be divided into two parties front-end and back-end.

Back-end

The back-end i used MYSQL, because it's open sources and also its high security, high availability.

Front-end

The front-end of an application is clearly human it's what the user sees. We use Hypertext Markup language (HTML), Cascading style sheet (CSS), JavaScript and Bootstrap which developed by tweeter,

6.4.4 Hypertext Mark-up Language (HTML)

The HTML is the backbone of every website without html it was not possible to structure; it allows to see picture or text or anything of website.

6.4.5 Cascading style sheet (css)

CSS is used to format the layout of web pages, it defines text style, tables sizes and other aspects of Web pages, CSS is allowed in our pages will look organized way, CSS consuming should write CSS when and the reuse some page in many Hypertext Markup language pages you can express a elegance for each HTML element and apply it to as many web pages as you want.

6.4.6 JavaScript

JavaScript it is most commonly using scripting language, its help in our system become dynamically for example all validations inputs or submit form not allowed to empty it validate , validations username or password while they incorrect JavaScript gives you alert message what tell your password or username is incorrect please Return,

6.4.7 Hypertext pre-processor (PHP)

Hypertext Preprocessor (PHP) is very powerful server side scripting language for developing applications, it's open source language also its compatible MySQL database similarly MySQL is open source database most famous websites are building PHP for example like Facebook.

6.4.8 Bootstrap

Bootstrapping for the most part alludes to a self-beginning procedure that should continue without outside info. In PC innovation the term (typically abbreviated to booting) for the most part alludes to the way toward stacking the fundamental programming into the memory of a PC after power-on or general reset, particularly the working framework which will at that point deal with stacking other programming as required. Bootstrapping generally alludes to a self-beginning procedure that should continue without outer info. In PC innovation the term (typically abbreviated to booting) as a rule alludes to the way toward stacking the fundamental programming into the memory of a PC after power-on or general reset, particularly the working framework which will at that point deal with stacking other programming as required.

Chapter 7

System design

The most inventive and testing stage in the framework life cycle is framework structure. The term portrays the last framework and the procedure through which it was produced. Demonstrates the specialized details to be connected in the usage of the proposed framework, It likewise incorporates program building and plan of yield, input, code, database and framework task.

7.1 Logical System Design:

Consistent framework configuration surveys the present framework, gets ready particular details, yield, altering, security and control execution designs.

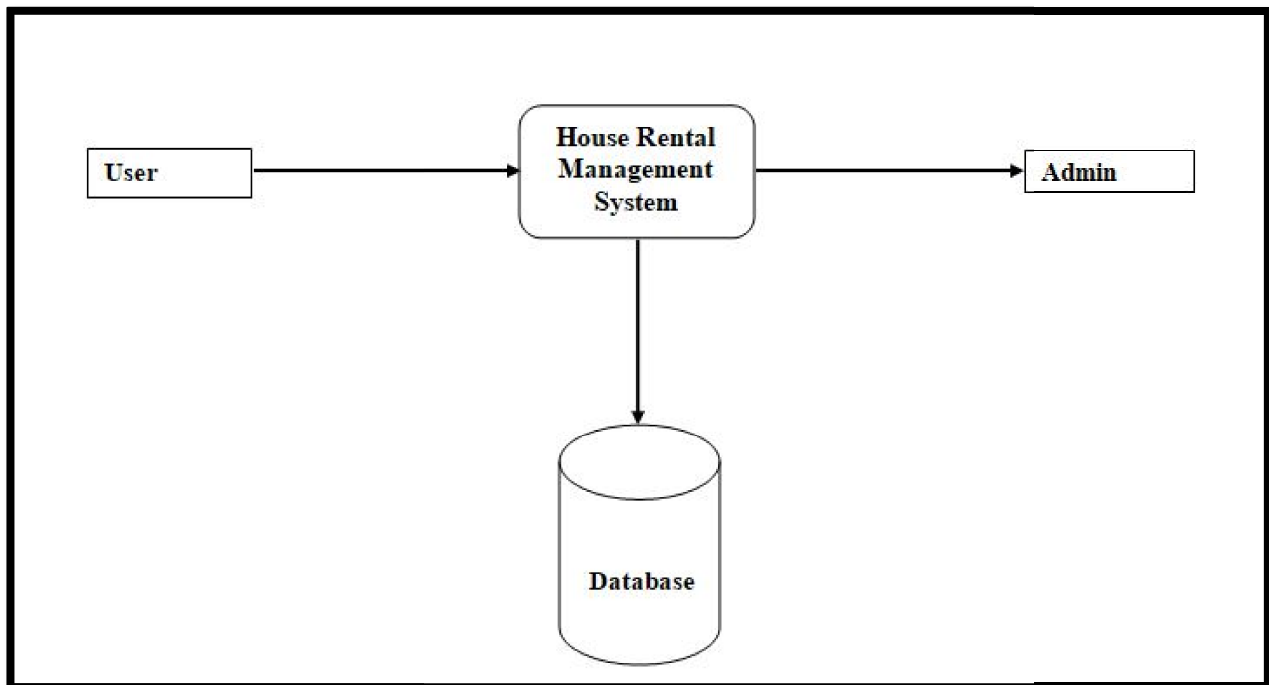


Figure 2: Logical System Design

7.2 Use case diagram

In structuring a productive and compelling framework it is imperative to consider use case graph. Use case graph is one of the five charts in UML or displaying the dynamic parts of the framework. Use case outline is key to displaying the conduct of a framework, a subsystem or a

class. Use case graph are increasingly critical for picturing, indicating and make frameworks. It shows how users will interact to the system.

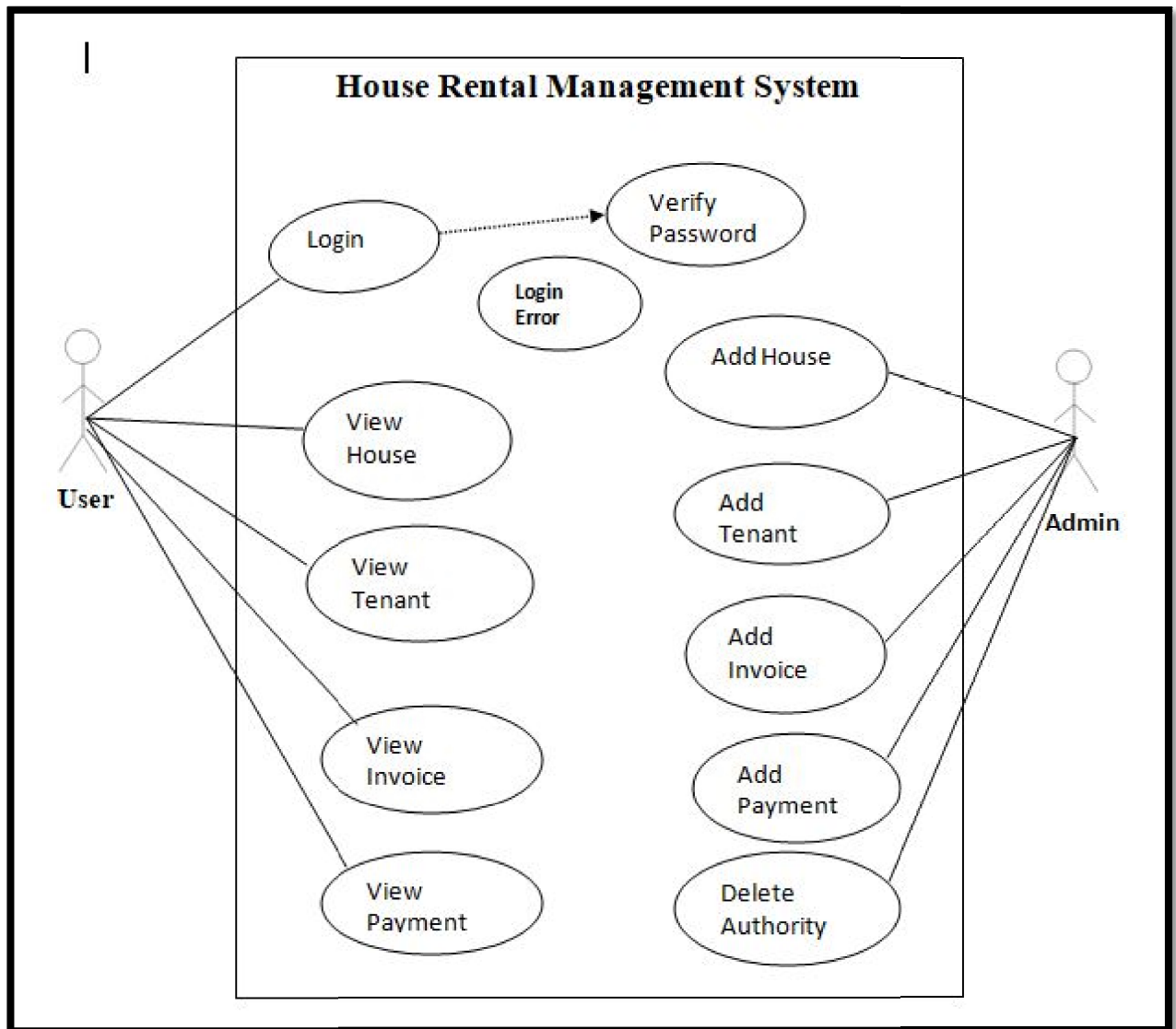


Figure 3: Use case diagram

7.3 Database design

Database configuration is the most vital piece of the framework configuration organizes. In the database condition, regular information is accessible and is utilized by numerous clients. Rather than each program dealing with its very own information, approved clients share information

over the application utilizing the database program that deals with the information as an element. In our undertaking, the director can share and deal with the subtleties

7.4 Tables design

Here are tables used in the project it all stored into MySQL database, the purpose of the data section is to record anything that is important from a data perspective

7.4.1 House Table

Columns Name	Type	Null	Default	Link
ID	Int(25)	No	None	
House_number	Varchar(40)	No	None	
Features	Text	No	None	
Rent	Varchar(40)	No	None	
Status	Varchar(40)	No	None	

7.4.2 Invoice Table

Columns Name	Type	Null	Default	Link
Id	Int(10)	No	None	
Tenant	Int(10)	No	None	
Phone	Int(10)	Yes	Null	
House	Int(10)	Yes	Null	
Year	Varchar(40)	No	None	
Month	Varchar(40)	No	None	
Particulars	Text	No	None	
Total	Varchar(40)	No	None	
Comments	Text	Yes	Null	
Status	Varchar(40)	No	None	
Feild10	Varchar(40)	Yes	Null	

7.4.3 Membership_Grouppermissions Table

Columns Name	Type	Null	Default	Link
permissionID	Int(10)	No	None	
Groupid	Int(11)	Yes	Null	
Tablename	Varchar(100)	Yes	Null	
Allowinsert	tinyint(4)	Yes	Null	
Allowview	tinyint(4)	No	0	
Allowededit	tinyint(4)	No	0	
Allowdelete	tinyint(4)	No	0	

7.4.4 Membership_groups Table

Columns Name	Type	Null	Default	Link
GroupID	Int()	No	None	
Name	Varchar(30)	Yes	Null	
Discription	Text	Yes	Null	
AllowSingup	Tinyint(4)	Yes	Null	
NeedsApproval	Tinyint(4)	Yes	Null	

7.4.5 Membership_userpermissions Table

Columns Name	Type	Null	Default	Link
PermissionID	Int(10)	No	None	
Memberid	Varchar(20)	No	None	
Tablename	Varchar(100)	Yes	Null	
Allowinsert	Tinyint(4)	Yes	Null	
Allowview	Tinyint(4)	No	0	
Allowededit	Tinyint(4)	No	0	
Allowdelete	Tinyint(4)	No	0	

7.4.6 Membership_userrecordsTable

Columns Name	Type	Null	Default	Link
Recid	Bigint(20)	No	None	
TableName	Varchar(100)	Yes	Null	
PkValue	Varchar(250)	Yes	Null	
MemBerid	Varchar(20)	Yes	Null	
DateAdded	Bigint(20)	Yes	Null	
DateUpdated	Bigint(20)	Yes	Null	
GroupId	Bigint(20)	Yes	Null	

7.4.7 Membership_usersTable

Columns Name	Type	Null	Default	Link
MemberID	Varchar(20)	No	None	
PassMD5	Varchar(40)	Yes	Null	
Email	Varchar(100)	Yes	Null	
SingupData	Data	Yes	Null	
GroupID	Int(10)	Yes	Null	
IsBanned	Bigint(20)	Yes	Null	
ISApproved	Bigint(20)	Yes	Null	
Custom 1	Text	Yes	Null	
Custom 2	Text	Yes	Null	
Custom 3	Text	Yes	Null	
Custom 4	Text	Yes	Null	
Comment s	Text	Yes	Null	
Pass_reset_key	Varchar(100)	Yes	Null	
Pass_reset_Expiry	Int(10)	Yes	Null	

7.4.8 PaymentsTable

Columns Name	Type	Null	Default	Link
Id	int(10)	No	none	
Tenant	int(10)	No	none	

House	int(10)	Yes	null	
Year	int(10)	Yes	null	
Month	int(10)	Yes	null	
Expected_Amount	int(10)	Yes	null	
Paid_Amount	Varchar(20)	No	none	
Blance	Varchar(20)	Yes	Null	
Date	Data	No	None	
Comments	Text	Yes	Null	

7.4.9 TenantsTable

Columns Name	Type	Null	Default	Link
Id	Int(10)	No	None	
FullName	varchar(40)	No	None	
Gender	varchar(40)	No	None	
National_id	varchar(40)	No	None	
PhoneNumber	varchar(40)	No	None	
Email	varchar(80)	Yes	Null	
Registration_data	Data	No	None	
House	Int(10)	No	None	
Status	Varchar(40)	No	None	
Exit_data	Data	Yes	Null	
Agreement_documents	Varchar(100)	Yes	Null	

7.5 Context Diagram

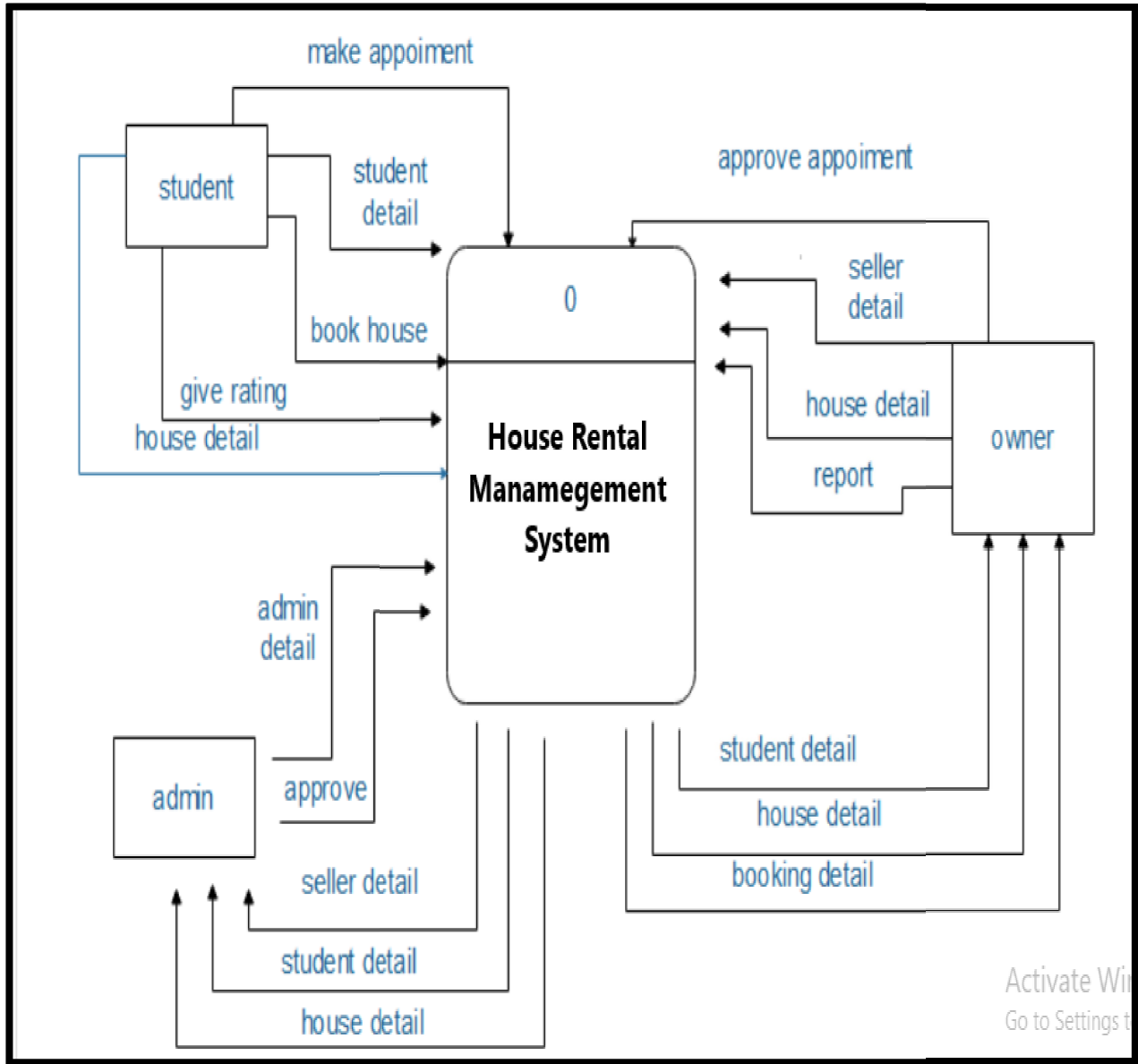


Figure 4 context diagram

7.6 Data flow diagram for system

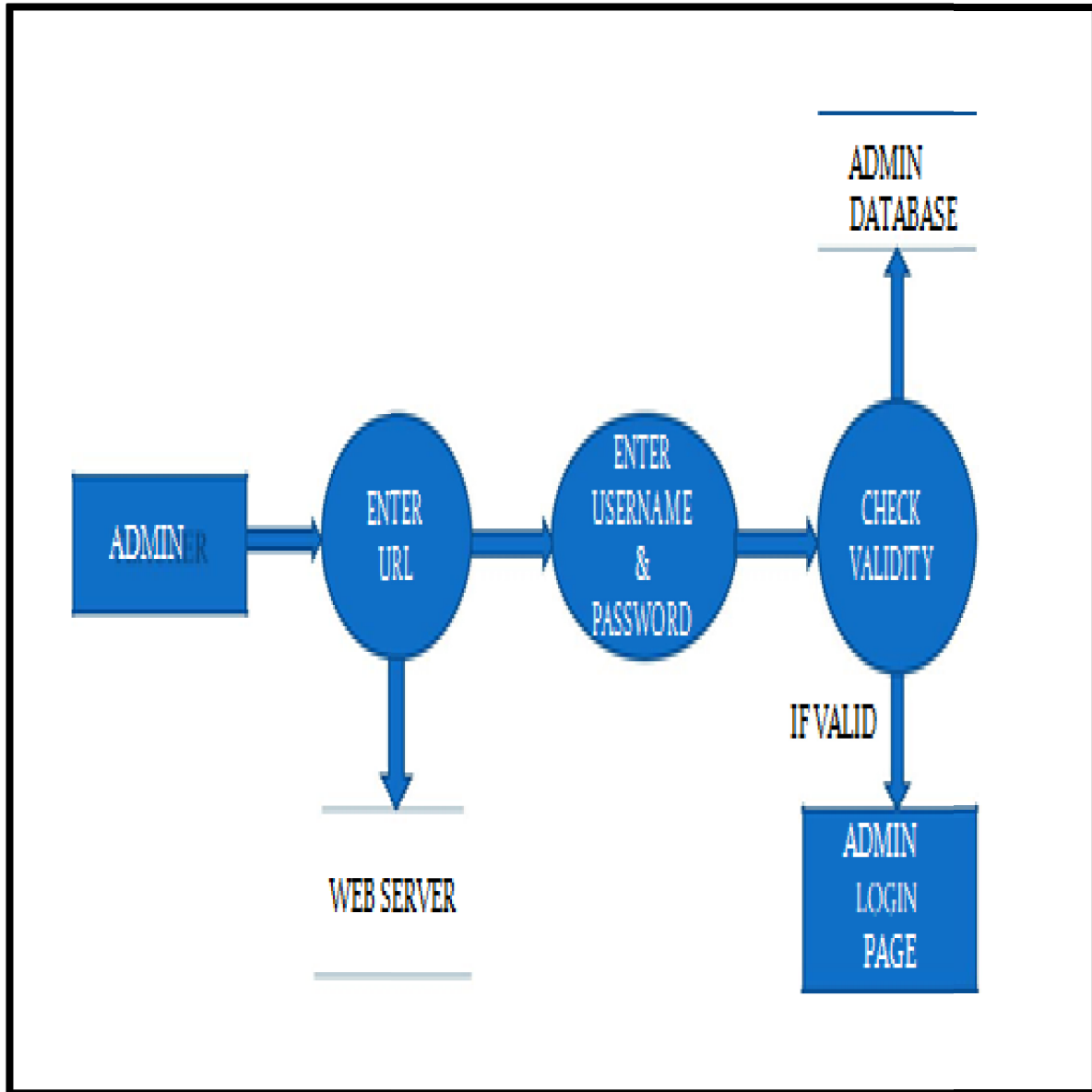


Figure 5: Data flow diagram for system

7.7 Booking System

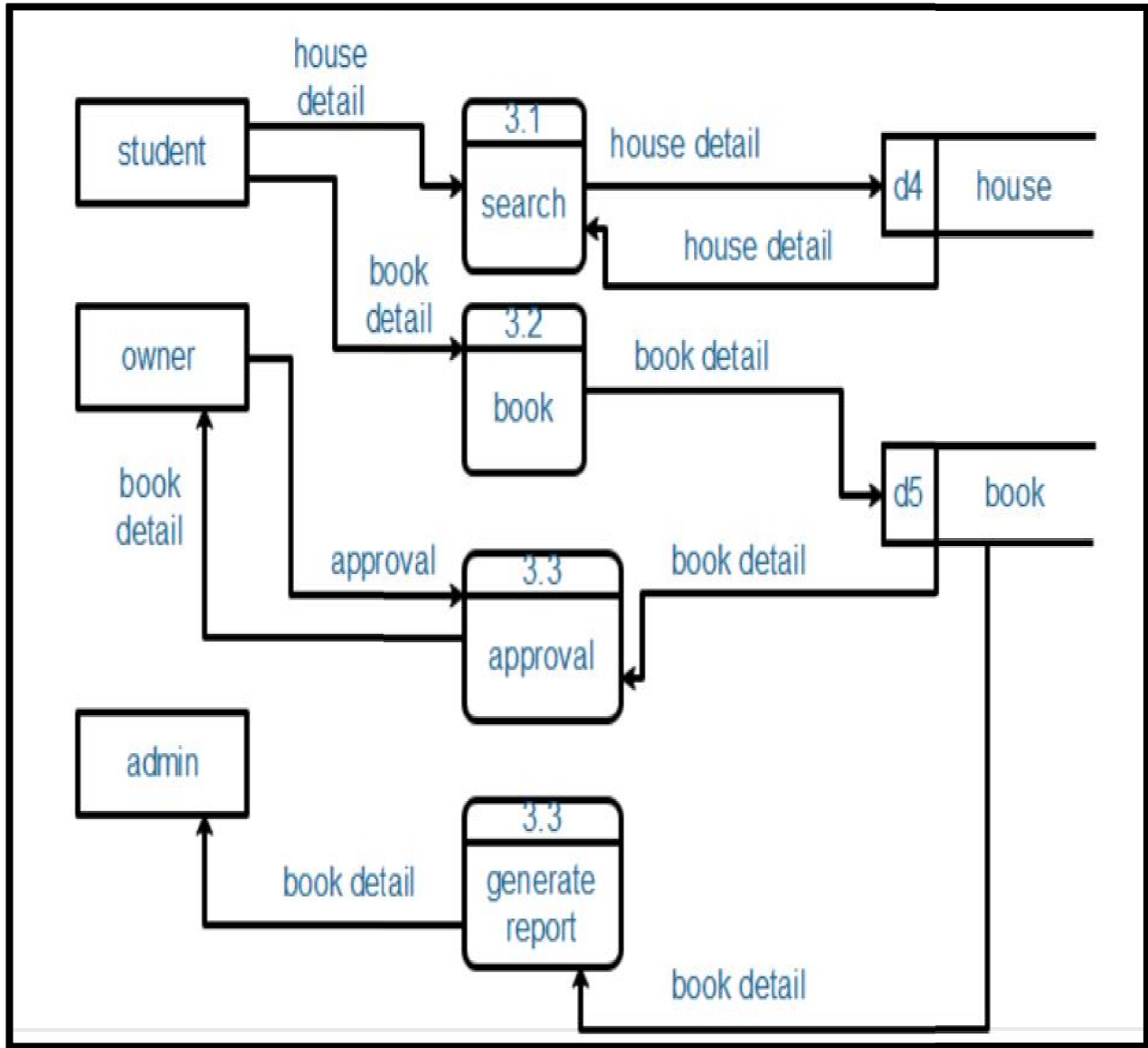


Figure 6: Booking system

7.8 Manage House

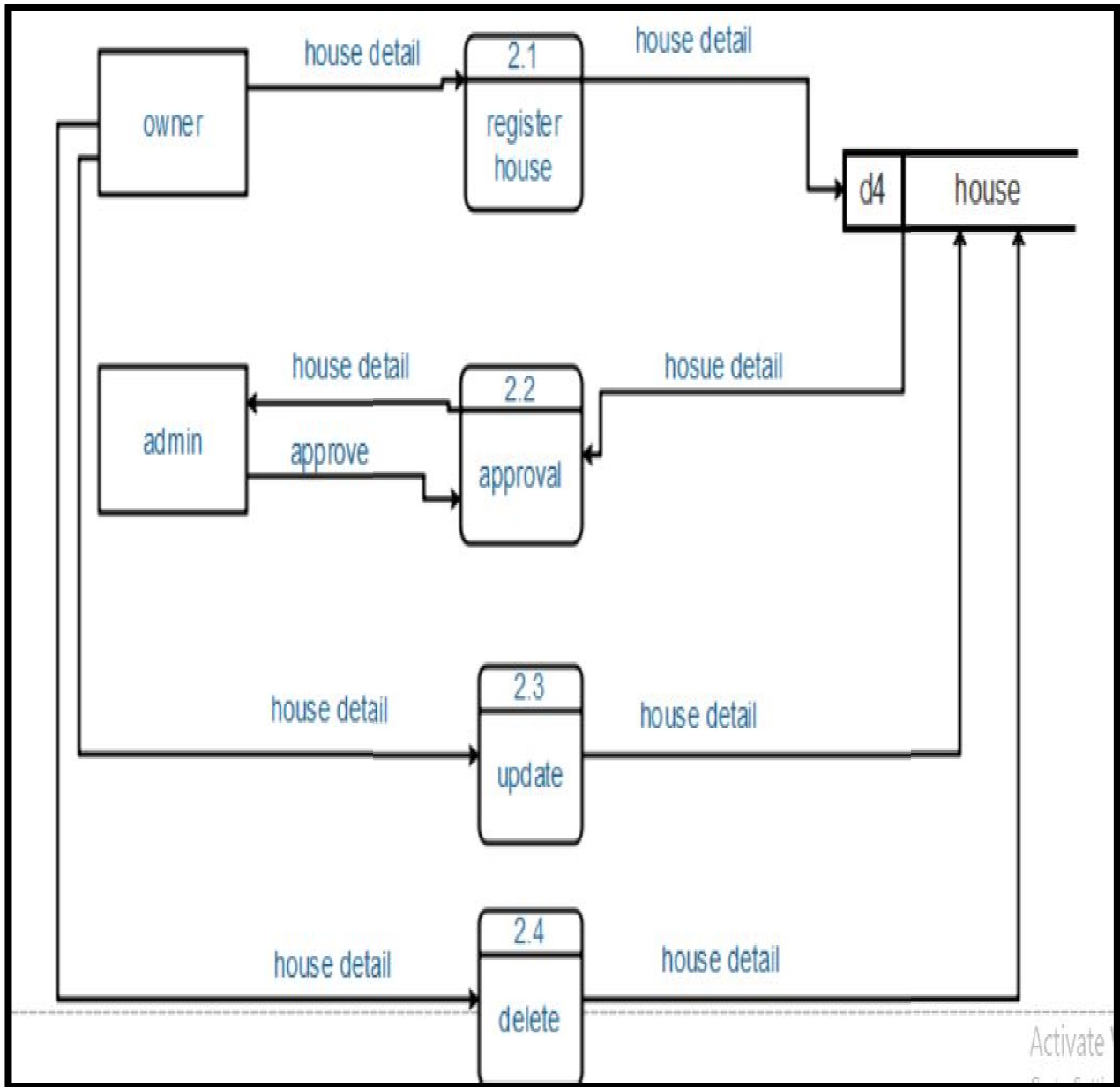


Figure 7: Manage house

7.9 ERD diagram

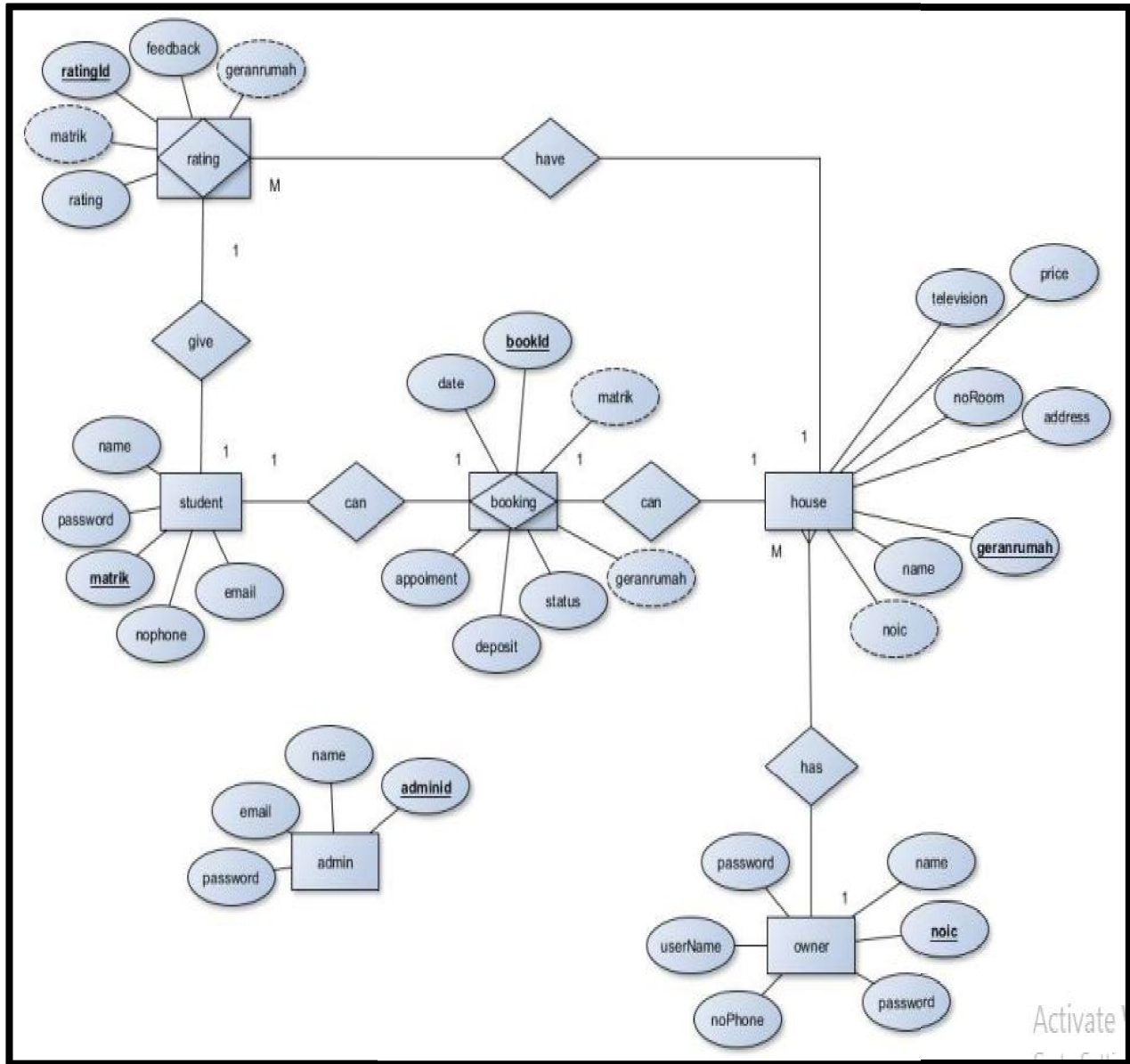


Figure 8: ERD diagram

7.10 Class diagram

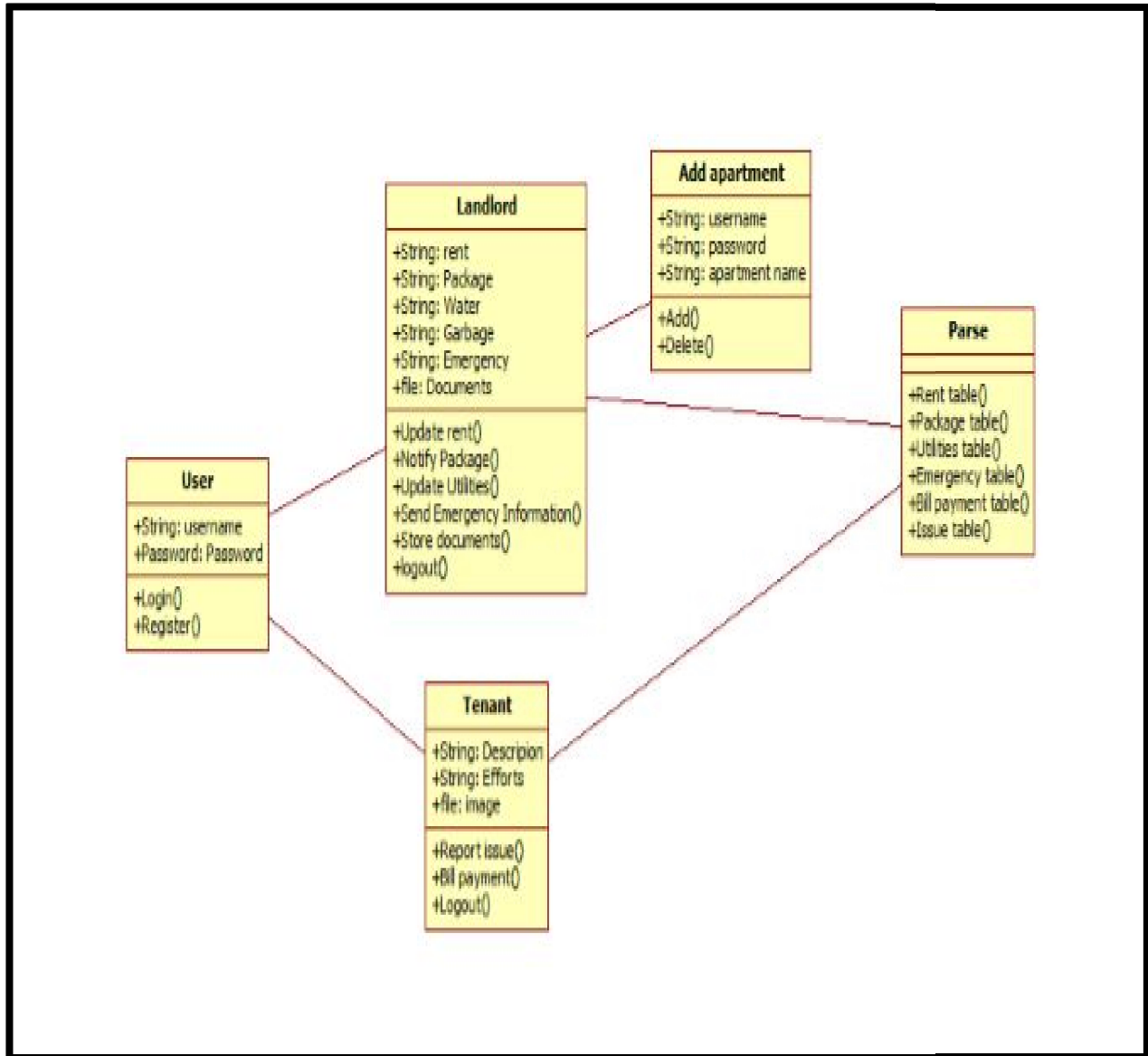


Figure 9: Class diagram

Chapter 8

Testing

8.1 Test Plan

Test plan is a basic stage for giving a quality full item. In a test plan the extension, procedures and criteria are portrayed for testing specific expectations of a venture. Along these lines, here various test designs have been portrayed for testing this house rental framework.

8.1.1 Testing against time boxes:

Test plan against time boxes is a vital part to pick up venture's advancement inside allotted time. Along these lines, a test plan has been produced against the characterized time box. With the assistance of this arrangement this entire task will be legitimately checked and watched and is anything but difficult to quantify advance.

8.1.2 Required tests

- **Unit Testing:** Unit testing will be performed for testing explicit usefulness or every module of this house rental administration framework.
- **Integration Testing:** Integration testing will be performed by joining all modules or segments of this framework and testing it as a gathering to guarantee that this framework is working appropriately.
- **Acceptance Testing:** Acceptance testing will be performed for verifying that this framework has met all client necessities and the framework is prepared to send.
- **Performance Testing:** Performance testing will be performed to quantify this current framework's effectiveness. Execution testing will recognize this present framework's reaction against client's desire.
- **Security Testing:** Security testing will be performed to check whether the framework is secure or not. Security testing will quantify this current framework's helplessness and capacity to anchor the secret information.

8.1.3 Testing Environment:

These following tools are necessary to prepare an environment to perform proper testing:

- Full configured PC with windows 7, 8 or 10.
- Web browsers such Mozilla, Google chrome etc.
- Printer
- Internet connection
- Some valid data.

8.2 Test Case

Here many test cases have been defined for testing information management system:

Test Case: 01	
Title	Explanation
Project Name	Information management system
Test case name	system sign in
Steps	<ul style="list-style-type: none"> • provide user name & password • click sign in button
Expected outcome	sign in successfully
Actual outcome	Sign in successfully

Test Case: 02	
Title	Explanation
Project Name	House rental management system
Test Case Name	Store Booking information
Steps	<ul style="list-style-type: none"> • Provide all house rent information • Click submit button

Expected outcome	Store customer information successfully
Actual outcome	customer information stored successfully

Test Case: 03	
Title	Explanation
Project Name	Information management system
Test Case Name	Update house information
Steps	<ul style="list-style-type: none"> • Click edit button • Change necessary information • Click update button
Expected outcome	Update house information successfully
Actual outcome	House information updated successfully

Test Case: 04	
Title	Explanation
Project Name	Information management system
Test Case Name	Delete house information
Steps	<ul style="list-style-type: none"> • Click delete button
Expected outcome	Delete house information
Actual outcome	House information deleted successfully

8.3 Unit Testing

Unit testing it is basically done by the developers to make sure that their code is working fine and meet the user specifications. They test their piece of code which they have written like classes, functions, interfaces and procedures

Unit testing for sign in:

Testing Procedure	Expected Outcome	Actual Outcome From Test Result
No username and password provided	Show messages for providing username and password	Sign in failed and message showed for providing username and password
Invalid username and password provided	Show messages for invalid username and password	Sign in failed and message showed invalid username and password.
Correct username and password provided	Sign in to the system and redirect to Main page	Signed in successfully

Figure 10: Unit testing for sign in diagram

8.4 Validation testing

Validation checking is a standout amongst the most imperative things since invalid or pointless information can cause numerous issues. It can likewise cause issues for survey information, looking definite information and report age. Here are the approval testing's for CFC data the board framework.

Input	Execution Outcome	Reason	Result
Provide House name which already exists and active	Show message squad already exists.	System checked previous data with input data.	Success
Provide jersey No which already exists	Show message jersey no already exists.	System checked previous jersey no. with input jersey no.	Success

8.5 Compatibility testing

Compatibility testing characterizes is this house rental administration framework perfect with various programs and gadgets. Here I have given some test consequences of framework's similarity.

Test Name	Execution	Expected Outcome	Actual Outcome
Running in Google Chrome	Yes	Successfully meet requirements	Successfully meet requirements
Running in Mozilla Firefox	Yes	Successfully meet requirements	Successfully meet requirements
Running in Mobile View	Yes	Successfully meet requirements	Successfully meet requirements

Chapter 9

System implementation

9.1 Implementation

Detailed Design of implementation this period of the frameworks advancement life cycle refines equipment and programming determination builds up programming designs, trains clients and usage broad testing methodology, to assess plan and working details and/or give the premise to facilitate adjustment.

9.2 Technical Design

This movement expands upon determinations created amid new framework configuration including subtleties specialized particular and documentation.

9.3 Testing detail and Planning

This action gets ready subtleties test detail for individual modules and projects work streams subsystems and for the framework as entirety.

9.4 Programming and Testing

This movement includes real improvement, composing, and testing of program units or modules.

9.5 User preparing

This action incorporates composing client strategy manuals arrangement of client preparing materials leading preparing projects and testing methodology.

9.6 Acceptance Test

A last procedural survey to show a framework and secure client endorsement before a framework winds up operational.

9.7 Installation stage

In this stage the new automated framework is introduced, the discussion to new methodology is completely actualized, and the capability of the new framework is investigated.

9.8 System establishment

The way toward beginning the genuine utilize a framework and preparing client staff in its task

9.9 Review Phase

This stage assesses the triumphs and disappointments amid a frameworks improvement venture and to gauge the consequences of another mechanized Tran framework as far as advantages and reserve funds anticipated toward the beginning of the undertaking.

9.10 Development recap

A survey of a task following consummation to discover triumphs and potential issues in future work

9.11 Post-execution audit

A survey directed after another framework has been in task for quite a while, to assess real framework execution against unique desires and projections for money saving advantage enhancements. Likewise distinguishes upkeep tasks to upgrade or enhance the framework.

9.12 Tenants

The screenshot shows a web application interface for managing tenants. At the top, it says "RENTAL MANAGEMENT" and "Signed in as gaagaale". The main heading is "Tenants" with a search bar. Below the heading are buttons for "Add New", "Print Preview", "Save CSV", "Filter", and "Show All". A table lists two tenants with columns for Fullname, Gender, National ID, Phone number, Email, Registration date, House, Agreement document, Status, and Exit date.

Fullname	Gender	National ID	Phone number	Email	Registration date	House	Agreement document	Status	Exit date
anwar mohamed	male	33516718291	0712345678		05/10/2018	A20		tenant in	
Hayaad Mohamud Mohamed	female	p0023412	01828754948		12/18/2018	0012		tenant in	01/05/1900

Records 1 to 2 of 2

Navigation: < Previous, Next >

Figure 11: Tenants diagram

9.13 User Login

The login form has a green header with "Sign In Here" and a "Sign Up" button. It contains fields for "Username" (with "gaagaale" entered) and "Password" (with "*****" entered). There is a link for "Forgot your password? Click here" and a "Remember me" checkbox. A blue "Sign In" button is at the bottom.

Figure 12: User Login

9.14 User Signup

You are not signed in [Sign In](#)

Sign Up Here!

Username

✘ Username already exists or is invalid. Make sure you provide a username containing 4 to 20 valid characters.

Password **Confirm Password**

Email Address

Group

If you choose to sign up to a group marked with an asterisk (*), you won't be able to log in until the admin approves you. You'll receive an email when you are approved.

[Sign Up](#)

Figure 13: User Signup

9.15 Dashboard

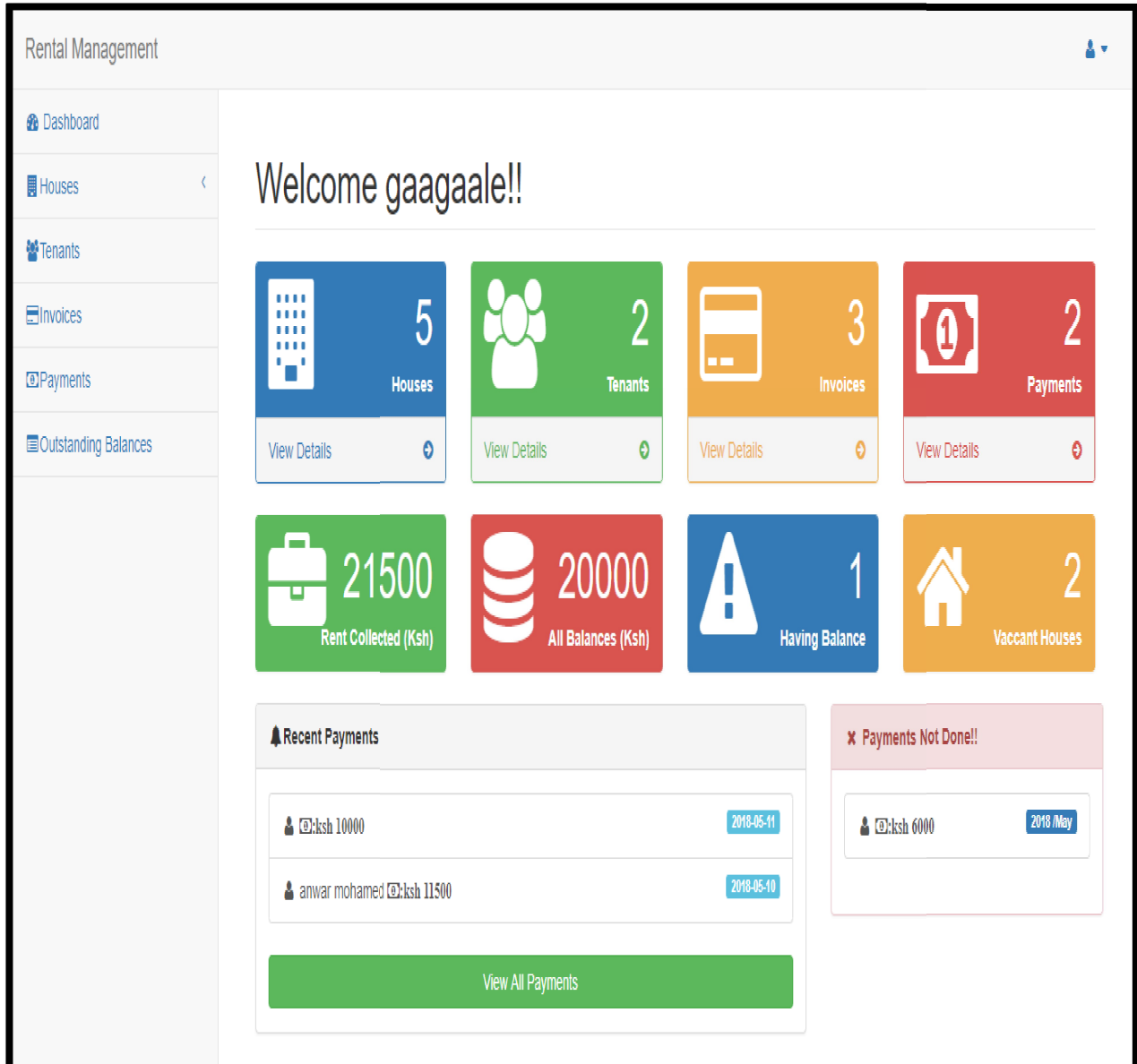


Figure 14: Dashboard

Chapter 10

Calculation

This House Rental management System has been computed effectively and was also confirmed effectively by enchanting Test cases it is user friendly, and has compulsory choices, which can be used by the user to do the wanted process.

In this software established by PHP as front end and back-end MYSQL in windows atmosphere, the aims that are achieved by the software are:

- Top operation of incomes.
- Well-organized Managing of reports.
- Summary of the actions.
- a lesser amount of handling time and receiving necessary information
- User responsive.
- Moveable and flexible for further development.

10.1 Goal of the project

The fundamental objective of this venture is to convey an advanced electronic data the board framework to the house rental to conquer their present data putting away and support issues. The house rental administration advisory group has arranged a rundown which contains a few objectives that should be satisfied by the new framework.

REVERENCE

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