

HOSTEL MENAGEMENT SYSTEM

*Project report submitted in partial fulfillment of
the requirements for the award of the diploma of*

DIPLOMA IN COMPUTER ENGINEERING

Awarded By

STATE BOARD OF TECHNICAL EDUCATION AND TRAINING

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DEPARTMENT OF COMPUTER ENGINEERING

B.V.C. INSTITUTE OF TECHNOLOGY & SCIENCE

(Approved by A.I.C.T.E, New Delhi, Accredited by NAAC & Permanently Affiliated to S B T.E.T
Vijayawada, certified by ODPL certification ISO 9001: 2015 for Quality Management System)

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2022

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CERTIFICATE

This is to certify that the project work on **“Hostel Management System”** submitted by **MS.DANGETI LAHARI SATYA DURGA (20252-CM-013) Ms. KOPPINEEDI LAKSHMIPRIYA(20252-CM-033) Ms. KANCHUSTAMBHAM ABHIRAMI(20252-CM-027) Ms. PENUMALLE JAYA NAGA RAJESWARI(20252-CM-051) Ms. RELANGI NAGA GOWTHAMA AKSHAYA SRI(20252-CM-056)** is examined and adjudged as sufficient as a partial requirement for the **Diploma In Computer Engineering** at State Board Of Technical Education And Training, Vijayawada is a Benefited record of the work done by all under my guidance and supervision.

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HOSTEL MANAGEMENT SYSTEM

ABSTRACT

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A Hostel management system is software that is designed to manage all the functions of a hostel. The aim of the Hostel management system is to carry out the activities of hostel in an effective and efficient way. This system completely automates all the Hostel's activities. This software will help user in case of reporting, registration and searching the information about residents and rooms. It will take operations of hostel to an upper level by providing faster access to data and allowing addition, upgrading, modification and deletion of data in a very systematic and reliable manner. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. We can overcome the efficiency of the system, thereby saving a lot of time and effort.

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CHAPTER 1

INTRODUCTION

In our current era of automated systems with it being either software or hardware, it's not advisable to be using manual system. Hostels without a management system are usually done manually. Registration forms verification to other data saving processes are done manually and most at times, they are written on paper. Thus a lot of repetitions can be avoided with an automated system. The drawbacks of existing systems lead to the design of a computerized system that will help reduce a lot of manual inputs. With this system in place, we can improve the efficiency of the system, thus overcome the drawbacks of the existing manual system. This system is designed in favour of the hostel management which helps them to save the records of the students about their rooms and other things. It helps them from the manual work from which it is very difficult to find the record of the students and the mess bills of the students, and the information of about the those ones who had left the hostel years before.

CHAPTER-2

SYSTEM ANALYSIS AND DESCRIPTION

EXISTING SYSTEM:

- ❖ Early days hostels are managed manually. It required lot of time to record or to retrieve the details.
- ❖ Room is allotted according to the room requirements and other special facilities demanded by the student.
- ❖ The employees who have to record the details must perform their job very carefully. Even a small mistake would create a lot of problems. Security of information is very less.
- ❖ In addition to its maintenance of member details, room status etc., manually is a complex task.
- ❖ Room categories: single, double, air-conditioned and corner.

DISADVANTAGES OF EXISTING SYSTEM:

- ❖ Security of information is very less.
- ❖ Time taking process.
- ❖ Maintain manually and visit physically.

PROPOSED SYSTEM:

- ❖ Long-term storage of records.
- ❖ High accuracy in calculations.
- ❖ Efficiency in modification and retrieval of data.
- ❖ Utilization of time and work force.
- ❖ Storage space for bulky records can be ignored.

ADVANTAGES OF PROPOSED SYSTEM:

- ❖ No need to visit physically.
- ❖ Take less time.
- ❖ Provides more security.
- ❖ Provide the functionality to make own bookings
- ❖ Update your web site without the need to get a web designer involved.
- ❖ It tracks all the information of residents, Rooms etc
- ❖ Manage the information of residents.
- ❖ Shows the information and description of the Rent, Hostel

MODULES DESCRIPTION:

- ❖ **Registration:** Allows to add the details of the students regarding personal information, Academic information ,room details etc. Student details can also be modified and deleted.
- ❖ **Room Details:** Allows the user to add details of rooms.Also possible to view the status of rooms such as occupied, vacant. Room details can also be modified and detected.
- ❖ **Fees:** Allows to enter the Fees details of the student. Student Fees details can also be modified and detected.
- ❖ **Admin:** Allows to add the details of students. Student details could be modified and deleted. Viewing the students as well as searching also could be done.
- ❖ **Student:** Allows to register and sign in and manage bookings
- ❖ **Status:** Displays the details of the student staying in rooms. Depending on the register id Student details will be displayed.
- ❖ **Reports:** Student Report could be generated.

SDLC MODEL:

DEFINITION:

SDLC is the process of following a software project within an organization. It consists of a detailed plan that describes how to develop, maintain, replace, modify, or improve specific software. The life cycle defines methodologies for improving software quality and the overall evolutionary process.

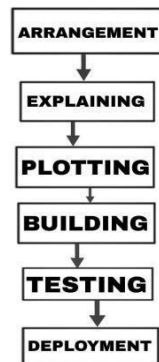


Fig:2.1System Evolution Life Cycle Diagram

SDLC METHODS:

Various software evolution lifecycle models have been defined and designed to follow during the software evolution process. These models are also called "software evolution process models ".Each process model carries out a series of steps specific to that type to ensure the success of the software evolution process. Following are the most important and popular SDLC models followed in the industry:

- ❖ Waterfall Method
- ❖ Iterative Method
- ❖ Spiral Method
- ❖ V-Method

V-MODEL DESIGN:

Under The V Model is planned in parallel with the test phase corresponding to the evolution phase. So "V" has a validation phase on one side and a validation phase on the other side. The coding phase combines two aspects of a V Model.

The below figure illustrates the different phases in V-Model of SDLC:

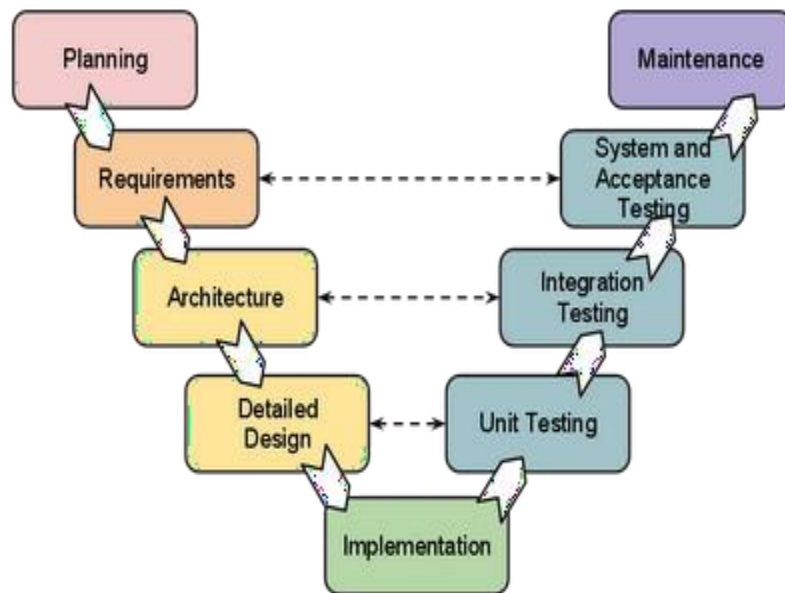


Fig:2.2 V-Model for SDLC

SAMPLECODING:

ROOM MODIFICATION CODE:

```
<?php
session_start();
?>

<html>
<head>
<title>HMS-modify-room</title>
<script type="text/javascript" src="jquery-3.6.1.min.js"></script>
<link rel="stylesheet" href="main.css">
<style>
body{background-image:url(cloud.jfif);
    background-repeat:no-repeat;
    background-attachment:fixed;
    background-size:100% 100%;font-family: "Poppins", sans-serif;font-size:16px;}
</style>
</head>

<body style="margin:0px;">
<div style="float:left;margin-left:80px;margin-top:100px;">

<?php
$c=mysqli_connect("localhost","root","");
$db=mysqli_select_db($c,"bvchdb");
$z=$_SESSION['v1'];
if(empty($z))
{echo("<script LANGUAGE='JavaScript'>
    window.alert('enter room name..');
    window.location.href='admin.php';</script>");
}
$fgg=1;
$d=mysqli_query($c,"select * from rooms");
while($r=mysqli_fetch_array($d)){
```

```
if($r['type']==$z)
{
$fgg=9;
}
}
if($fgg!=9)
{
echo("<script LANGUAGE='JavaScript'>
    window.alert('room not found');
    window.location.href='admin.php';</script>");
}
$du=mysqli_query($c,"select * from rooms where type='$z'");
if($du)
{
echo "<table border=1 cellspacing=2 cellpadding=6>";
while($r=mysqli_fetch_array($du))
{
echo "<tr><td>type</td>";
echo "<td>".$r['type']. "</td></tr>";
$s7=$r['type'];
$_SESSION['vara22']=$s7;
echo "<tr><td>no.of rooms</td>";
echo "<td>".$r['noofrooms1']. "</td><td id='1'>change</td></tr>";
$s6=$r['noofrooms1'];
echo "<tr><td>available rooms</td>";
echo "<td>".$r['noofrooms']. "</td><td></td></tr>";
echo "<tr><td>fees</td><td></td><td id=2>change</td></tr>";
echo "<tr><td>single installment</td>";
echo "<td>".$r['sin']. "</td><td></td></tr>";
$s5=$r['sin'];
echo "<tr><td>2 installments </td>";
echo "<td>".$r['dou']. "</td><td ></td></tr>";
$s4=$r['dou'];
echo "<tr><td>8 installments </td>";
```

```

echo "<td>".$r['m1'];
$s3=$r['m1'];
echo ",   ".$r['m2']. "</td><td></td></tr>";
$s2=$r['m2'];
echo "<tr><td>one semester </td>";
echo "<td>".$r['onesem']. "</td><td></td></tr>";
$s1=$r['onesem'];
}
echo "</table>";
}

```

```

mysqli_close($c);

```

```

?>

```

```

</div>

```

```

<div style="float:right;margin-right:100px;margin-top:80px;">

```

```

<div id="d1" style="display:none">

```

```

<form action="modify3.php" method="POST">

```

```

Enter number of rooms you want to add:<br>

```

```

<input type="number" name="e"/>

```

```

<button>ok</button>

```

```

</form></div>

```

```

<div id="d2" style="display:none;">

```

```

<h2>Enter new fee details</h2>

```

```

<form action="modify4.php" method="POST">

```

```

<table border=1 cellpadding=2 cellspacing=6>

```

```

<tr><td>Academic year Fees as per installments:</td>

```

```

<td></td></tr>

```

```

<tr><td>single installment</td>

```

```

<td><input type="number" name="sif" placeholder="single installment fee"/></td></tr>

```

```

<tr><td>2 installments:</td>

```

```

<td><input type="number" name="dif" placeholder="enter fee per installment"/></td></tr>

```

```

<tr><td>8 installments:</td>

```

```

<td width=100px><input type="number" name="mif" placeholder="enter fee of 1st

```

```
installment"/><br>
<input type="number" name="mif2" placeholder="enter fee per each of 2-8
installments"/></td></tr>
<tr><td>fee or single sem:</td>
<td><input type="number" name="ons" placeholder="enter fee for single
semester"/></td></tr>
<tr><td></td>
<td><input type="submit" value="change"/></tr>
</table>
</form>
</div>
</div>
<script>
$(document).ready(function(){

$("#back").click(function(){
window.location="modify.php";
});
$("#1").click(function(){
$("#d1").show();
$("#d2").hide();
});
$("#2").click(function(){
$("#d2").show();
$("#d1").hide();
});
});
</script>
</body>
</html>
```

ROOM ALLOCATION CODE:

```
<?php
session_start();

$p=$_SESSION['var6name'];

$ty=$_SESSION['var5name'];

$ins=$_SESSION['vara4'];

$c=mysqli_connect("localhost","root","");

$db=mysqli_select_db($c,"bvchdb");

$du=mysqli_query($c,"select * from rooms where type='$ty'");

if($du)
{
while($r=mysqli_fetch_array($du))
{
$nof=$r['noofrooms'];

$ss=$r['sin'];
}

if($nof<1)
{
echo("<script LANGUAGE='JavaScript'>

    window.alert('no rooms');

    window.location.href='viewrequest2.php';

</script>");
```

```
}

else

{

if($ins=="single installment")

{

$de=mysqli_query($c,"select sin from rooms where type='$ty'");

while($rr=mysqli_fetch_array($de)){

$f=$rr['sin'];

}

}

else if($ins=="2 installements")

{

$de=mysqli_query($c,"select dou from rooms where type='$ty'");

while($rr=mysqli_fetch_array($de)){

$f=$rr['dou']*2;

}

}

else if($ins=="8 installements")

{

$de=mysqli_query($c,"select m1,m2 from rooms where type='$ty'");

while($rr=mysqli_fetch_array($de)){

$f=$rr['m1']+( $rr['m2']*7);

}

}
```

```
}

else if($ins=="one sem")

{

$de=mysqli_query($c,"select onesem from rooms where type='$ty'");

while($rr=mysqli_fetch_array($de)){

$f=$rr['onesem'];

}}

$ss=substr($ty,1,5).substr($ss,0,3);

$nof=$nof-1;

$i=mysqli_query($c,"UPDATE rooms SET noofrooms='$nof' WHERE type='$ty'");

$kl=mysqli_query($c,"UPDATE reqroom SET

alloted='yes',report='0',fees='$f',roomid='$ss' WHERE pin='$p'");

if($kl)

{

echo "<script LANGUAGE='JavaScript'>

    window.alert('sucessfully alloted');

    window.location.href='admin.php';

</script>";

}

}

}

else
```

```
{  
    echo "<br>failed";  
}  
mysqli_close($c);  
?>
```

CHAPTER 3

REQUIREMENT ANALYSIS

Hardware Requirements:

- Processor : Intel Core Processor
- Operating System : Windows Vista ,Windows7, Ubuntu
- Memory : 1gb Ram Or More
- Hard Disk Space : Minimum 3 Gb For Database Usage For Future

Software Requirements:

- A PHP engine : XAMPP-Windows.
- A database server : MySQL Server 5.0
- A web server : Apache HTTP Server 2.2

FUNCTIONAL REQUIREMENTS:

- User id is provided user when they register.
- The system must only allow user with valid id and password to manipulate the system .
- The system performs authorization process which decides what user level can access.
- The user must be able to logout after they finished using system.
- System must be able to verify information .
- System must be able to resist access to information if information is wrong.
- System must be able to search the database based on select search type .
- System must be able to filter rooms based on user request.
- System must be able to show the room details in table view.

NON-FUNCTIONAL REQUIREMENTS:

- **Efficiency Requirement:** When a Hostel management system is implemented, admin and user can easily access accommodation as searching and room allocation and vacation will be very faster.
- **Reliability Requirement:** The system should accurately performs member registration, member validation, report generation, room allocation and vacation.
- **Usability Requirement:** The system is designed for a user friendly environment so that student and staff of hostel can perform the various tasks easily and in an effective way.
- **Implementation Requirements:** In implementing whole system it uses html in front end with php as server side scripting language which will be used for database connectivity and the backend that is the database part is developed using mysql.

CHAPTER – 4

SOFTWARE DESIGN

DESIGN OVERVIEW:

The design phase begins with the specification of the software requirements that you develop. Design is the first step towards the transition from the problem domain to the solution domain. Design is essentially a bridge between the final solution to meet the required specifications and requirements. It is the most critical factor affecting the quality of the software.

The design process for the software system has two levels.

1. System Design or Top level design
2. Detailed Design or Logical Design

DETAILED DESIGN:

In detailed design the interconnection of the modules or how the specifications of the module can be satisfied is decided. Some properties for a software system design is

- ❖ Verifiability
- ❖ Completeness
- ❖ Consistency
- ❖ Traceability
- ❖ Simplicity/Understandability

DATA FLOWDIAGRAMS:

The DFD gets a view of the system's input process output. That is, data objects flow into the software, and the resulting data objects transformed by the processing elements flow out of the software. Data objects represented by transformations with arrows on labels are represented by circles, also called bubbles. DFDs are displayed hierarchically. In other words, the first data flow model represents the system as whole.

SEQUENCETABLES:

Table ▲	Action	Rows	Type	Collation	Size	Overhead
admlgin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
payment	★ Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16.0 KiB	-
reqroom	★ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	32.0 KiB	-
rooms	★ Browse Structure Search Insert Empty Drop	10	InnoDB	latin1_swedish_ci	16.0 KiB	-
stu_reg	★ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	32.0 KiB	-

Table:4.1 Database Details

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 type	varchar(100)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	2 noofrooms1	int(11)			No	None			Change Drop More
<input type="checkbox"/>	3 noofrooms	int(11)			No	None			Change Drop More
<input type="checkbox"/>	4 sin	int(11)			No	None			Change Drop More
<input type="checkbox"/>	5 dou	int(11)			No	None			Change Drop More
<input type="checkbox"/>	6 m1	int(11)			No	None			Change Drop More
<input type="checkbox"/>	7 m2	float			No	None			Change Drop More
<input type="checkbox"/>	8 onesem	int(11)			No	None			Change Drop More

Table:4.2 Room Details


Name	Type	Collation	Attributes	Null	Default	Comments	Extra
uid 	varchar(30)	latin1_swedish_ci		No	None		
pw	varchar(20)	latin1_swedish_ci		No	None		

Table:4.3 Admin Login



























#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	pinno 	varchar(30)	latin1_swedish_ci		No	None			 Change  Drop  More
2	Name	varchar(50)	latin1_swedish_ci		No	None			 Change  Drop  More
3	Course	varchar(10)	latin1_swedish_ci		No	None			 Change  Drop  More
4	Address	varchar(100)	latin1_swedish_ci		No	None			 Change  Drop  More
5	Phoneno	int(11)			No	None			 Change  Drop  More
6	Emailid	varchar(50)	latin1_swedish_ci		No	None			 Change  Drop  More
7	usid 	varchar(20)	latin1_swedish_ci		No	None			 Change  Drop  More
8	pw	varchar(12)	latin1_swedish_ci		No	None			 Change  Drop  More

Table:4.4 Registration Details

HOSTEL MANAGEMENT SYSTEM

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	pin	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	2	n	varchar(30)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	3	co	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	4	ad	varchar(100)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	5	phn	int(11)			No	None		Change Drop More
<input type="checkbox"/>	6	ei	varchar(50)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	7	usid	varchar(30)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	8	t	varchar(100)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	9	ni	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	10	du	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	11	ms	varchar(15)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	12	dj	varchar(30)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	13	alloted	varchar(10)	latin1_swedish_ci		No	0		Change Drop More
<input type="checkbox"/>	14	roomid	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	15	report	varchar(300)	latin1_swedish_ci		No	None		Change Drop More
<input type="checkbox"/>	16	fees	float			No	None		Change Drop More

Table:4.5 Resident Table:

DATAFLOW DIAGRAMS:

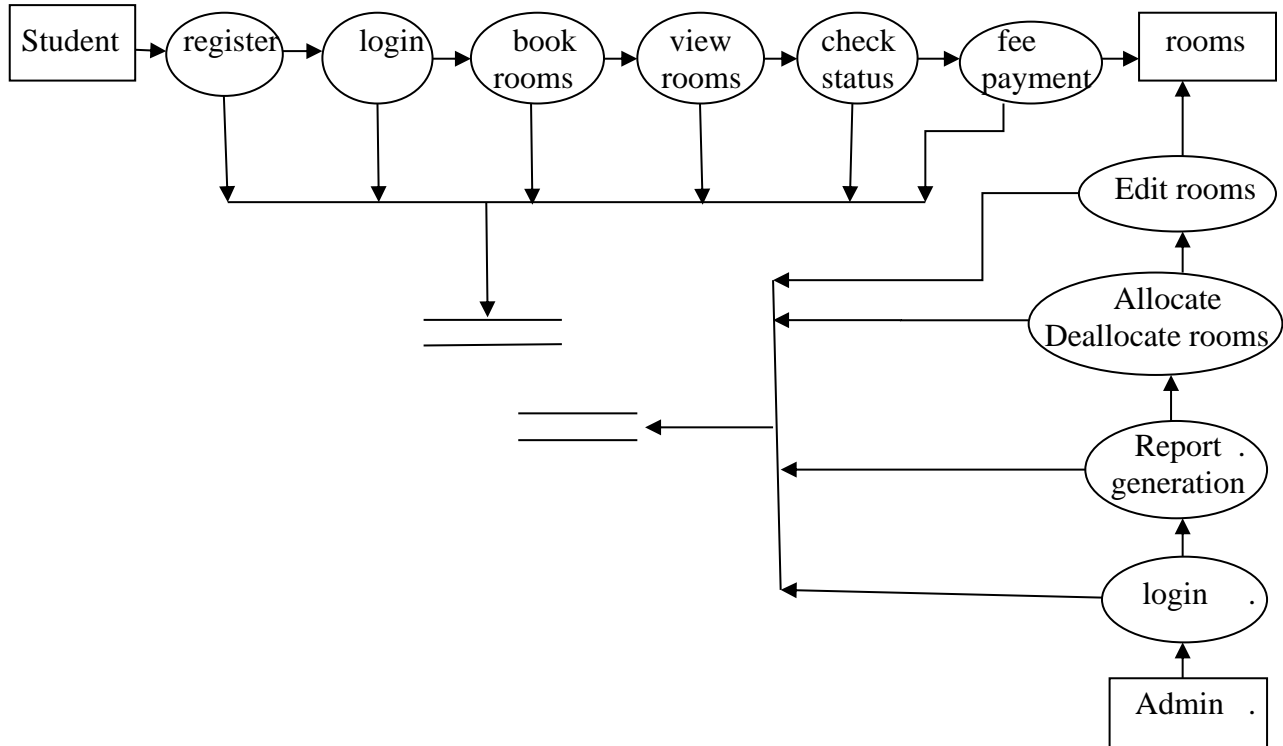


Fig:4.6 DATAFLOW DIAGRAM

SYSTEM ARCHITECTURE:

A large amount of structured information is buried in unstructured text. The information extraction system extracts structured relationships in a document and enables sophisticated SQL-like queries in unstructured text. The information extraction system is incomplete and the output has incomplete accuracy and recall (that is, it contains false tuples and misses good tuples). In general, extraction systems have a set of parameters that can be used as "knobs" to adjust the system to precision or range. The choice of documents to process in the extraction system also affects the quality of the extracted relationships relation

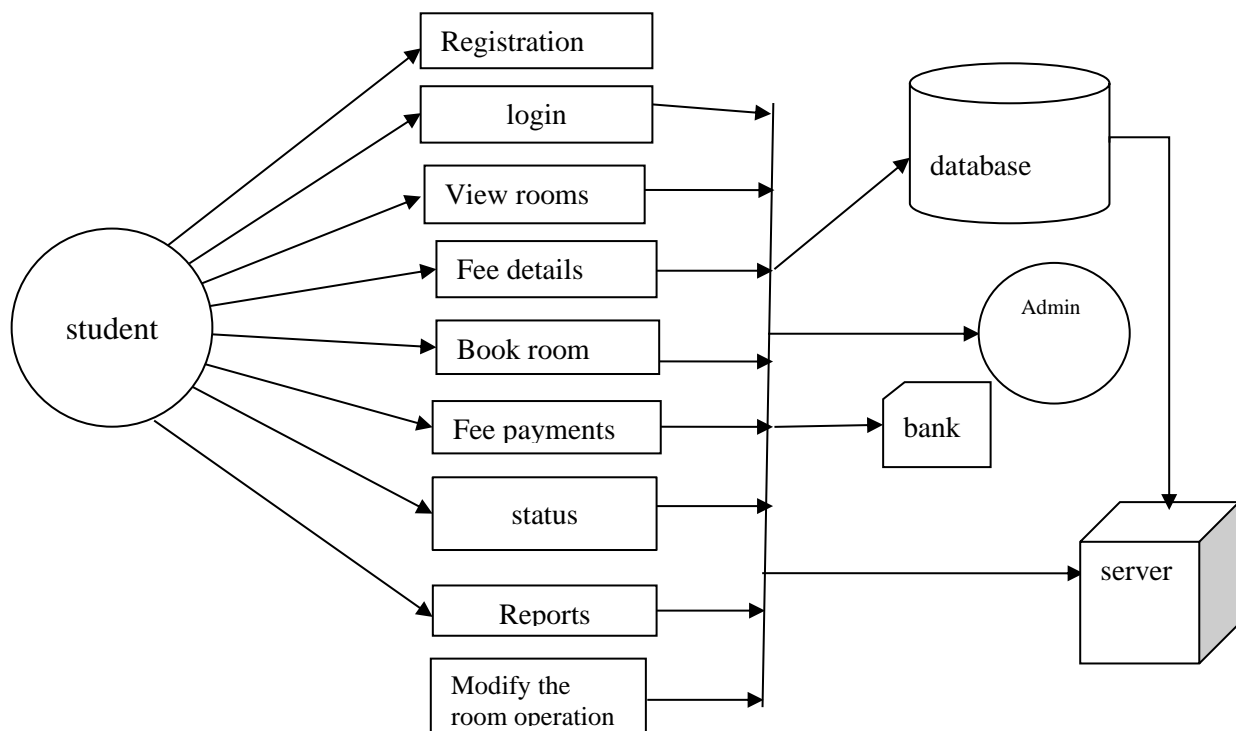


Fig:4.7 SYSTEM ARCHITECTURE.

UNIFIED MODELING LANGUAGE DIAGRAMS:

UML stands for Unified Modeling Language. UML is a standardized general-purpose modeling language in the field of object-oriented software engineering. This standard was created and maintained by the Object Management Group.

The goal is to become a common language for creating models of UML object. The current format consists of two main components of UML meta modeling notation. Any form of method or process may be added in the future.

USE CASE DIAGRAM:

UML (Unified Modeling Language) use case diagrams are a type of behavior diagram defined and generated by use case analysis. Its purpose is to provide a graphic overview of the features provided by the system in terms of actors, goals (shown in usecases), and dependencies between these use cases. The main purpose of the use case diagram is to show what system functions are performed for what actors. You can explain the role of the actor in the system depicted.



Fig:4.8 USECASE DIAGRAM

CLASS DIAGRAM:

In software engineering, a UML (Unified Modeling Language) class diagram is a type of static structure diagram that describes the structure of a system by showing the relationships between the classes, attributes, operations (or methods) of the system and the system class. Indicates whether some classes contain information.

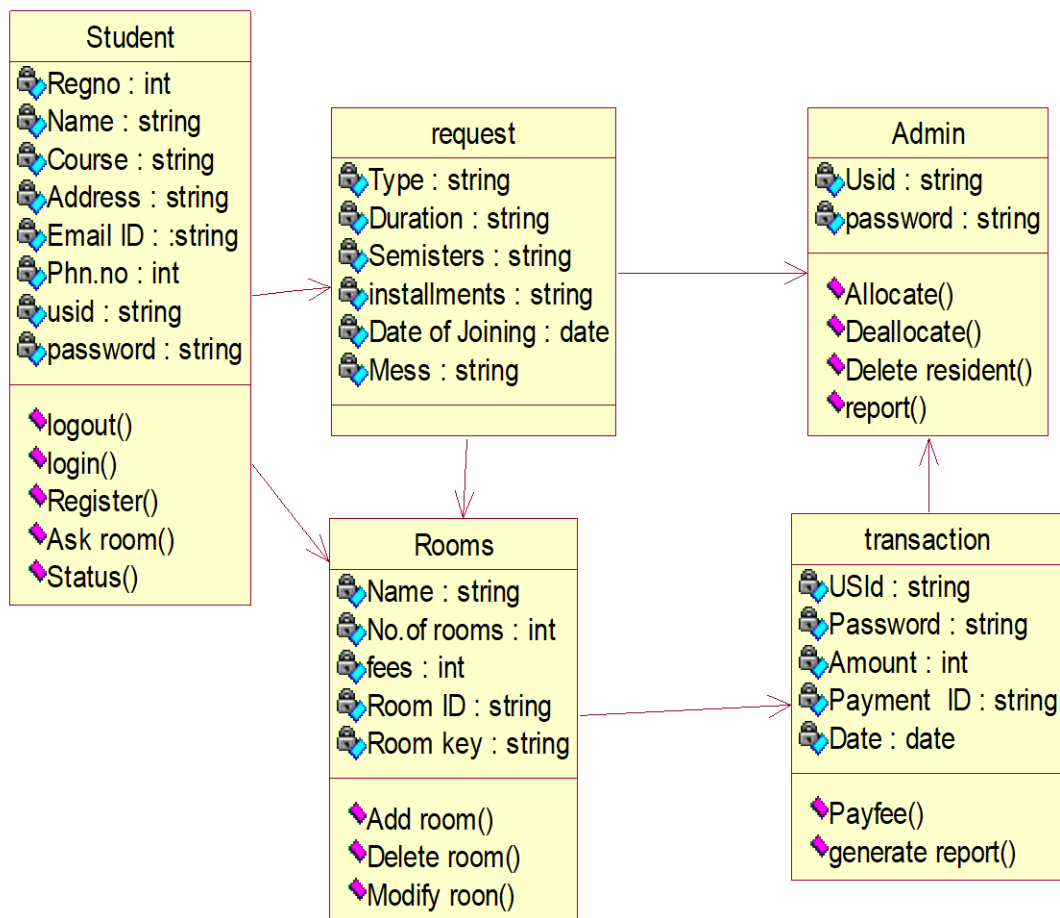


Fig:4.9 CLASS DIAGRAM

SEQUENCE DIAGRAM:

A UML (Unified Modeling Language) sequence diagram is a kind of interaction diagram that shows how and in what order processes work with each other. This is the structure of the message sequence chart. Sequence diagrams are also known as event diagrams, event scenarios, and timing diagrams.

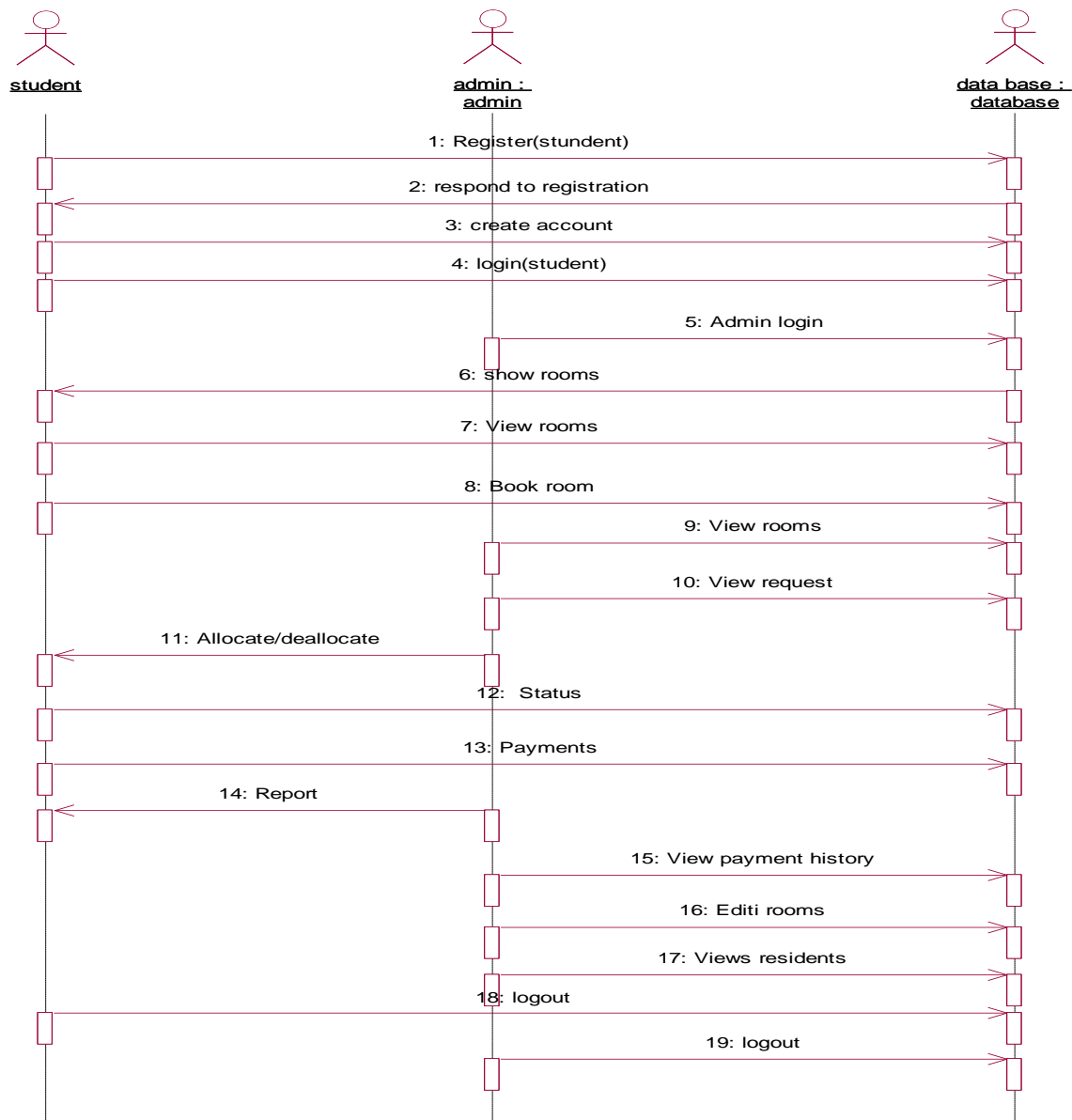


Fig:4.10 ACTIVITY DIAGRAM FOR ADMIN

ACTIVITY DIAGRAM:

An activity diagram, when selected, is a graphical representation of the work flow of activities and actions for procedures that support repetition and concurrency. Activity diagrams in an integrated modeling language can be used to describe the business and operational step-by-step workflows of system components. The activity diagram shows the overall control flow control.

ACTIVITY DIAGRAM FOR ADMIN:

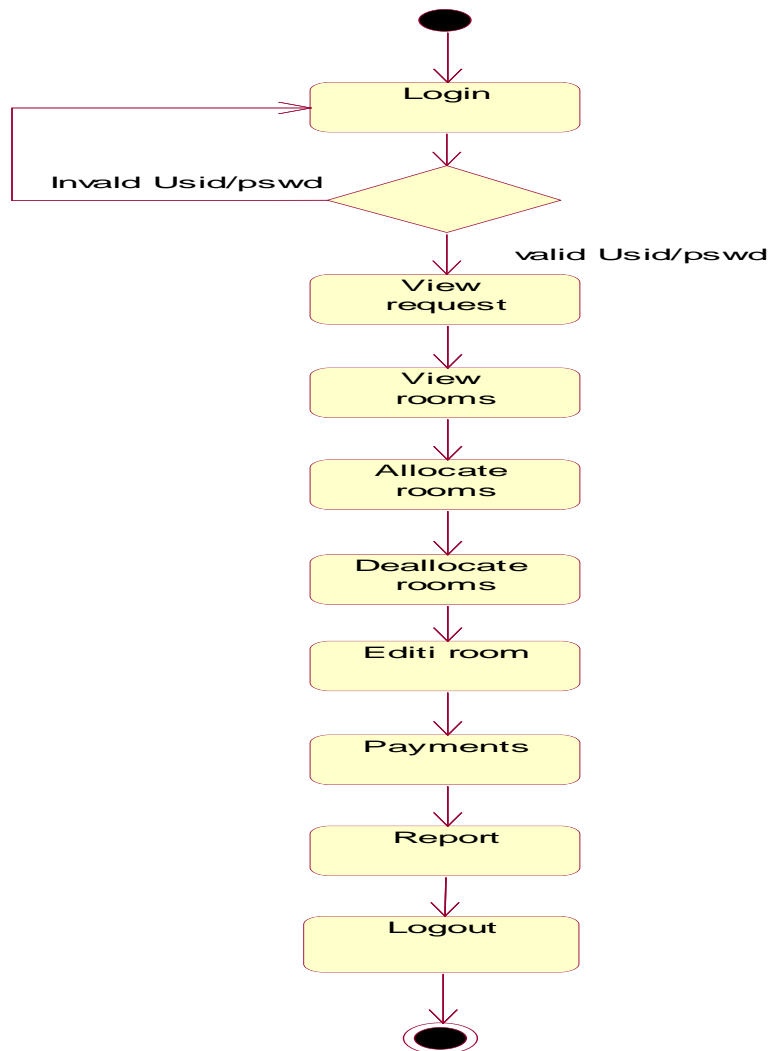


Fig:4.11 ACTIVITY DIAGRAM FOR ADMIN

ACTIVITYDIAGRAMFOR USER:

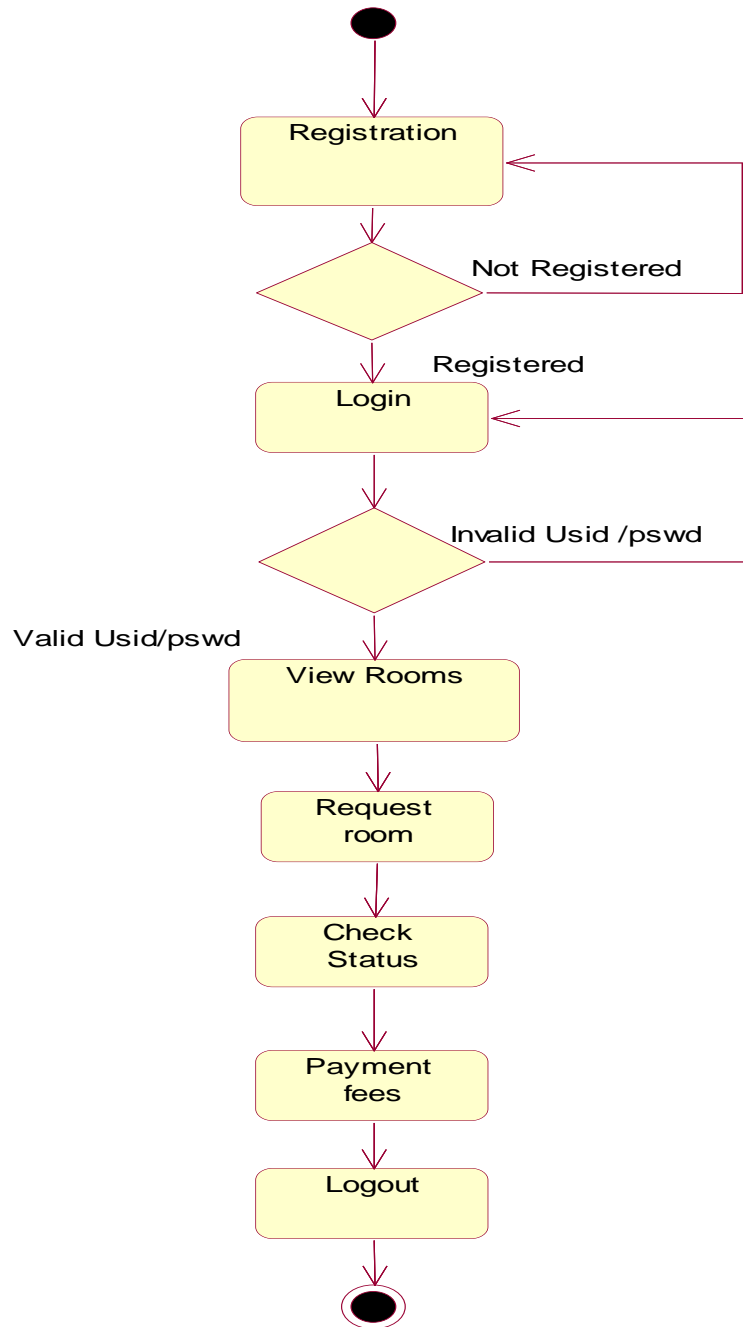


Fig:4.12: ACTIVITY DIAGRAM FOR USER

COMPONENT DIAGRAM:

A component diagram shows a series of components and the relationships. A component diagram represents a static implementation view of a system. A component diagram contains a number of classes and interfaces. Contains a collection of graphic vertices and arcs.

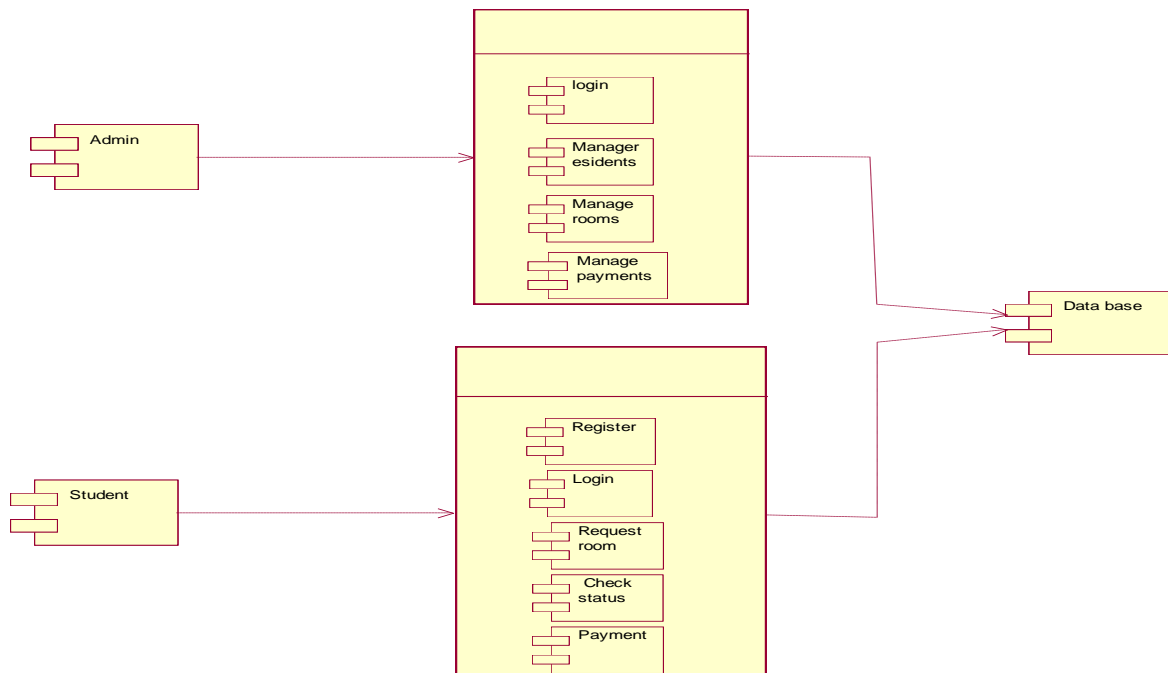


Fig:4.13 COMPONENTDIAGRAM

DEPLOYMENTDIAGRAM:

The placement diagram contains the relationship with the no deset. Here is an example of static deployment of the system. The distribution contains one or more components. A node is a physical element that exists at run time and represents a computational resource. Nodes are rendered in cubes.

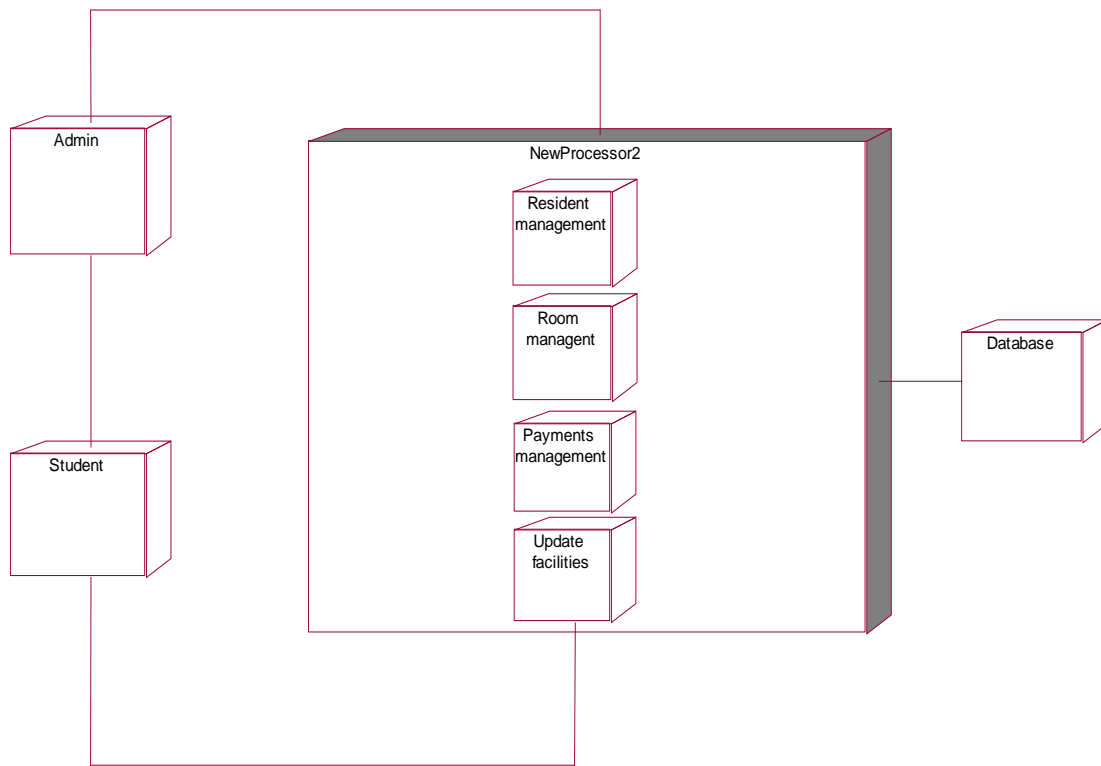


Fig:4.14 DEPLOYMENT DIAGRAM

4.42 ENTITY-RELATIONSHIP DIAGRAM:

E-R (Entity-Relationship) Diagram is used to represent the relationship between entities in the table.

The symbols used in E-R diagrams are:

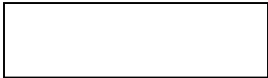
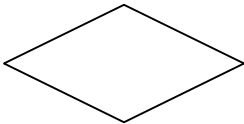
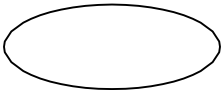


<u>SYMBOL</u>	<u>PURPOSE</u>
	Represent Entity Sets.
	Represent Relationship
	Represent Attribute
	Line represents flow
	Data Flow from Entity to Attribute

Fig:4.15 SYMBOLS FOR ENTITY-RELATIONSHIP DIAGRAMS

4.12 ENTITY-RELATIONSHIP DIAGRAM:

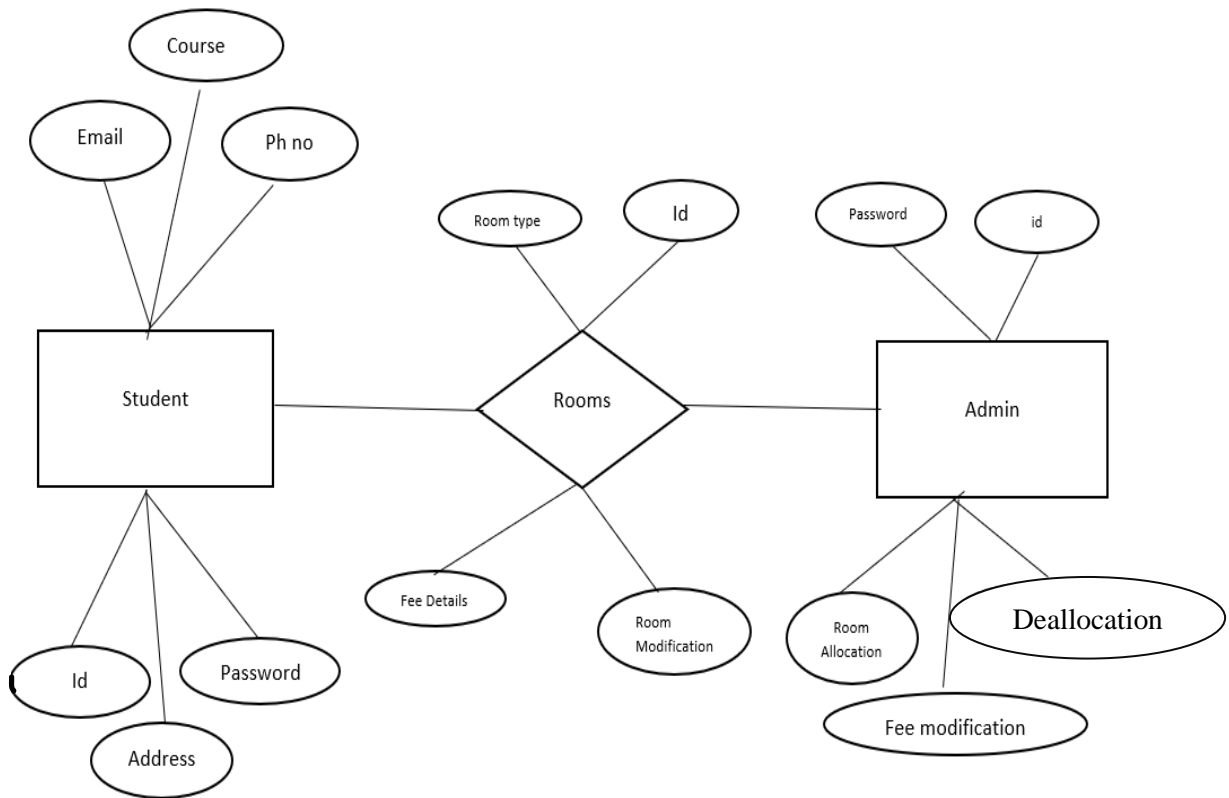


Fig:4.16 ENTITY-RELATIONSHIP DIAGRAM

CHAPTER - 5

IMPLEMENTATION

HTML:

The Hyper Text Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

PHP:

PHP is a general-purpose scripting language geared toward web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1993 and released in 1995.[[] The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor. PHP is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.]

JAVASCRIPT:

JavaScript, often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on users' devices. JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It has dynamic typing, prototype-based object-orientation, and first-class functions. It is multi-paradigm, supporting event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM).

CSS:

Cascading Style Sheets, fondly referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page. It describes how a webpage should look: it prescribes colors, fonts, spacing, and much more. In short, you can make your website look however you want. CSS lets developers and designers define how it behaves, including how elements are positioned in the browser.

While html uses tags, css uses rulesets. CSS is easy to learn and understand, but it provides powerful control over the presentation of an HTML document.

MYSQL:

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language. A relational database organizes data into one or more data tables in which data may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

CHAPTER-6

SYSTEM TESTING

INTRODUCTION:

The purpose of testing is to find errors. The outcome of a test task is the process of trying to discover all possible obstacles or weaknesses. This provides a way to verify the functionality of components, subassemblies, assemblies and/or finished products. This is the process of running software to ensure that it does not fail in an unacceptable way to meet the software system requirements and user expectations. There are many different types of tests. Each test type corresponds to a specific test requirement.

TYPES OF TESTS:

TESTCASE:

All the test cases mentioned above passed successfully. No defects encountered shown in Tab 6.1

Test ID	TESTCASE NAME	INPUT	EXPECTED OUTPUT	OBTAINED OUTPUT	RESULT
T1	Admin login	Valid User ID,password	Admin page	Admin page	Success
T2	Admin login	invalid User ID,password	Invalid details	Invalid details	Success
T3	Student login	Valid User ID,password	Student page	Student page	Success
T4	Student login	invalid User ID,password	Invalid details	Invalid details	Success
T5	Student registration	Valid details	Create account	Create account	Success
T6	Student registration	Invalid details	Enter valid details	Enter valid details	Success
T7	Student account	Valid user ID,password	Successfully created,home page	Successfully created,home page	Success
T8	Student account	Invalid user ID,password	Enter valid userID, password	Enter valid userID,password	Success
T9	Book room	New booking/	Request sent	Request sent	Success

HOSTEL MANAGEMENT SYSTEM

		Not a resident			
T10	Book room	Already allocated	Check your status	Check your status	Success
T11	Status	Resident	Show details	Show details	Success
T12	Status	Not a Resident	Book your room..	Book your room...	Success
T13	Student payment	-	SBI collect	SBI collect	Success
T14	Admin allocate room	Room available	Allocated and Residents page	Allocated and Residents page	Success
T15	Admin allocate room	Room not available	Not possible, no rooms available	Not possible, no rooms available	Success
T16	Delete room	Valid room name and If there are no residents in the specified room	deleted	deleted	Success
T17	Delete room	Valid room name and If there are residents in the specified room	Not possible	Not possible	Success
T18	Delete room	Invalid room name	The room you specified is not found	The room you specified is not found	Success
T19	Add room	Enter correct details and unique room name	Successful, view room details page	Successful, view room details page	Success
T20	Add room	Enter correct details and existing room name	Room already exist	Room already exist	Success
T21	Modify an existing room	Valid room name	Modify page	Modify page	Success
T22	Modify an existing room	Invalid room name	Room not found	Room not found	Success
T23	Change fee structure to a specified room	Enter every detail	Updated, show Updated room details	Updated, show Updated room details	Success

T24	Change fee structure to a specified room	Enter invalid data	Reenter correct details	Reenter correct details	Success
T25	Increase/decrease available rooms of a specified type	Enter valid number	Updated, show Updated no. of rooms	Updated, show Updated no. of rooms	Success
T26	Increase/decrease available rooms of a specified type	Enter invalid data	Reenter correct details	Reenter correct details	Success
T27	deallocate a room/remove resident	Enter valid reg.no of the resident	Removed and unallocated, show residents	Removed and unallocated, show residents	Success
T28	deallocate a room/remove resident	Enter invalid reg.no of the resident	Not possible	Not possible	Success
T29	Generate report to a resident or user	Valid reg.no	Report generation.html	Report generation.html	Success
T30	Generate report to a resident or user	Invalid reg.no	Enter valid reg.no	Enter valid reg.no	Success
T31	View fee structure	-	Fee structure	Fee structure	Success
T32	Admin payment	-	SBI collect	SBI collect	Success

Table:6.1 Test Case Specifications

CHAPTER -7

SAMPLE SCREENS

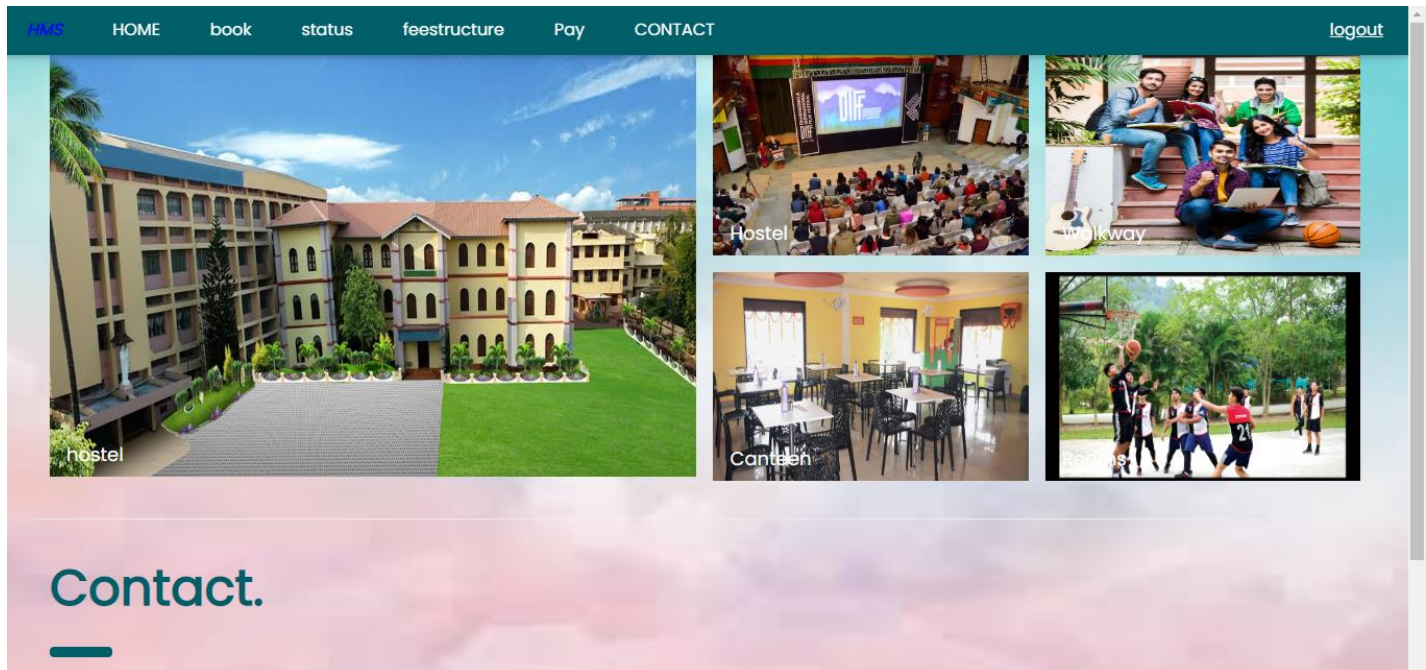


Fig:7.1 STUDENT HOMEPAGE

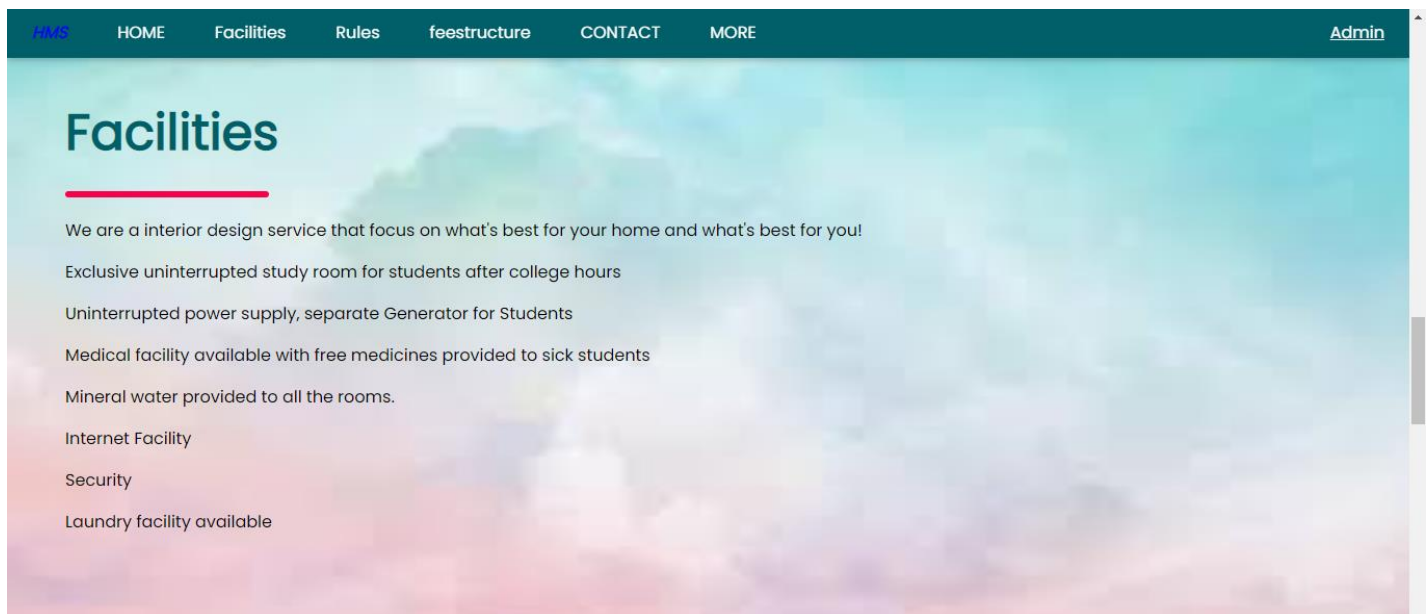


Fig:7.2 FACILITIES

Rules

[year guidance](#)

[admission](#)

[discipline policy](#)

Smoking, Alcohol & Narcotic consumption is strictly prohibited in and around the Hostel premises. Strict action will be taken against offenders.

Strict adherence to the prescribed dress code is required. Decency in dressing & demeanor is a must.

Loitering in the Hostel campus during the class hours will not be appreciated.

The Management & Staff will not be responsible for personal belongings.

Late comers will be penalized.

Students must keep the Campus & Rooms clean. Defacing walls, equipment, furniture etc., is strictly prohibited.

Birthday/Other Celebrations are strictly prohibited in Hostel.

Students must turn off all the electrical equipments & lights before leaving their rooms.

Students are not allowed to use electric stoves, heaters etc in rooms except in designated places.

Students are not allowed to organize any group activities in their room.

Fig:7.3 RULES

Fee structure

With a key focus on developing a self-sustained residential campus, Hostel facility is provided with separate accommodation for Male and Female students. College has a girls hostel inside the campus. Boys hostel is located outside the campus and is being maintained on lease basis. Ideal hostel facility with homely atmosphere is provided within the campus. Many recreation facilities are also provided.

Hostle Fee particulars:

s.no	Type	single installment	2 installments	8 installments		one sem
			per installment fee	1st installment fee	per each of 2-8 installments fee	
1	A/C Common Toilet (3-bed)	112900	58000	35700	11900	73500
2	AC DELUXE ROOM WITH ATTACHED TOILET WITH STUDY ROOM (3-BED)	137975	70500	43200	14400	90000
3	AC DELUXE ROOM WITH ATTACHED TOILET WITHOUT STUDY ROOM (3 Bed)	122975	63000	38700	12900	80000
4	AC ROOM WITH COMMON TOILET (4-BED)	107975	55500	34200	11400	70200
5	AC SUPER DELUXE ROOM WITH ATTACHED TOILET (2-	112975	70500	43200	14400	90000

Fig:7.4 FEE STRUCTURE

student ID	enter ID
name	enter name
course	enter course
address	enter permanent address
phone number	enter phone number
email	enter your mail id
submit	

Fig:7.5 STUDENT SIGN-UP PAGE

Type of room	NON-AC ROOM WITH COMMON TOILET (4-BED) ▼
Installments	single installment ▼
duration	<input checked="" type="radio"/> Academic Year <input type="radio"/> Single Semester
Mess	<input checked="" type="radio"/> vegetarian <input type="radio"/> Non-vegetarian
Date Of Joining	mm/dd/yyyy 📅
Book	

Fig:7.6 ROOM BOOKING PAGE

[HMS](#)
[HOME](#)
[book](#)
[status](#)
[feestructure](#)
[Pay](#)
[CONTACT](#)
[logout](#)

check your Status:

your report and allotment status will be updated within 3days....

Details:

student ID	20cm100
name	Tony
course	CME
address	amp
phone.no	88776677
emailID	tonu@gmail.com
UserID	tony
type of room	AC SUPER DELUXE ROOM WITH ATTACHED TOILET (2-BED)
no of installments	2 installments
Duration	AcademicYear

Fig:7.7 VIEW STATUS PAGE

[HMS](#)
[HOME](#)
[Facilities](#)
[Rules](#)
[feestructure](#)
[CONTACT](#)
[MORE](#)
[Admin](#)

Hostels

View

Admin Login

User name

password

login

Fig:7.8 ADMIN LOGIN

Back

Details:

Reg.no	20cm68
Name	Nani
Course	mce
Address	rjy
Phone.no	77886699
EmailID	nani@mail.com
UserID	nani
Type of Room	NON-AC ROOM WITH COMMON TOILET (1-BED)
No. of Installments	2 installements
Duration	AcademicYear
Mess	Non-vegetarian
Date of Joining	2023-01-05

Allocate

Report

Submit

Fig:7.9 REQUEST DETAILS

HOME Residents Requests Edit_Rooms Room_Details payments logout

enter student ID of resider Report

enter student ID of resider Delete

Rno	Room ID	Name	Course	Address	Phone.no	EmailID	UserID	No. of Installments	Duration	Mess	Date of Joining	report	fees
20cm27	C DEL122	Abhirami	cme	amp	88888899	Abhi@mail.com	abhi	single installment	AcademicYear	vegetarian	2022-12-08	0	122975
20cm51	C DEL137	Akshaya	cme	amp	88888888	Akshaya@whitemail.com	akshaya	single installment	AcademicYear	Non-vegetarian	2022-12-08	fgfg	137975
20cm69	C ROO107	fathima	aiml	kkd	99999999	fati@mail.com	fathima	one sem	Single Semester	Non-vegetarian	2023-01-05	howarre you	70200
20cm13	C DEL137	Priya	cme	amp	2147483647	Priya@whitemail.com	priya	single installment	Single Semester	vegetarian	2022-12-07	hi	135775
20cm56	ON-AC979	raji	cme	amp	56784	raji@mail.com	raji	2 installements	AcademicYear	vegetarian	2022-12-07	0	100000
20cm41	C	Sruthi	cme	amp	88888888	sruthi@mail.com	sruthi	single	AcademicYear	vegetarian	2022-	0	142975

Fig:7.10 RESIDENTS DETAILS PAGE

Fig:7.11 ADDING ROOM PAGE

type	AC DELUXE ROOM WITH ATTACHED TOILET WITH STUDY ROOM (3-BED)	
no.of rooms	20	change
available rooms	16	
fees		change
single installment	137975	
2 installments	70500	
8 installments	43200, 14400	
one semister	90000	

Enter new fee details

Academic year Fees as per installments:	
single installment	single installment fee
2 installments:	enter fee per installment
8 installments:	enter fee of 1st installmer enter fee per each of 2-8
fee or single sem:	enter fee for single semis
	change

Fig:7.12 ROOM MODIFICATION PAGE

CHAPTER-8

CONCLUSION

To conclude the description about the project, the project, developed using PHP with MySQL & XAMPP is based on the requirement specification of the user and the analysis of the existing system. HOSTEL MANAGEMENT SYSTEM is very useful for hostel allotment and mess fee calculation. This hostel management software is designed for people who want to manage various activities in the hostel. For the past few years the numbers of educational institutions are increasing rapidly. Thereby the numbers of hostels are also increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented.

CHAPTER-9

FUTURE ENHANCEMENTS

- **Employee Payroll:** we can include the facility in the system that will generate payroll for all the employees of the hostel.
- **Resident attendance:** The attendance of the resident will be marked each time the resident enters or leaves the hostel premises.
- **Accounting Details except Hosteller's Fee details:** All the other accounting details can be maintained in addition to the fee details

CHAPTER-10

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- <http://www.freepdfbook.com/principles-web-design-6th/>
- <https://www.mheducation.co.in/php-the-complete-reference-9780070223622-india>

