**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

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A Mini Project report on

**Hotel Management System**

Submitted in partial fulfillment of the requirement for the award of Degree of

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

By

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**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**ACHARYA INSTITUTE OF TECHNOLOGY**

(Affiliated to Visvesvaraya Technological University, Belgaum)

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**ACHARYA INSTITUTE OF TECHNOLOGY**

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**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**



**Certificate**

Certified that the Mini Project entitled **Hotel Management System** is a bonafide work carried out by **Anoop C.A** in partial fulfillment for the award of degree of **Bachelor of Engineering in Computer Science & Engineering of the Visvesvaraya Technological University**, Belgaum during the year **2017-2018.** It is certified that all corrections/ suggestions indicated for internal assessments have been incorporated in the Report deposited in the departmental library. The Mini Project report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the **Bachelor of Engineering Degree**.

**Signature of Guides Signature of H.O.D**

**Name of the examiners** **Signature with date**

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**ACKNOWLEDGEMENT**

I express my gratitude to our institution and management for providing us with good infrastructure, laboratory, facilities and inspiring staff, and whose gratitude was of immense help in completion of this seminar successfully.

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My gratitude thanks should be rendered to many people who helped me in all possible ways.

**Anoop C.A**

**(**1AY15CS015**)**

**ABSTRACT**

The objective of the project is to design Hotel Management System which enables the Manager to keep the record of the information regarding the hotel and customers.

The project has been designed in Php/Mysql and consists of a Sql Server which acts as the database for the project.

My motivation for the project came from my enthusiasm and strong urge to learn php and sql which is one of the fastest growing field in today’s world. The Hotel Management System consists of two types of users. The customer inserts the information and the administrator modifies and updates the information.

All the data needed for the application is stored in the form of tables in MYSQL server.

The report contains the details of all the tasks carried out during the entire development life cycle of the Hotel Management System. This document depicts all the details of the project.

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**1.1 Introduction**

Hotel Management System manages variety of tasks related to Hotel bookings. A hotel admin manages a guest’s check-in and checkout, cash transactions, outlet transactions, reservations etc. It impacts the rooms division during and after the arrival chronology.

The System is to manage all the Boarding and lodging activities of a hotel. It automates the task of room reservation, bill generation, checks room availability, etc. The overall Functioning of the system, schemas and its attributes are mentioned below.

**Schemas**:

Contact, Login, Newsletterlog, Payment, Room, Roombooking

**Some objectives are**-

No data duplication

No paper work required

Time Efficient

Cost Efficient

Automatic data validation

User friendly environment

Data security and reliability

Fast data insertion and retrieval

Easy performance check

**Sample source code-**

<?php

$con = mysqli\_connect("localhost","root","","hotel") or die(mysql\_error());?>

<?php

session\_start();

if(isset($\_SESSION["user"]))

{

header("location:home.php");

}

?>

<!DOCTYPE html>

<html >

<head>

<meta charset="UTF-8">

<title>SUN RISE ADMIN</title>

<link rel="stylesheet" href="css/style.css">

</head>

<body>

<div id="clouds">

<div class="cloud x1"></div>

<!-- Time for multiple clouds to dance around -->

<div class="cloud x2"></div>

<div class="cloud x3"></div>

<div class="cloud x4"></div>

<div class="cloud x5"></div>

</div>

<div class="container">

<div id="login">

<form method="post">

<fieldset class="clearfix">

<p><span class="fontawesome-user"></span><input type="text" name="user" value="Username" onBlur="if(this.value == '') this.value = 'Username'" onFocus="if(this.value == 'Username') this.value = ''" required></p> <!-- JS because of IE support; better: placeholder="Username" -->

<p><span class="fontawesome-lock"></span><input type="password" name="pass" value="Password" onBlur="if(this.value == '') this.value = 'Password'" onFocus="if(this.value == 'Password') this.value = ''" required></p> <!-- JS because of IE support; better: placeholder="Password" -->

<p><input type="submit" name="sub" value="Login"></p>

</fieldset>

</form>

</div> <!-- end login -->

</div>

<div class="bottom"> <h3><a href="../index.php">SUN RISE HOMEPAGE</a></h3></div>

</body>

</html>

<?php

include('db.php');

if($\_SERVER["REQUEST\_METHOD"] == "POST") {

// username and password sent from form

$myusername = mysqli\_real\_escape\_string($con,$\_POST['user']);

$mypassword = mysqli\_real\_escape\_string($con,$\_POST['pass']);

$sql = "SELECT id FROM login WHERE usname = '$myusername' and pass = '$mypassword'";

$result = mysqli\_query($con,$sql);

$row = mysqli\_fetch\_array($result,MYSQLI\_ASSOC);

$active = $row['active'];

$count = mysqli\_num\_rows($result);

// If result matched $myusername and $mypassword, table row must be 1 row

if($count == 1) {

$\_SESSION['user'] = $myusername;

header("location: home.php");

}else {

echo '<script>alert("Your Login Name or Password is invalid") </script>' ;

}

}

?>

**1.2 Introduction to DBMS**

DBMS stands for Database Management System. We can break it like this DBMS = Database + Management System. Database is a collection of data and Management System is a set of programs to store and retrieve those data. Based on this we can define DBMS like this: DBMS is a collection of inter-related data and set of programs to store & access those data in an easy and effective manner. Database systems are basically developed for large amount of data. When dealing with huge amount of data, there are two things that require optimization: Storage of data and retrieval of data.

**DBMS Languages**

Data Definition Language (DDL)

Used by the DBA and database designers to specify the conceptual schema of a database.

• In many DBMSs, the DDL is also used to define internal and external schemas (views).

Data Manipulation Language (DML)

Used to specify database retrievals and updates DML commands (data sublanguage) can

be embedded in a general-purpose programming language (host language), such as

COBOL, C, C++, or Java.

Why Use DBMS?

* To develop software applications In less time.
* Data independence and efficient use of data.
* For uniform data administration.
* For data integrity and security.
* For concurrent access of data, and data recovery from crashes.
* To use user-friendly declarative query language.

Where is Database Management System (DBMS) being Used?

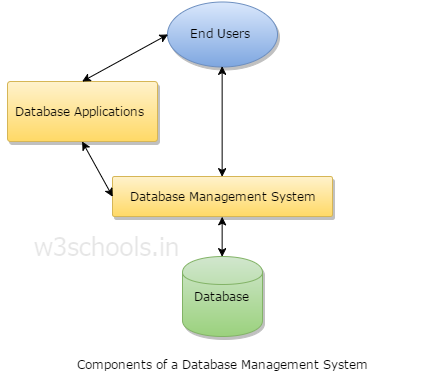
* Airlines: reservations, schedules etc
* Telecom: calls made, customer details, network usage etc
* Universities: registration, results, grades etc
* Sales: products, purchases, customers etc
* Banking: all transactions etc

Advantages of DBMS

A DBMS manage data and has many advantages. These are:

* Data independence: Application programs should be as free or independent as possible from details of data representation and storage. DBMS can supply an abstract view of the data for insulating application code from such facts.
* Efficient data access: DBMS utilizes a mixture of sophisticated concepts and techniques for storing and retrieving data competently and this feature becomes important in cases where the data is stored on external storage devices.
* Data integrity and security: If data is accessed through the DBMS, the DBMS can enforce integrity constraints on the data.
* Data administration: When several users share the data, integrating the administration of data can offer major improvements. Experienced professionals understand the nature of the data being managed and can be responsible for organizing the data representation to reduce redundancy and make the data to retrieve efficiently.

Components of DBMS



* Users: Users may be of any kind such as DB administrator, System developer or database users.
* Database application: Database application may be Departmental, Personal, organization’s and / or Internal.
* DBMS: Software that allow users to create and manipulate database access,
* Database: Collection of logical data as a single unit.

**2.1 Software Requirements**

User Interface: HTML, CSS

Client-side Scripting: JavaScript

Programming Language: PHP

Web Applications: WampServer 3.1.0 64-bit

IDE/Workbench: Notepad++

Database: Mysql

Server Deployment: Apache2.0

**2.2 Hardware Requirements**

Processor: Pentium III or higher

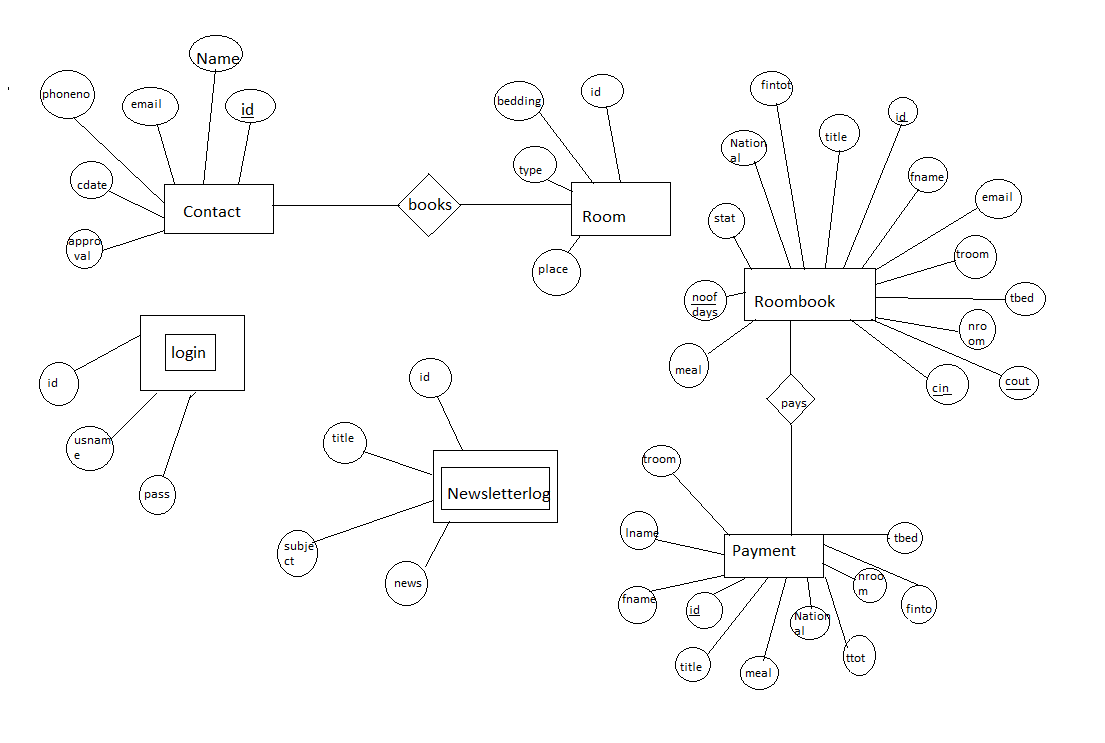
Ram:512Mb or more

Hard Disk: 20Gb or more

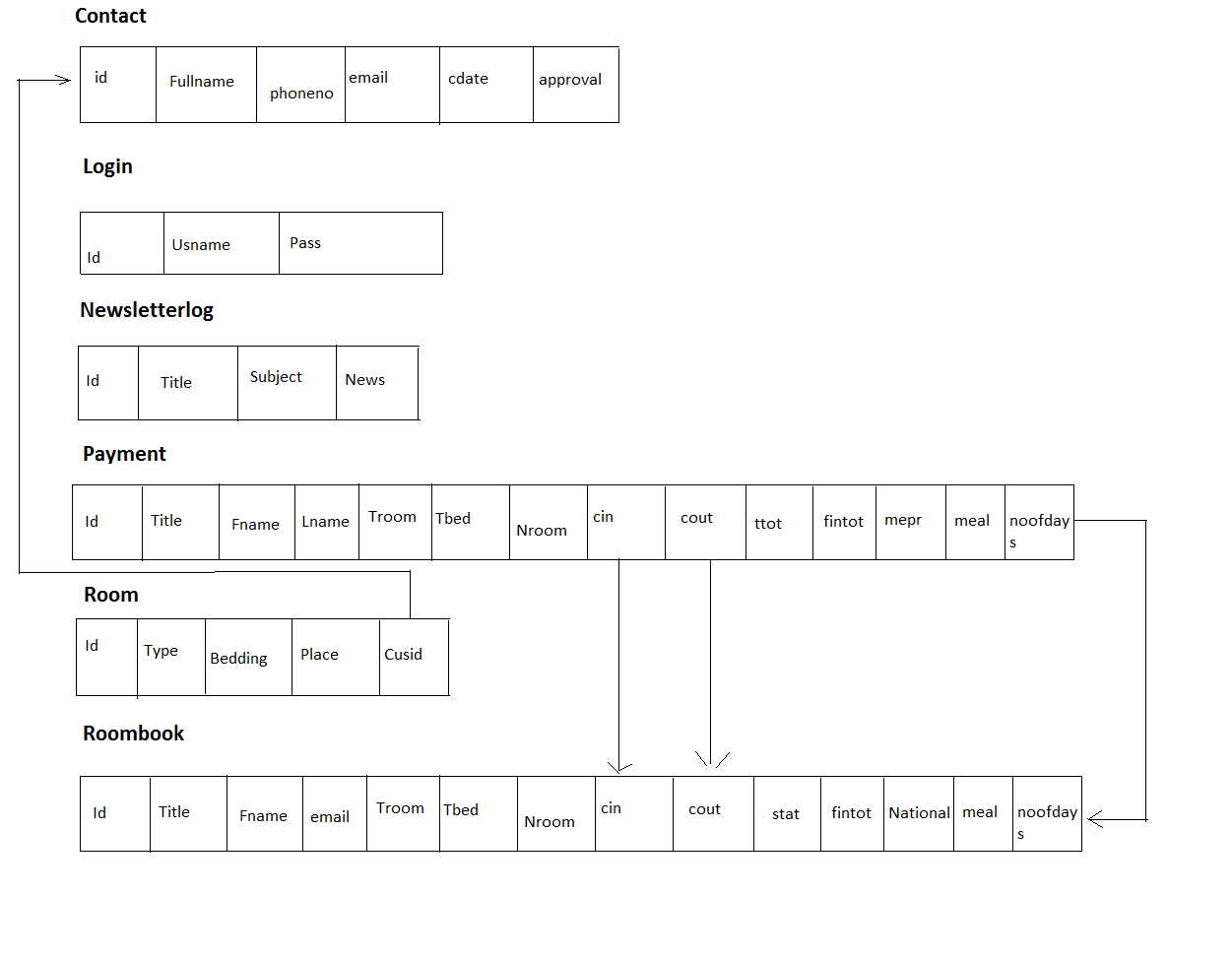
Browser: IE, Chrome, Mozilla Firefox etc

Operating System: Windows 7/8/8.1/10 or Linux

**3.1 ER Diagram**

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**3.2 Schema Diagram**

****

**4.1 Table Creation**

create table contact (id int, fullname varchar (100), phoneno int, email text, cdate date, approval varchar (12));

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Null constraint | Key constraint |
| id | int | NOT NULL | Primary Key |
| Fullname | Varchar (100) | NOT NULL |  |
| phoneno | int | NOT NULL |  |
| email | text | NOT NULL |  |
| cdate | date | NOT NULL |  |
| approval | Varchar (12) | NOT NULL |  |

create table login (id int, usname varchar (30), pass varchar (30));

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Null constraint | Key constraint |
| Id | Int | NOT NULL | Primary Key |
| Usname | Varchar (30) | NOT NULL |  |
| Pass | Varchar (30) | NOT NULL |  |

create table newsletterlog (id int, title varchar (52), subject varchar (100), news text);

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Null constraint | Key constraint |
| Id | Int | NOT NULL | Primary Key |
| Title | Varchar (52) | NOT NULL |  |
| Subject | Varchar (100) | NOT NULL |  |
| News | Text | NOT NULL |  |

create table payment (id int, title varchar (5), fname varchar (30), lname varchar (30), troom varchar (30), tbed varchar (30), nroom int,cin date, cout date,ttot double (8,2), fintot double (8,2),mepr double (8,2),meal varchar (30),noofdays int);

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Null Constraint | Key Constraint |
| Id | Int | NOT NULL | Primary Key |
| Title | Varchar (5) | NOT NULL |  |
| Fname | Varchar (30) | NOT NULL |  |
| lname | Varchar (30) | NOT NULL |  |
| troom | Varchar (30) | NOT NULL |  |
| tbed | Varchar (30) | NOT NULL |  |
| nroom | int | NOT NULL |  |
| cin | Date | NOT NULL |  |
| cout | date | NOT NULL |  |
| ttot | Double (8,2) | NOT NULL |  |
| fintot | Double (8,2) | NOT NULL |  |
| mepr | Double (8,2) | NOT NULL |  |
| meal | Varchar (30) | NOT NULL |  |
| noofdays | int | NOT NULL |  |

create table room (id int, type varchar (15), bedding varchar (10), place varchar (10), cusid int);

|  |  |  |  |
| --- | --- | --- | --- |
| Data Type | Column Name | Null Constraint | Key Constraint |
| Id | Int | NOT NULL | Primary Key |
| Type | Varchar (15) | NOT NULL |  |
| Bedding | Varchar (10) | NOT NULL |  |
| Place | Varchar (10) | NOT NULL |  |
| Cusid | int | NOT NULL | Foreign Key |

create table roombook(id int , Title varchar (5), Fname text, Lname text,Email varchar (50), National varchar (30),phone text ,troom varchar (10),bed varchar (10),nroom varchar (2),meal varchar (15),cin date, cout date, stat varchar (15),nodays int);

|  |  |  |  |
| --- | --- | --- | --- |
| Data Type | Column Name | Null Constraint | Key Constraint |
| Id | int | NOT NULL | Primary Key |
| title | Varchar (5) | NOT NULL |  |
| fname | text | NOT NULL |  |
| lname | text | NOT NULL |  |
| email | Varchar (50) | NOT NULL |  |
| National | Varchar (30) | NOT NULL |  |
| phone | text | NOT NULL |  |
| troom | Varchar (10) | NOT NULL |  |
| bed | Varchar (10) | NOT NULL |  |
| nroom | Varchar (2) | NOT NULL |  |
| meal | Varchar (15) | NOT NULL |  |
| Cin | date | NOT NULL | Foreign Key |
| cdate | date | NOT NULL | Foreign Key |
| stat | Varchar (15) | NOT NULL |  |
| nodays | int | NOT NULL | Foreign Key |

**4.2 Table Insertion**

Insert into roombook values (1,’Mr.’,’Anoop’,’Chipli’,’anoopssjchipli@gmail.com’,’Indian’,’India’,9448873942,’Single Room’,1,’room only’,’26-nov-2017’,’02-DEC-2017’,’Not Confirmed’,3);

Insert into roombook values (2,’Miss.’,’Nayana’,’Chandrashekhar’,’sss@gmail.com’,’Indian’,’Mexico’,8867572160,’Deluxe Room’,1,’Breakfast’,’01-Feb-2017’,’20-DEC-2017’,’Not Confirmed’,322);

Insert into roombook values (3,’Dr.’,’Vishnu’,’Vardhan’,’vv@gmail.com’,’Non Indian’,’United States’,9448873942,’Guest House’,1,’Full board’,’30-nov-2017’,’08-DEC-2017’,’Not Confirmed’,8);

Insert into login values (1,’admin’,’1234’);

Insert into login values (2,’prasath’,’12345’);

Insert into values (1,’Hi’,’Rent’,’Please pay’);

Insert into values (1,’Superior Room’,’Single’,’Free’,Null);

Insert into values (2,’Superior Room’,’Double’,’Free’,Null);

Insert into values (3,’Superior Room’,’Triple’,’Free’,Null);

Insert into values (4,’Single Room’,’Quad’,’Free’,Null);

Insert into values (5,’Superior Room’,’Quad’,’Free’,Null);

Insert into values (6,’Deluxe Room’,’Single’,’Free’,Null);

Insert into values (7,’Deluxe Room’,’Double’,’Not Free’,Null);

Insert into values (8,’Deluxe Room’,’Triple’,’Free’,Null);

Insert into values (9,’Deluxe Room’,’Quad’,’Free’,Null);

Insert into values (10,’Superior Room’,’Single’,’Free’,Null);

Insert into values (11,’Guest House’,’Single’,’Free’,Null);

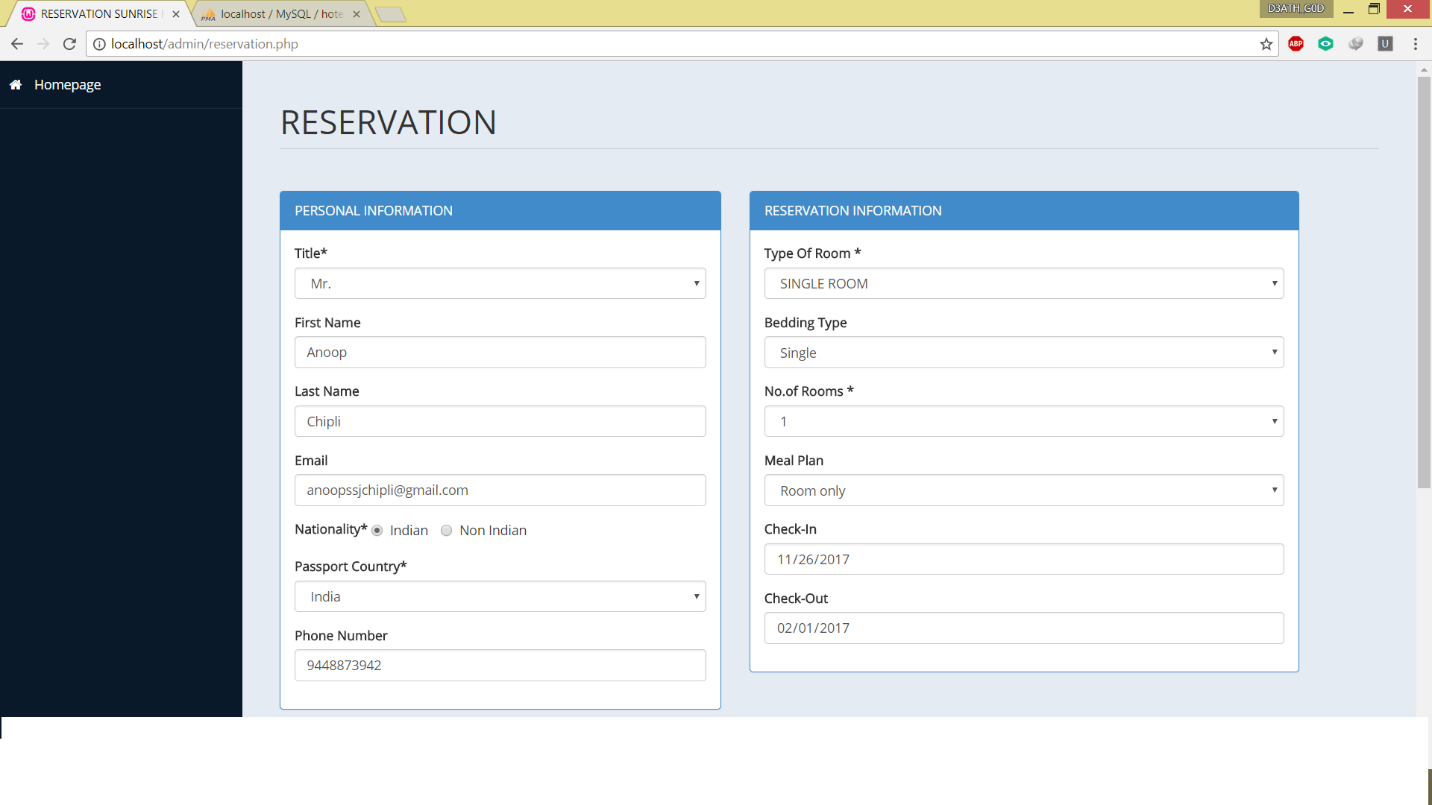
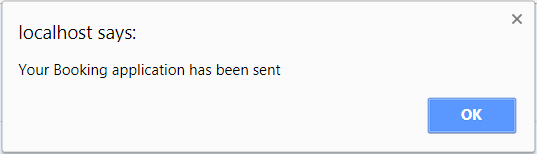
Insert into values (12,’Guest House’,’Double’,’Free’,Null);

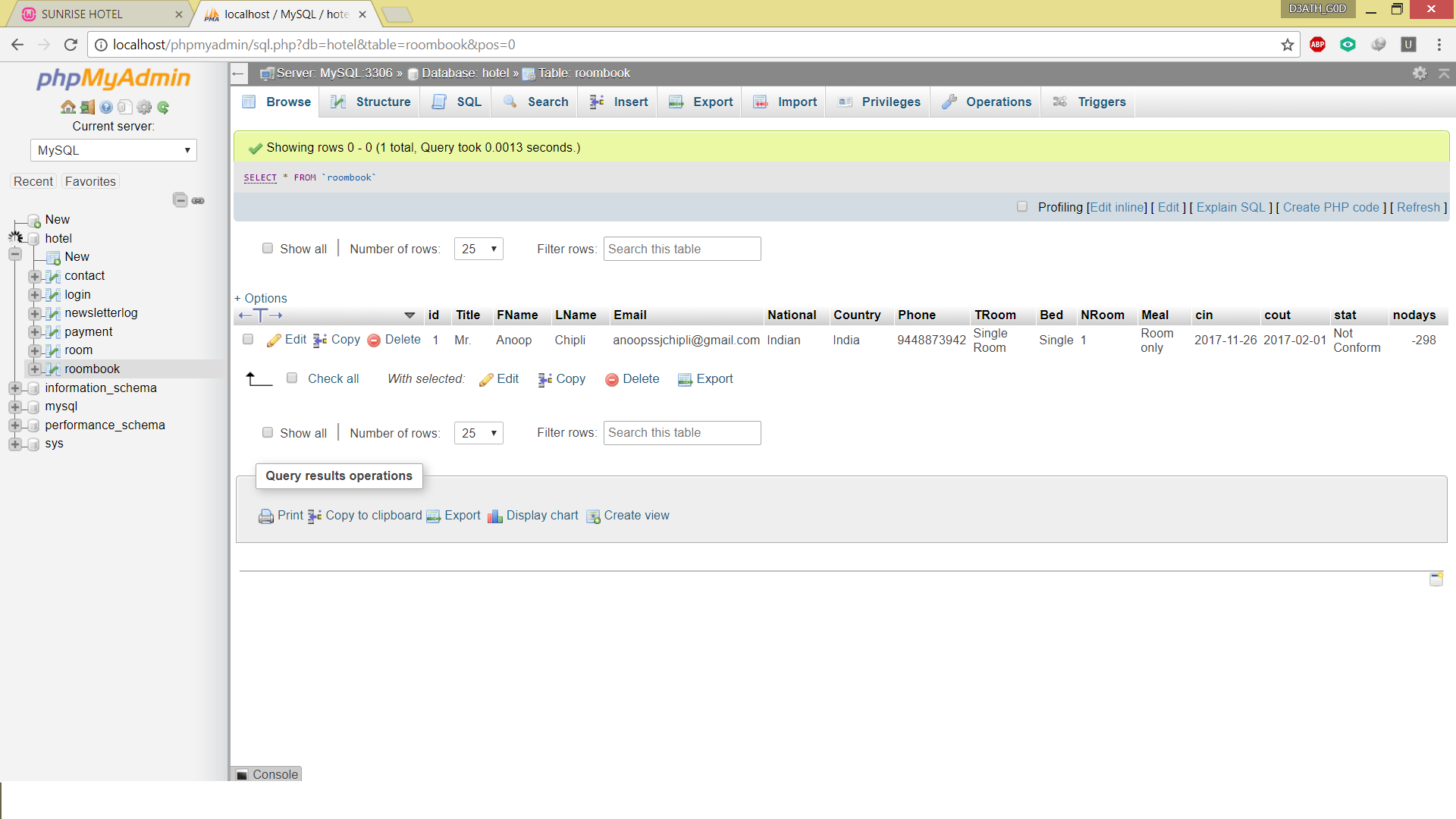
Insert into values (13,’Guest House’,’Triple’,’Free’,Null);

Insert into values (14,’Guest House’,’Quad’,’Free’,Null);

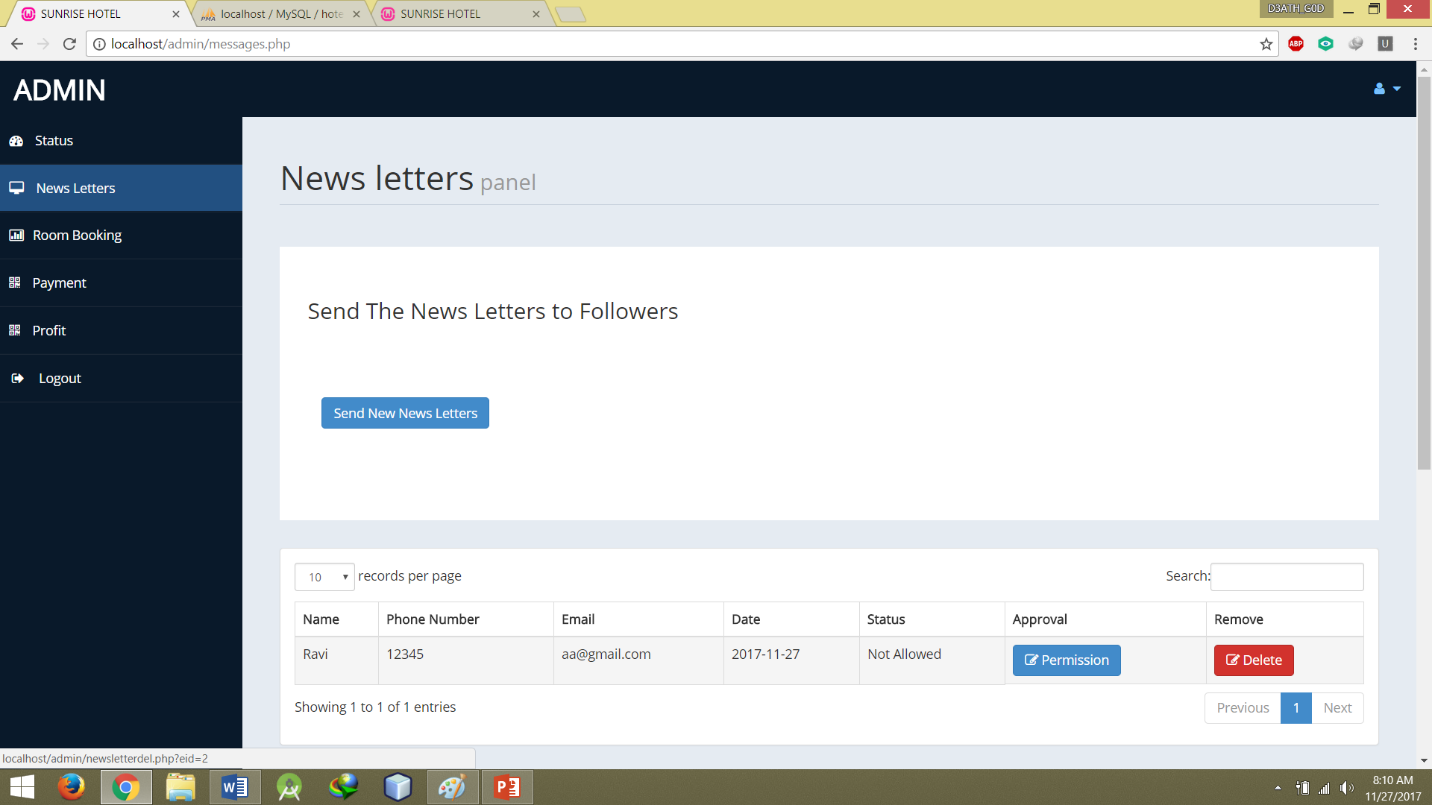
**4.3 Table Queries**

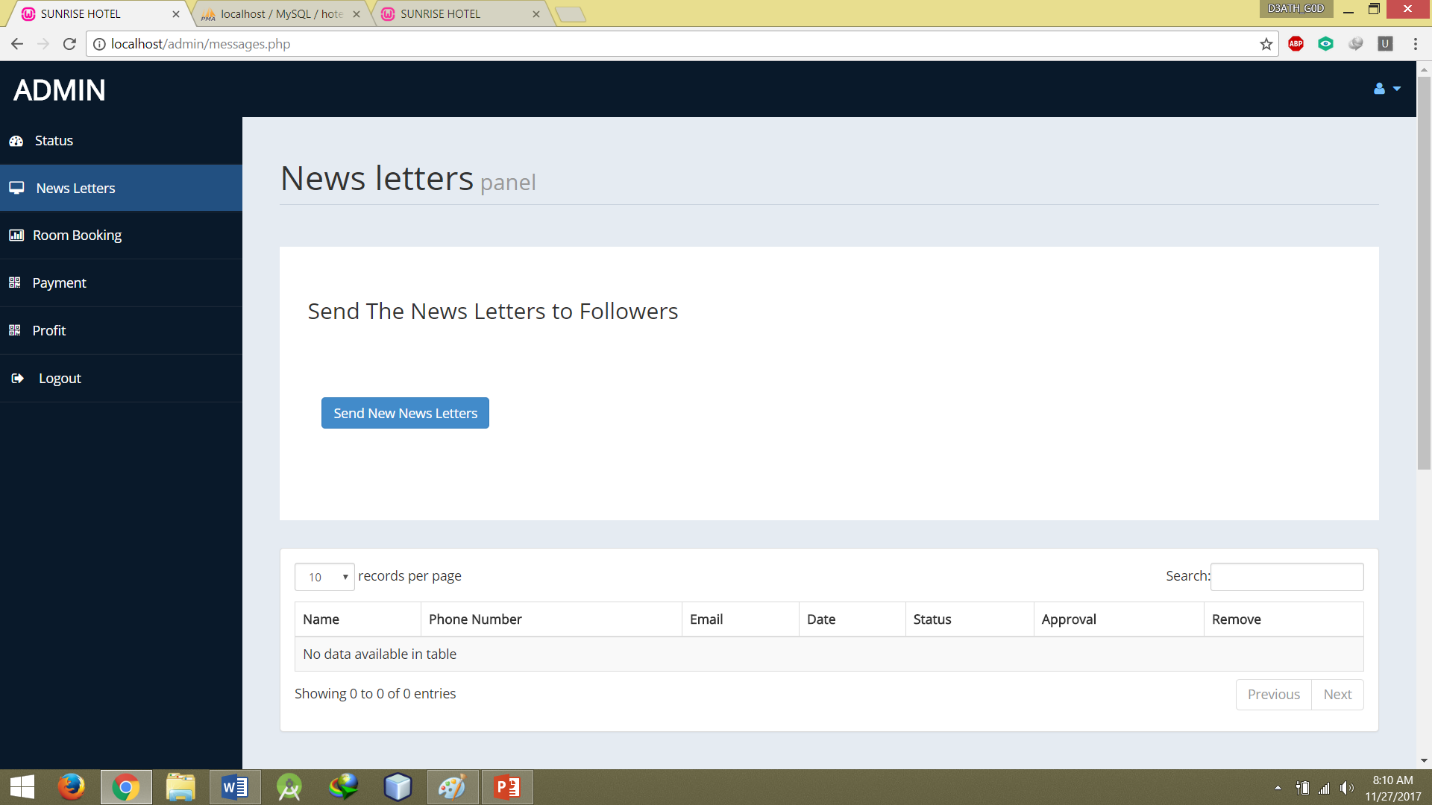
**Insertion**

**** ****

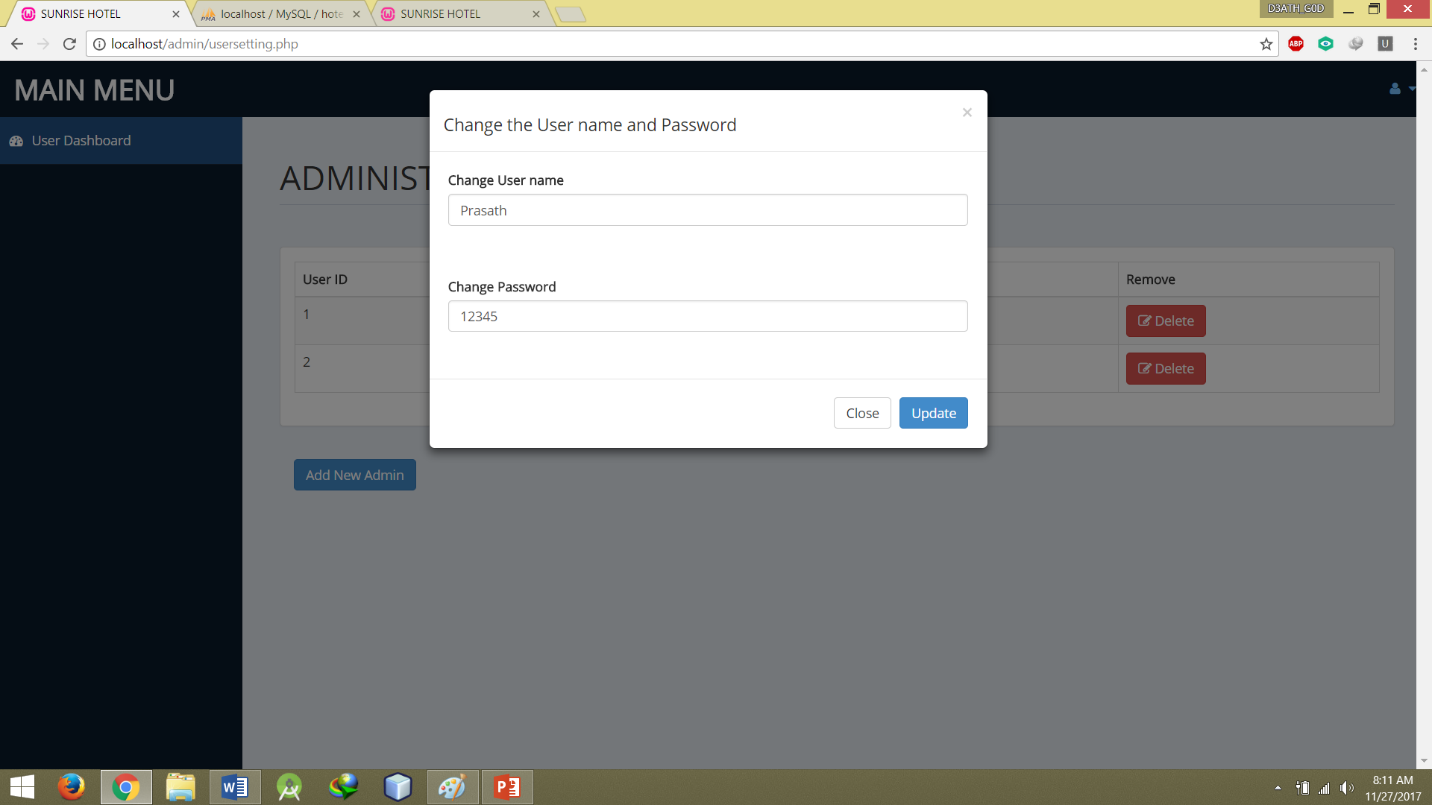
****

**Deletion**

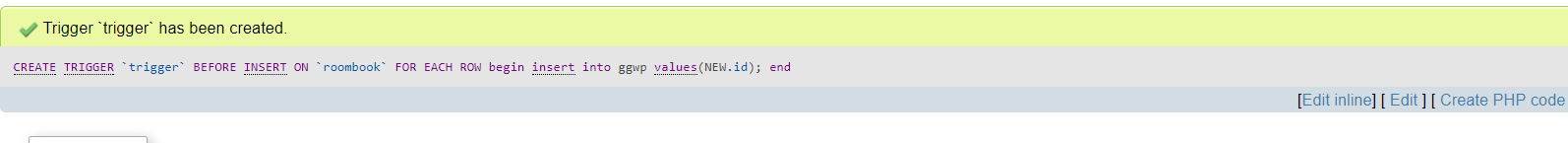
****



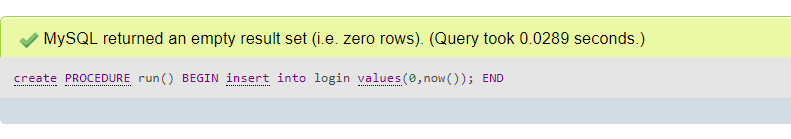
**Updating**



**4.4 Triggers**

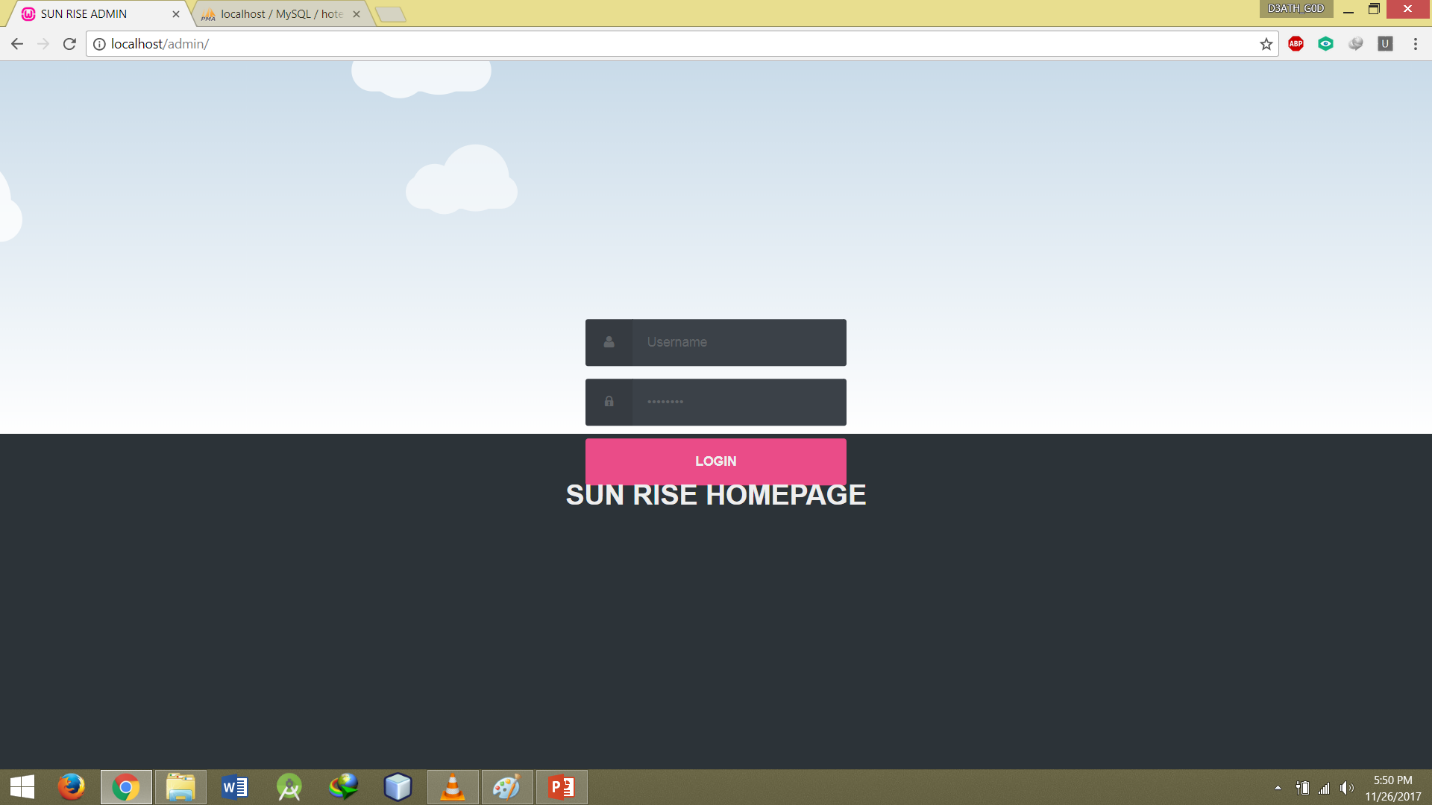
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**4.5 Stored Procedure**

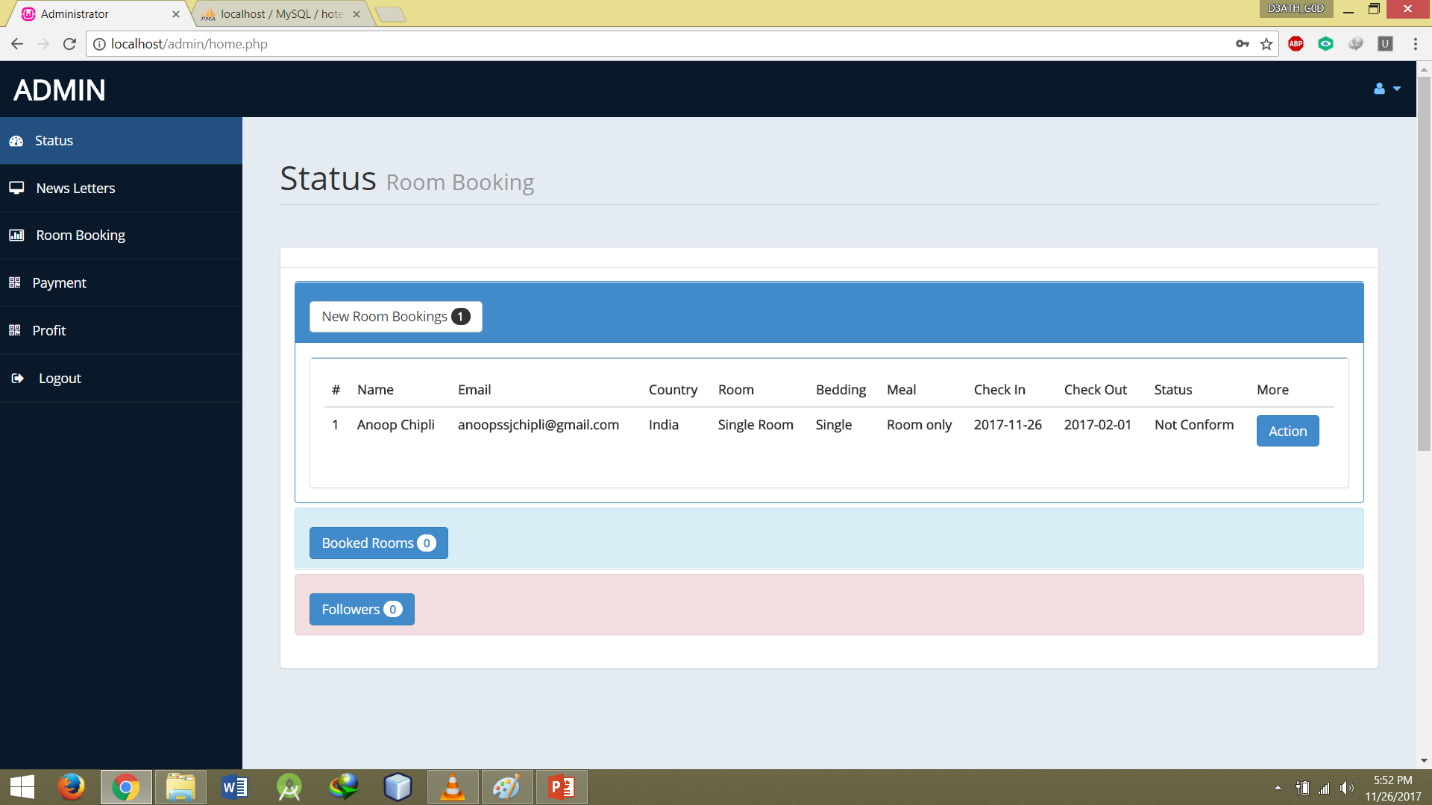
****

**Snapshots**

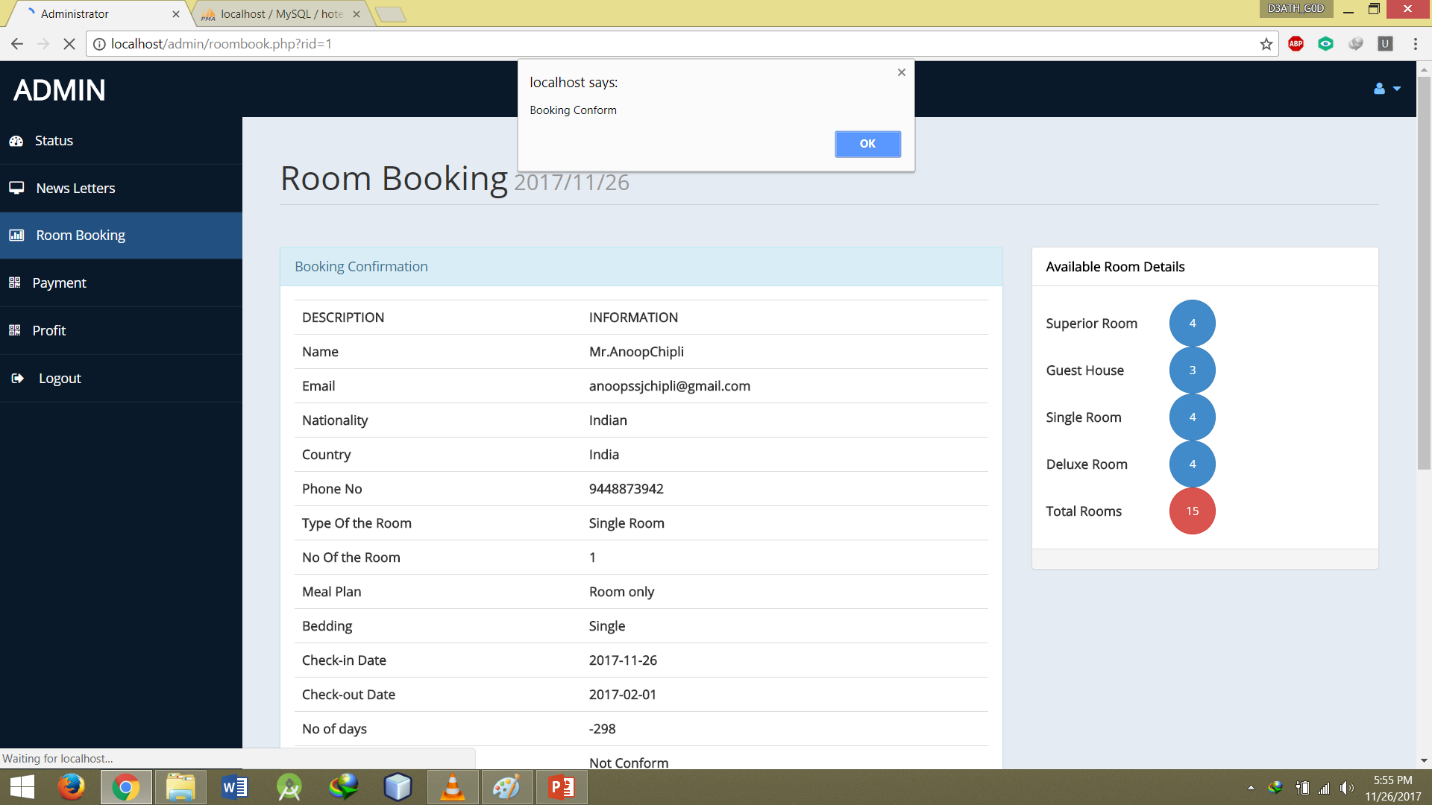
Login Page

****

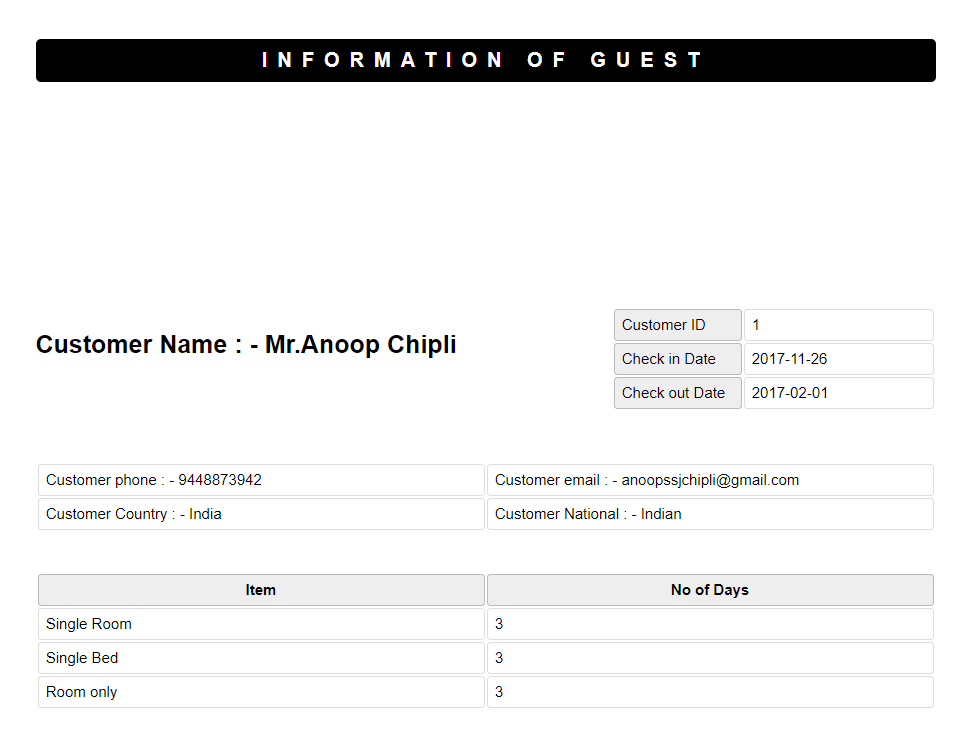
Status Checking

****

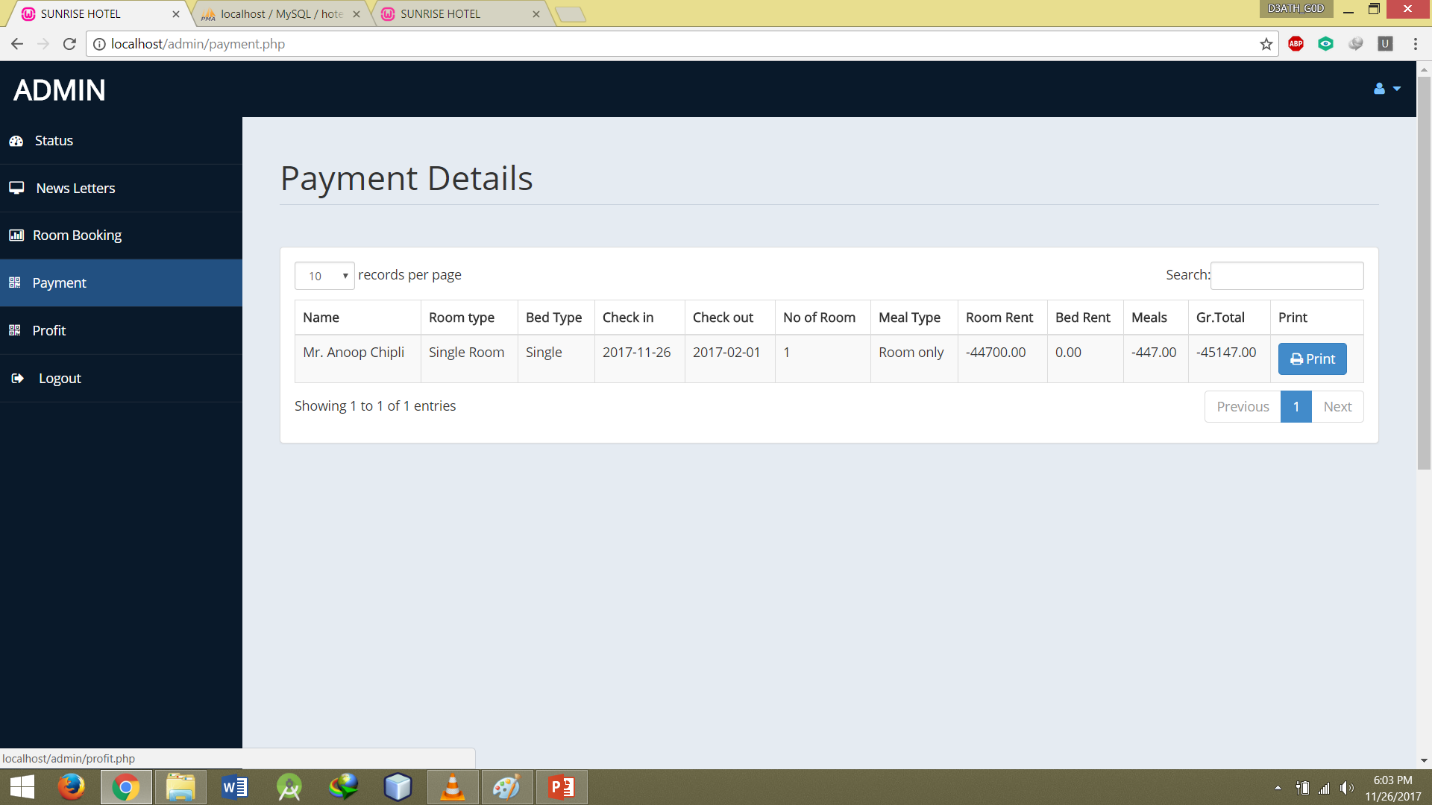
Room Booking



Fetching the Info



Checking the payment info



**Conclusion**

It has been a matter of immense pleasure, honor and challenge to have this opportunity to take up this project and complete it successfully. While developing this project I have learnt a lot about hotel management, I have also learnt how to make it user friendly by hiding the complicated parts of it from users. During the development process I studied carefully and understood the criteria for making a software more demanding, I also realized the importance of maintaining a minimal margin for error.

**Future Enhancement**

There are a lot of things which can be taken care in the project and it can be done in better way. We can perform operations such as room reservation, availability, hall reservation, billing. Now after the web is made available at all the places and the way in which it can be accessed easily and managed comfortably there is a need for a software which can manage everything for hotel room reservation. To implement this, we need a front-end tool which will give a user-friendly end to the customer for easy reservation of the hotel room through online. If we can implement the above situation the project can be used for all the hotel depending on their requirements.

**Bibliography**

Source obtained from:

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[www.wikipedia.com](http://www.wikipedia.com)

[www.Msdn.com](http://www.Msdn.com)

[www.w3schools.in](http://www.w3schools.in)