

## 1. INTRODUCTION

### 1.1 PROBLEM DEFINITION

This system is designed in favor 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. All the hostels at present are managed manually by the hostel office.

The Registration form verification to the different data processing is done manually. Thus there are a lot of repetitions which can be easily avoided. 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.

We can improve the efficiency of the system, thus overcome the drawbacks of the existing system. We design this system of the hostel management especially for the college hostel, through this they cannot require so efficient person to handle and calculate the things. This system automatically calculates all the bills and issued the notifications for those students who are against some rules.

## **2. SYSTEM ENVIRONMENT**

### **2.1 HARDWARE CONFIGURATION**

Processor : Pentium  
RAM : 512MB  
Hard Disk : 40GB  
Monitor : 15" Color Monitor

### **2.2 SOFTWARE CONFIGURATION**

Operating System : Windows 7/8/10  
Language : PHP  
Database : MYSQL

### **3. SYSTEM ANALYSIS**

#### **3.1 EXISTING SYSTEM**

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. We can improve the efficiency of the system, thus overcome the following drawbacks of the existing system.

- More human error.
- Repetition of the same procedures.
- Low security
- Data redundancy
- Difficult to handle
- Difficult to update data
- Record keeping is difficult
- Backup data can be easily generated

### **3.2 PROPOSED SYSTEM**

The drawback of the existing system is that it is very difficult to retrieve data from records. It is difficult to handle the whole system manually and it is less accurate and to keep the data in records for future reference because it may get destroyed. Moreover it is very difficult to retrieve data. Redundancy of data may occur and this may lead to the inconsistency. The manual system is so time-consuming. The proposed system is very easy to operate. Speed and accuracy are the main advantages of proposed system. There is no redundancy of data. The data are stored in the computer secondary memories like hard disk, etc. it can be easily receive and used at any time. The proposed system will easily handle all the data and the work done by the existing systems. The proposed systems eliminate the drawbacks of the existing system to a great extent and it provides tight security to data.

### **3.3 SOFTWARE TOOL USED**

The whole Project is divided in two parts the front end and the back end.

#### **3.3.1 FRONT END**

The front end is designed using of Php, css, Java script.

### PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for *Personal Home Page*, it now stands for *PHP: Hypertext Preprocessor*, a recursive backronym. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge

### CSS

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. The basic purpose of CSS is to separate the content of a web document (written in any markup language) from its presentation (that is written using Cascading Style Sheets). There are lots of benefits that one can extract through CSS like improved content accessibility, better flexibility and moreover, CSS gives a level of control over various presentation characteristics of the document. It also helps in reducing the complexity and helps in saving overall presentation time. CSS gives the option of selecting various style schemes and rules according to the requirements and it also allows the same HTML document to be presented in more than one varying style.

### **JAVA SCRIPT**

JavaScript is considered to be one of the most famous scripting languages of all time. JavaScript, by definition, is a Scripting Language of the World Wide Web. The main usage of JavaScript is to add various Web functionalities, Web form validations, browser detections, creation of cookies and so on. JavaScript is one of the most popular scripting languages and that is why it is supported by almost all web browsers available today like Firefox, We used the browser Opera or Internet Explorer. JavaScript is considered to be one of the most powerful scripting languages in use today. It is often used for the development of client-side web development. JavaScript is used to make web pages more interactive and dynamic.

JavaScript is a light weight programming language and it is embedded directly into the HTML code. JavaScript, as the name suggests, was influenced by many languages, especially Java.

### **3.3.2 BACK END**

The back end is designed using mysql which is used to design the databases

### **MySQL**

MySQL ("My S-Q-L", officially, but also called "My Sequel") is (as of July 2013) the world's second most widely used open-source relational database management system (RDBMS). It is named after co-founder Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation .MySQL is a popular choice of database for use in web applications, and is central components of the widely used LAMP open source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality.

## 4. SYSTEM DESIGN

### 4.1 TABLE DESIGN

The following are the tables that are involved in the proposed system

#### 1.LOGIN

FIELD NAME	DATA TYPE
Username	Varchar
Password	Varchar

**2. STUDENT**

<b>FIELD NAME</b>	<b>DATA TYPE</b>
Stud_id	Int
Student_name	Varchar
Class	Varchar
Dept	Varchar
Email	Varchar
Phone_number	Int
Pass_word	Varchar
Admission_id	Varchar
Fee_payed	Float
Created_user	Varchar
Current_date	Timestamp



### 3. ROOM

FIELD NAME	DATA TYPE
Room_id	int
Block	Varchar
Floor	Varchar
Room_type	int
Capacity	Int
Occupied	Int
Available	Int

### 4. ROOM TYPE

FIELD NAME	DATA TYPE
Type_id	int
Type	Varchar

## 5.ASSIGN ROOM

FILED NAME	DATATYPE
Stud_id	Int
Room_id	Int
Occpaid_date	Date
Total_paid	Int
Permite_admin	Varchar
Create_user	Timestamp

## 6.STUDENT ATTENDENCE

FIELD NAME	DATATYPE
Stud_id	Int
Messbill_id	Varchar
No_days	Int
Create_user	Varchar
Created_date	Timestamp

## 7.DEPARTMENT

FIELD NAME	DATATYPE
Dept_id	Varchar
Dept_name	Varchar

## 8.MESSBILL

FIELD NAME	DATA TYPE
Stud_id	Int
Amount_paid	Int
Difference_amt	Int
Trans_no	Int
Trans_date	Timestamp

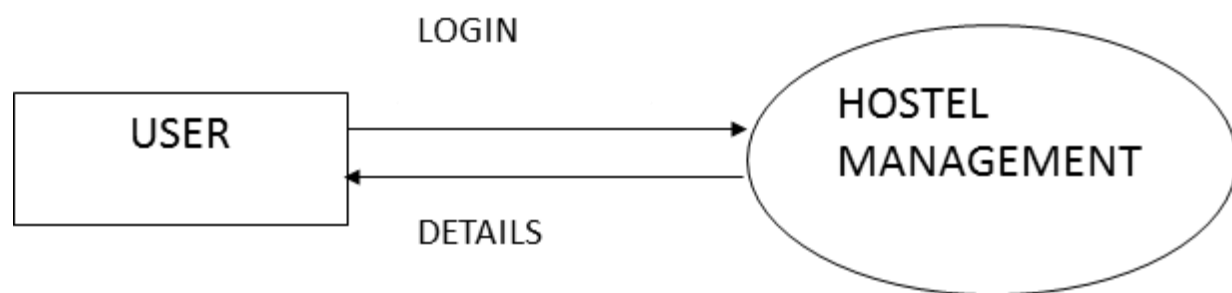
**9. MESSBILL MASTER :-**

FIELD NAME	DATA TYPE
Mess_id	Varchar
Month	Int
Years	Int
No_days	Int
Amount	Int
Electricity_bill	Int
Other	Int
User	Varchar
Created_date	Datetime

## 4.2 DATA FLOW DIAGRAM'S

A **data-flow diagram** (DFD) is a way of representing a flow of a data of a process or a system (usually an information system). The DFD also provides information about the outputs and inputs of each entity and the process itself

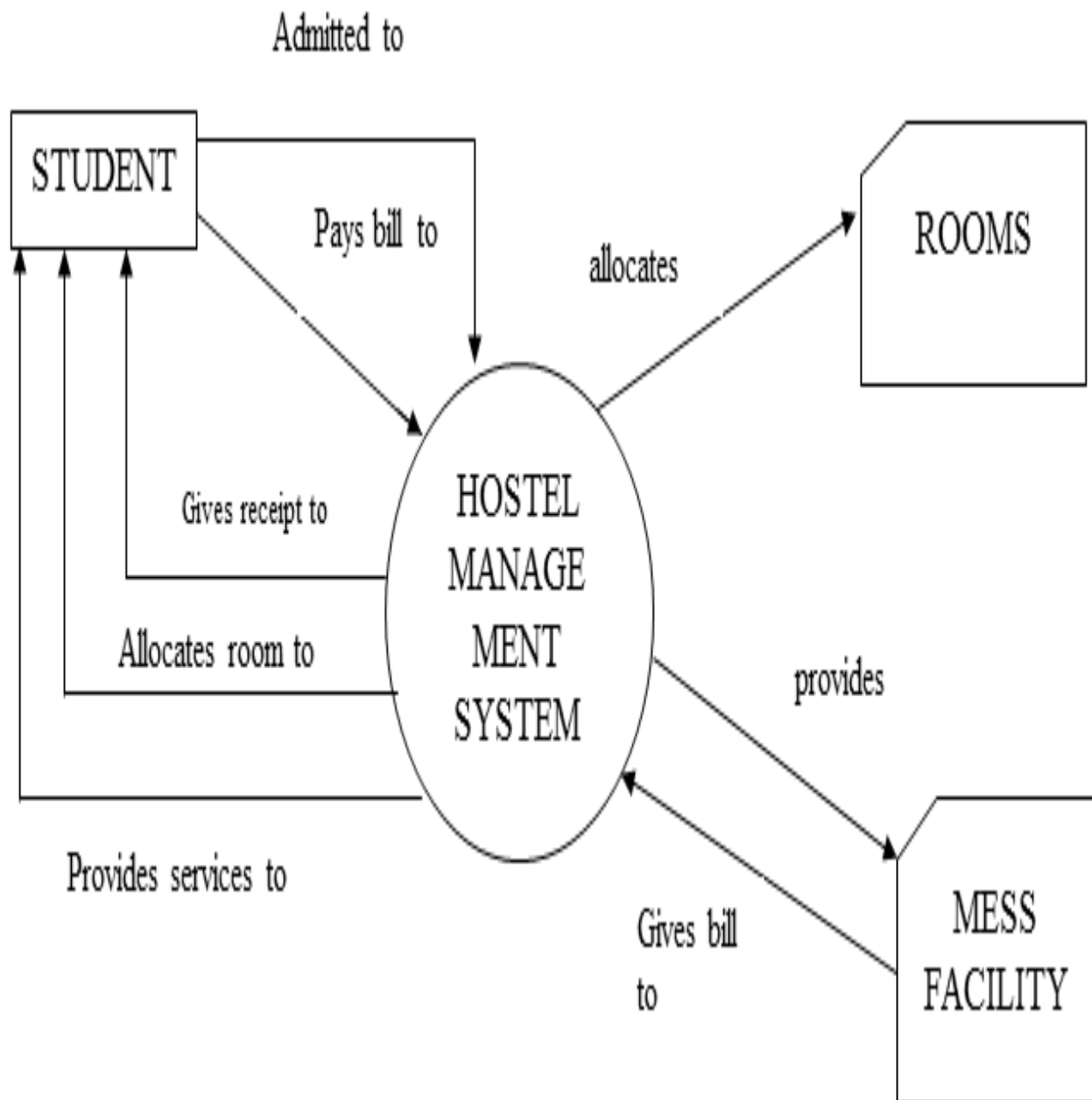
### LEVEL 0



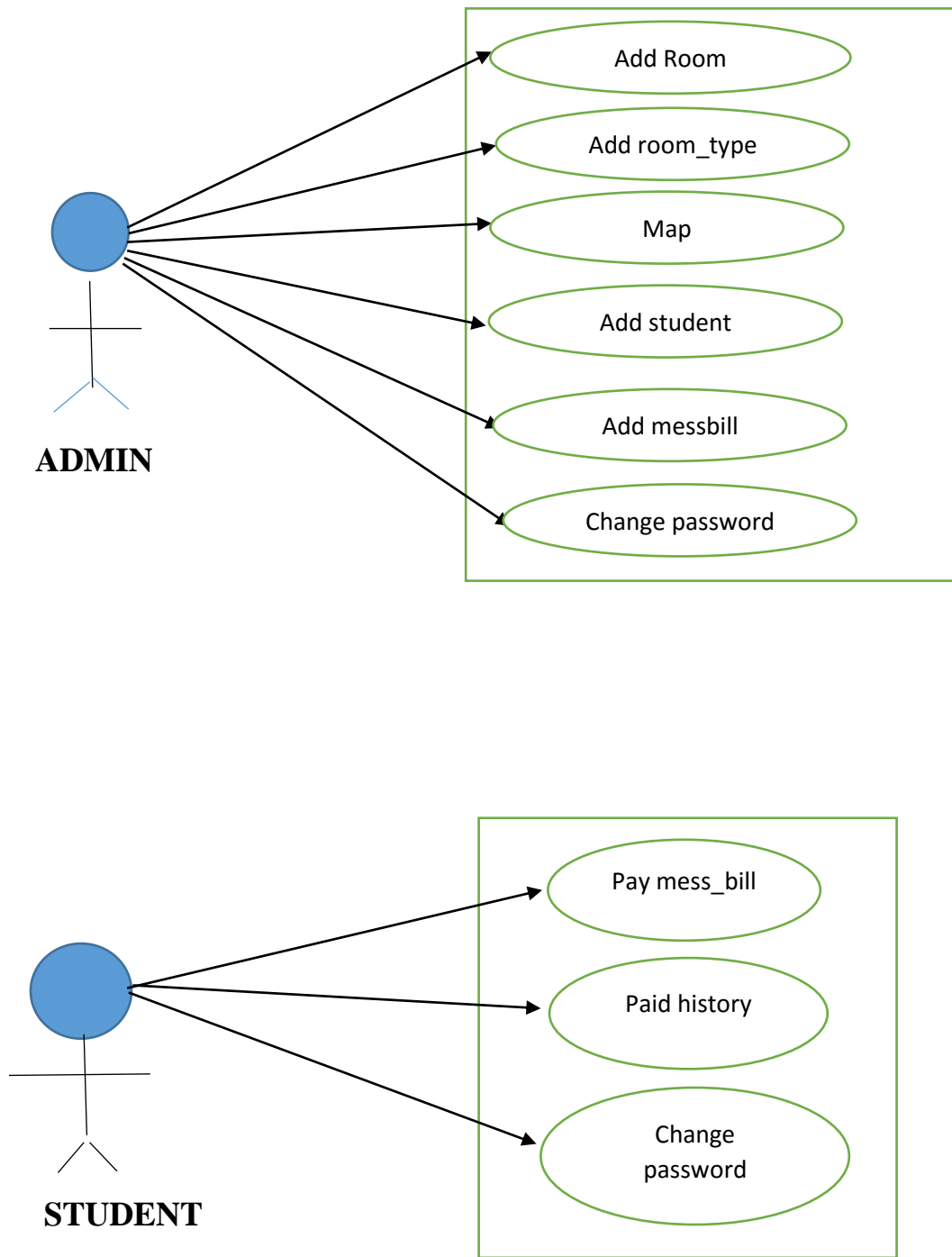
### LEVEL 1



**LEVEL 2 :-**



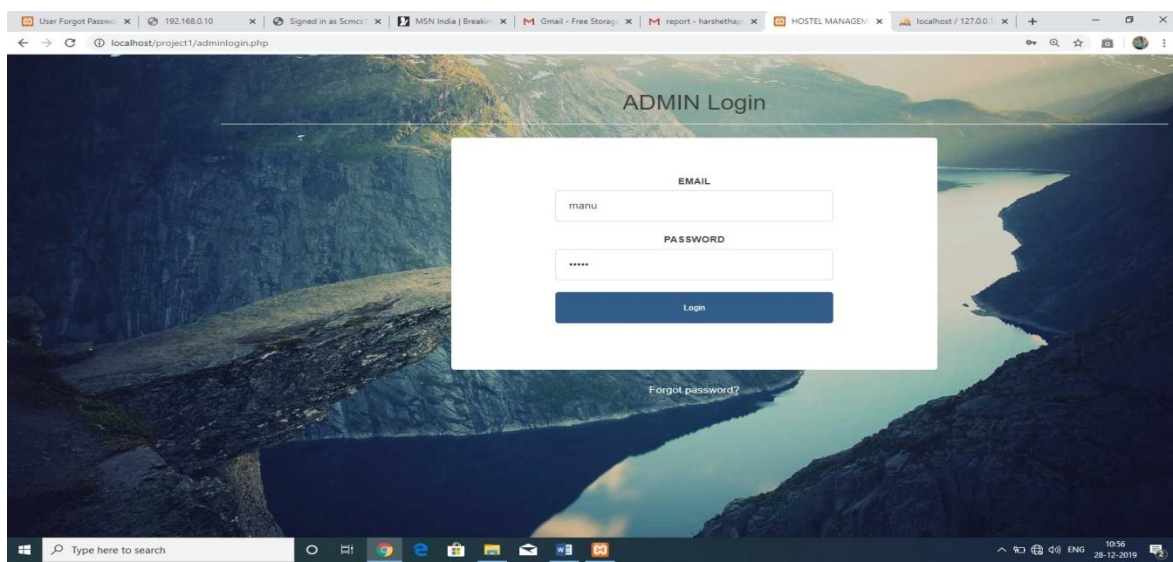
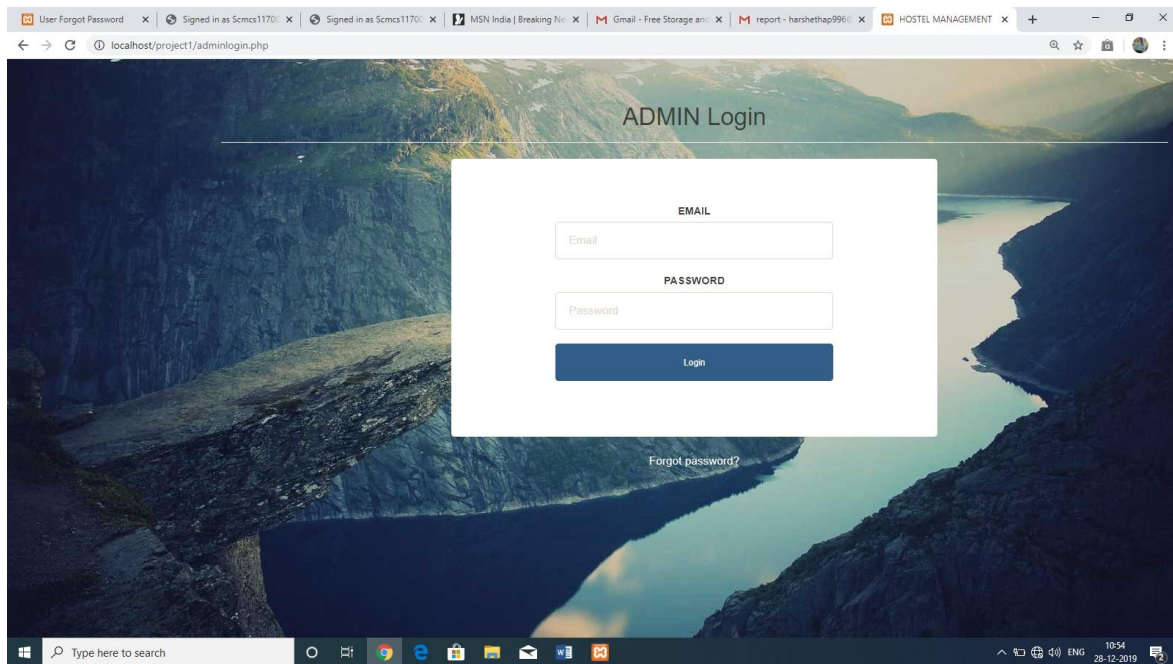
## USE CASE DIAGRAM :-



## 5. SYSTEM IMPLEMENTATION.

### SCREENSHOTS

#### ADMIN





# STUDENT REGISTRATION

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

## Student Registration

FILL ALL INFO

Student Name:

Class :

Department:

Email id:

phone number :

Admission Id:

Fee paid:

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

## Student Registration

FILL ALL INFO

Student Name:

Class :

Department:

Email id:

phone number :

Admission Id:

Fee paid:

## ADD ROOM

Hostel Management System

Room

FILL ALL INFO

Block: Select

Floor: Select

Room Type : Select

Capacity:

Occupaid:

Available:

Cancel submit

Hostel Management System

Room

FILL ALL INFO

Block: Right

Floor: 1 floor

Room Type : Type-I

Capacity: 4

Occupaid: 1

Available: 3

Cancel submit

## ADD ROOM\_TYPE

Hostel Management System

Room Type

FILL ALL INFO

Type Id:

Type :

Cancel submit

Hostel Management System

Room Type

FILL ALL INFO

Type Id:

Type :

Cancel submit

## DEPARTMENT

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Department

FILL ALL INFO

Department Id:

Department Name:

Cancel submit

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Department

FILL ALL INFO

Department Id:

Department Name:

Cancel submit

## ROOM MAP

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Room map

**FILL ALL INFO**

Department:

Student:

Room Type :

Room :

Occupied Date:

Fees:

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Room map

**FILL ALL INFO**

Department:

Student:

Room Type :

Room :

Occupied Date:

Fees:

Room :7  
Room Type :Type-I  
Floor - Block :1Floor -Left  
Capacity :5  
Occupied :4  
Available :1

## MESS BILL

localhost / 127.0.0.1 / db\_hostel x Messbill Master x +

localhost/hostel/messbill%20master.php

Apps www.google.com Online Shopping SL... Your Orders YouTube Prime Video Gmail Maps News NextStep- Tata Con... Hotstar - Watch TV... Translate

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Messbill Master

FILL ALL INFO

month: Select month

Years: Select

No of Days Worked:

Amount Per Day:

electricity bill:

Other:

Cancel submit

Search the web and Windows

10:26 PM 12/27/2019

localhost / 127.0.0.1 / db\_hostel x Messbill Master x +

localhost/hostel/messbill%20master.php

Apps www.google.com Online Shopping SL... Your Orders YouTube Prime Video Gmail Maps News NextStep- Tata Con... Hotstar - Watch TV... Translate

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Messbill Master

FILL ALL INFO

month: December

Years: 2019

No of Days Worked: 20

Amount Per Day: 100

electricity bill: 120

Other: 1

Cancel submit

Search the web and Windows

10:49 PM 12/27/2019

## ATTENDENCE

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

modify attendance

FILL ALL INFO

Department: Select department

student: Select

Messbill ID: Select

persent days:

Cancel Submit

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

modify attendance

FILL ALL INFO

Department: MCA

student: Manohar M C

Messbill ID: April - 2021

persent days: 29

Cancel Submit

## STUDENT REPORT

localhost / 127.0.0.1 / db\_hostel x student Wise Report x +

localhost/hostel/studentwiserep.php

Apps www.google.com Online Shopping SL... Your Orders YouTube Prime Video Gmail Maps News NextStep- Tata Con... Hotstar - Watch TV... Translate

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Reports

#### STUDENT WISE REPORT

Department: Select department

Student: Select

Print

Search the web and Windows

10:28 PM 12/27/2019

localhost / 127.0.0.1 / db\_hostel x student Wise Report x +

localhost/hostel/studentwiserep.php

Apps www.google.com Online Shopping SL... Your Orders YouTube Prime Video Gmail Maps News NextStep- Tata Con... Hotstar - Watch TV... Translate

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Reports

#### STUDENT WISE REPORT

Department: MCA

Student: Manohar

Student Name	Class / Dept	Phone Number
Manohar	MCA/MCA	2147483647

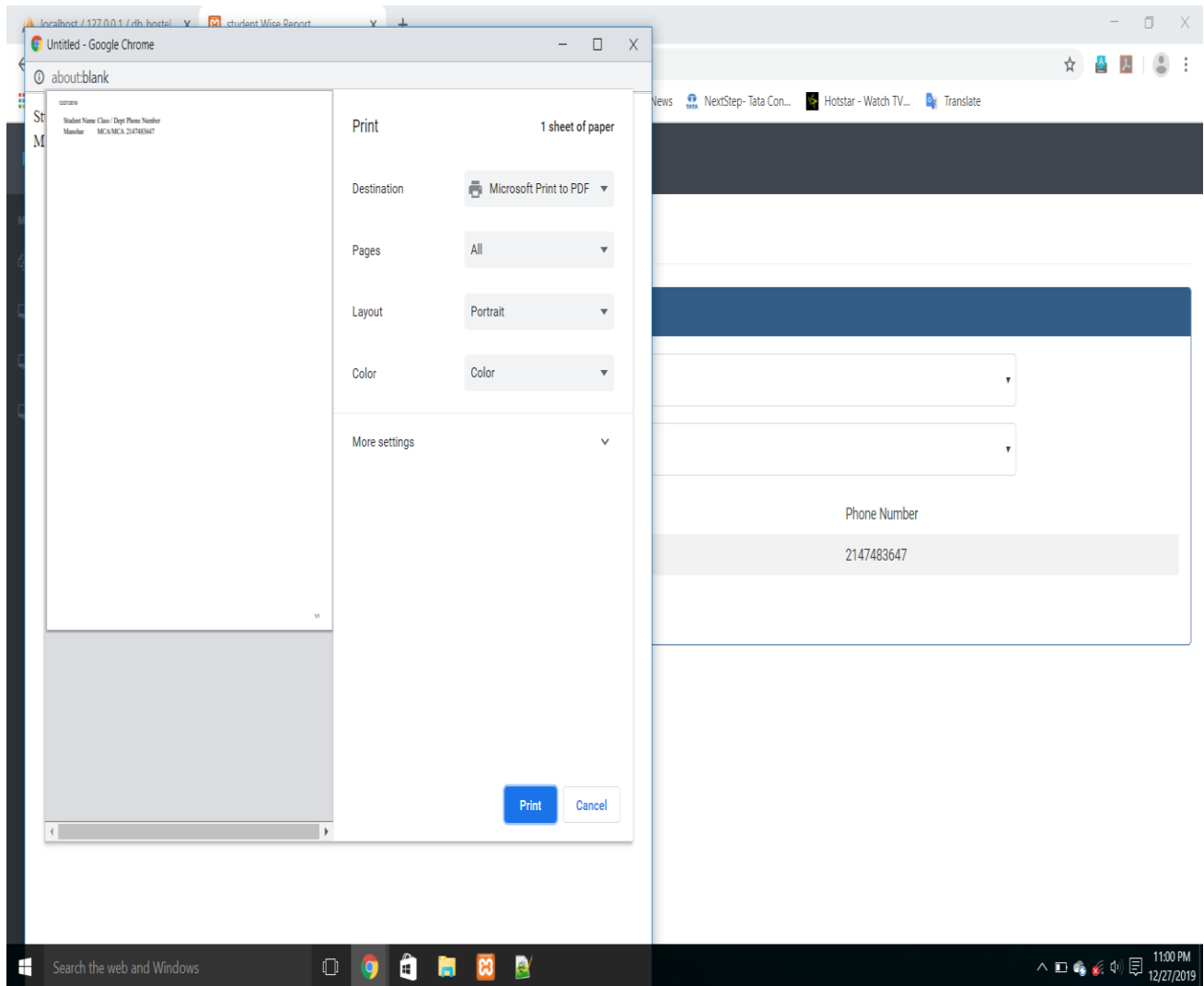
Print

Search the web and Windows

11:00 PM 12/27/2019



## STUDENT REPORT PRINT



## ROOM REPORT

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Reports

#### ROOM WISE REPORT

Select Room:  [Back to Results](#)

**ROOM INFO :**  
Room NO:1 Blook / Floor :Left / 1  
Capacity : 4 Occupaid :0 Available :0

Student Name	Class / Dept	Phone Number	Occupaid Date	Total Paid

**ROOM INFO :**  
Room NO:6 Blook / Floor :Right / 3  
Capacity : 5 Occupaid :0 Available :5

Student Name	Class / Dept	Phone Number	Occupaid Date	Total Paid

**ROOM INFO :**  
Room NO:7 Blook / Floor :Left / 1  
Capacity : 5 Occupaid :4 Available :1

Student Name	Class / Dept	Phone Number	Occupaid Date	Total Paid
Raghu	mca/MCA	3545	2019-12-12	4000

Hostel Management System

MAIN

- Master
- Link
- mess master
- Reports

### Reports

#### ROOM WISE REPORT

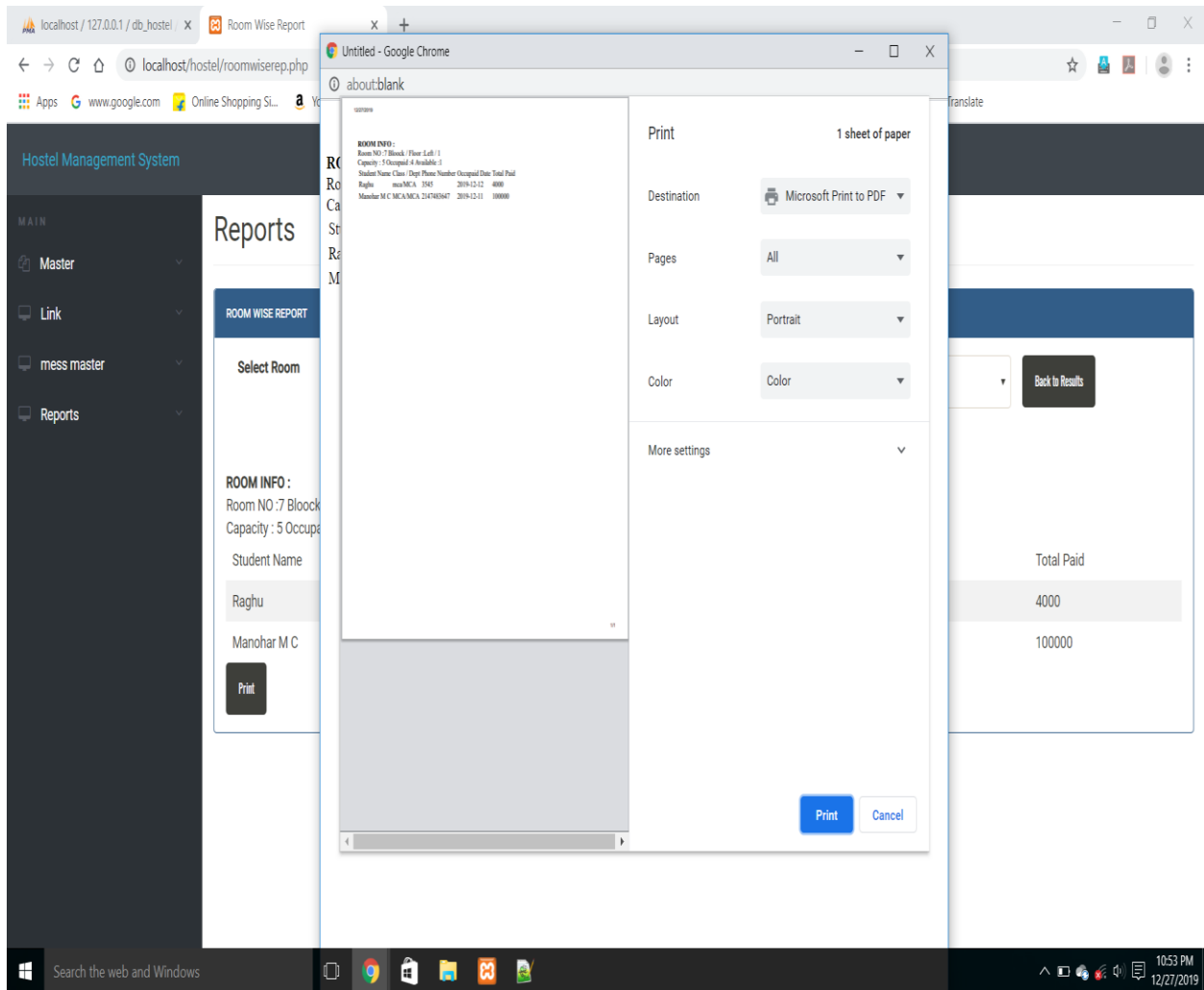
Select Room:  [Back to Results](#)

**ROOM INFO :**  
Room NO:7 Blook / Floor :Left / 1  
Capacity : 5 Occupaid :4 Available :1

Student Name	Class / Dept	Phone Number	Occupaid Date	Total Paid
Raghu	mca/MCA	3545	2019-12-12	4000
Manohar M C	MCA/MCA	2147483647	2019-12-11	100000

[Print](#)

## ROOM REPORT PRINT



## 6. SYSTEM TESTING

### 6.1 UNIT TESTING

The software units in a system are modules and routines that are assembled and integrated to perform a specific function. Unit testing focuses first on modules, independently of one another, to locate errors. This enables, to detect errors in coding and logic that are contained within each module. This testing includes entering data and ascertaining if the value matches to the type and size supported by java. The various controls are tested to ensure that each performs its action as required.

### 6.2 VALIDATION TESTING

Approval testing manages testing whatever the acceptances are defended and all the prerequisites are satisfied sensibly according to the necessities of the application, a way to deal with the issue in an intelligent and social way. All the approval testing has been finished.

### TEST CASES

#### HOSTEL MANAGEMENT SYSTEM

Serial number	1
Test Name	Admin login test
Test Item	All the mandatory fields in register form, allot the room , add mess bill, are filled by the admin and click on the submit button.
Expected output	Student registered .
Status	Success.

Serial number	2
Test Name	Admin Logout test.
Test Item	A click on logout option.
Expected output	Go to login page.
Status	Success.

Serial number	3
Test Name	Student Login
Test Item	Pay the mess bill and see the paid history and also changed password.
Expected output	Mess bill paid successfully.
Status	Success.

Serial number	4
Test Name	Student Logout test.
Test Item	A click on logout option.
Expected output	Go to login page.
Status	Success.

### **7. CONCLUSION**

To conclude the description about the project: The project developed using PHP and MySQL is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement.

The expanded functionality of today's software requires an appropriate approach towards software development.

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.

## **8. BIBLIOGRAPHY**

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[2] Eloquent\_JavaScript.pdf

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2. <http://www.tutorialspoint.com/js>