VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018

A Project Work on

"RESORT BOOKING"

A Dissertation work submitted in partial fulfillment of the requirement
for the award of the degree

Bachelor of Engineering

In

Information Science & Engineering

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Acharya Dr. Sarvepalli Radhakrishnan Road, Soldevanahalli, Bengaluru-560107

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING
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Certificate

This is to Certify that the Mini-Project work entitled **"RESORT BOOKING"** is a bonafide work carried out by **Tilakraj Nayak(1AY16IS112) AND Nitish Hegde(1AY16IS073)**, in partial fulfillment for the award of the degree of **Bachelor of Engineering** in **Information Science and Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Project has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Prof. Nagesh A G Guide	**Dr. Surekha K B** HOD

Name of the Examiners	**Signature with date**
1. _____	_____
2. _____	_____

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Tilakraj Nayak
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ABSTRACT

The online resort management website is useful for the customers who like to book the room online without going to resort personally and dealing face to face. It provides the facility to the customers or the users to have complete information about the resort services at one place and it keeping customer's record and also calculate customer bill slip. It contains the details of the different rooms available, for instance there might be rooms with A.C/Non-A.C and deluxe/Non-deluxe.

The main objective of this project is to provide the better work efficiency, security, accuracy, reliability, feasibility.

This system will provide automation of reservation and billing system to front desk staff and room booking facility to guest using website.

The project contains

- Keeping the records of all customers.
- Maintains proper list of all persons.
- Generating bill slip.

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CHAPTER 1

INTRODUCTION

Today the world's most forward looking comic agency are trying to provide more reliable and accurate services in their field, offering services to the customers and employees with all the available choices in their interest. It may be a leading many different comic stores. Every Store nowadays is trying to computerize its activities to provide better services to its customers. The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same.

The project, “RESORT BOOKING” is also a step towards offering more or less the similar features. This system enables to manage and record the activities of whole comic Store of multifacility skills only.

Marvel dc comic store enables the other staff to provide their services in a more systematic and efficient manner, hence improving the goodwill of concerned institution. This helps the administrator to analyze upon the performance of store.

1.1 Introduction to DBMS

DBMS stands for **D**ata**b**ase **M**anagement **S**ystem. 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. Basically DBMS is a software tool to organize (create, retrieve, update and manage) data in a database.

The main aim of a DBMS is to supply a way to store up and retrieve database information that is both convenient and efficient. By data, we mean known facts that can be recorded and that have embedded meaning. Normally people use software such as DBASE IV or V, Microsoft ACCESS, or EXCEL to store data in the form of database. A datum is a unit of data. Meaningful data combined to form information. Hence, information is interpreted data – data provided with semantics. MS. ACCESS is one of the most common examples of database management software.

Database systems are meant to handle large collection of information. Management of data involves both defining structures for storage of information and providing mechanisms that can do the manipulation of those stored information. Moreover, the database system must ensure the safety of the information stored, despite system crashes or attempts at unauthorized access.

1.1.1 Why 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.

1.1.2 Database applications

- **Telecom:** There is a database to keeps track of the information regarding calls made, network usage, customer details etc. Without the database systems it is hard to maintain that huge amount of data that keeps updating every millisecond.

- **Industry:** Where it is a manufacturing unit, warehouse or distribution centre, each one needs a database to keep the records of ins and outs. For example distribution centre should keep a track of the product units that supplied into the centre as well as the products that got delivered out from the distribution centre on each day; this is where DBMS comes into picture.

- **Education sector:** Database systems are frequently used in schools and colleges to store and retrieve the data regarding student details, staff details, course details, exam details, payroll data, attendance details, fees details etc. There is a hell lot amount of inter-related data that needs to be stored and retrieved in an efficient manner.

- **Online shopping:** You must be aware of the online shopping websites such as Amazon, Flipkart etc. These sites store the product information, your addresses and preferences,

credit details and provide you the relevant list of products based on your query. All this involves a Database management system.

- **Banking system:** For storing customer info, tracking day to day credit and debit transactions, generating bank statements etc. All this work has been done with the help of Database management systems.

1.1.3 Advantages of DBMS

A DBMS manage data and has many advantages.

- **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.

- **Providing backup and recovery:** A DBMS must provide facilities for recovering from hardware or software failures. The backup and recovery subsystem of the DBMS is responsible for recovery.

- **Permitting inferencing and actions using rules:** Some database systems provide capabilities for defining deduction rules for inferencing new information from the stored database facts.

1.1.4 Components of DBMS

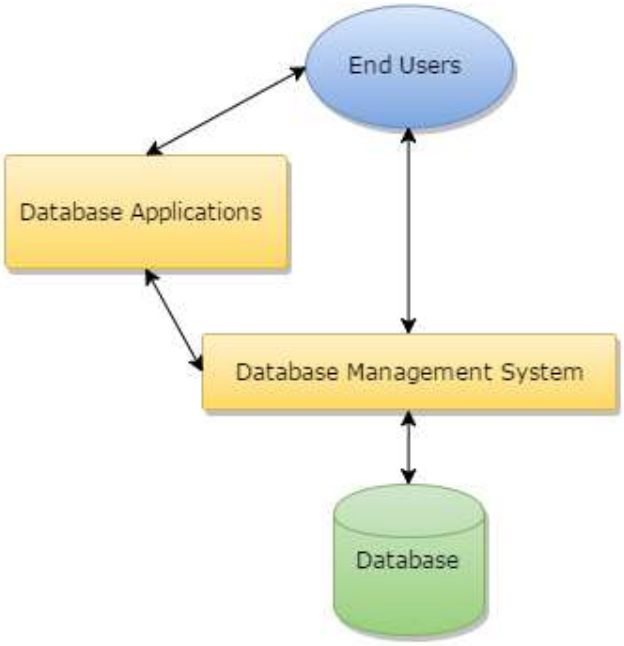

Fig-1.1: Components of a Database Management System

- **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.

- **Database access language:** This is used to access the data to and from the database, to enter new data, update existing data, or retrieve required data from databases. The user writes a set of appropriate commands in a database access language, submits these to the DBMS, which then processes the data and generates and displays a set of results into a user readable form.

1.1.5 Three-Schema architecture

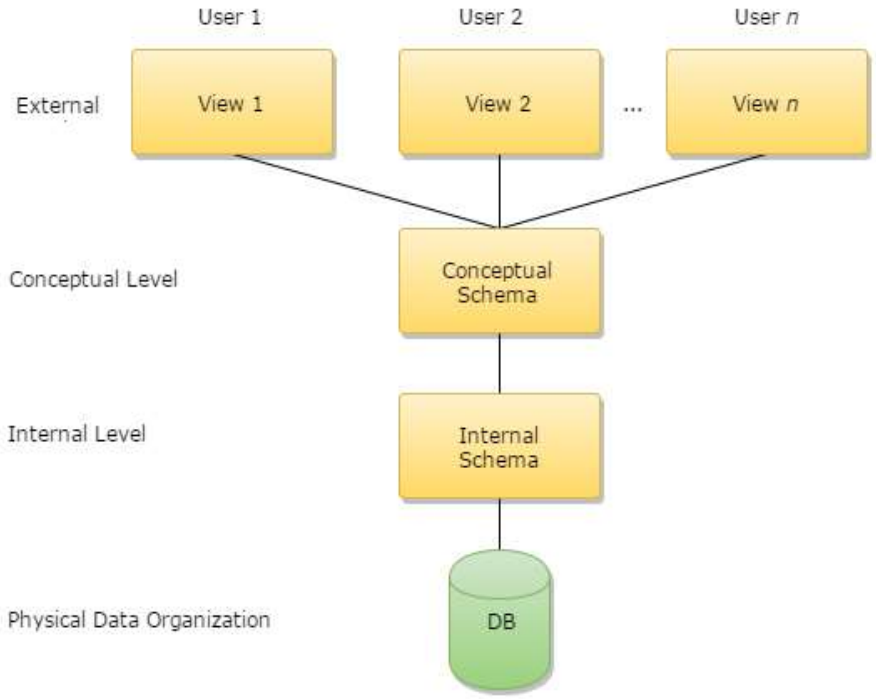

Fig-1.2: Architecture of database system

The levels form a three-level architecture that includes an external, a conceptual, and an internal level. The way users recognize the data is called the external level. The way the DBMS and the operating system distinguish the data is the internal level, where the data is actually stored using the data structures and file. The conceptual level offers both the mapping and the desired independence between the external and internal levels.

CHAPTER 2

SYSTEM REQUIREMENTS

2.1 Hardware Requirements

- **Processor:** Intel Core2 Quad @ 2.4Ghz on Windows® Vista 64-Bit / Windows® 7 64-Bit / Windows® 8 64-Bit / Windows® 8.1 64-Bit.
- **RAM:** 2GB of RAM
- **Memory:** 256GB Hard drive
- **Keyboard:** MS compatible keyboard
- **Mouse:** MS compatible mouse

2.2 Software Requirements

- **Operating system:** Windows® Vista 64-Bit / Windows® 7 64-Bit / Windows® 8 64-Bit / Windows® 8.1 64-Bit.
- **Front end:** Java Swings
- **Back end:** Oracle database 11g release 2
- **Software:** JDK 1.8
- **IDE:** Eclipse Mars 2

CHAPTER 3

DESIGN

3.1 ER Diagram

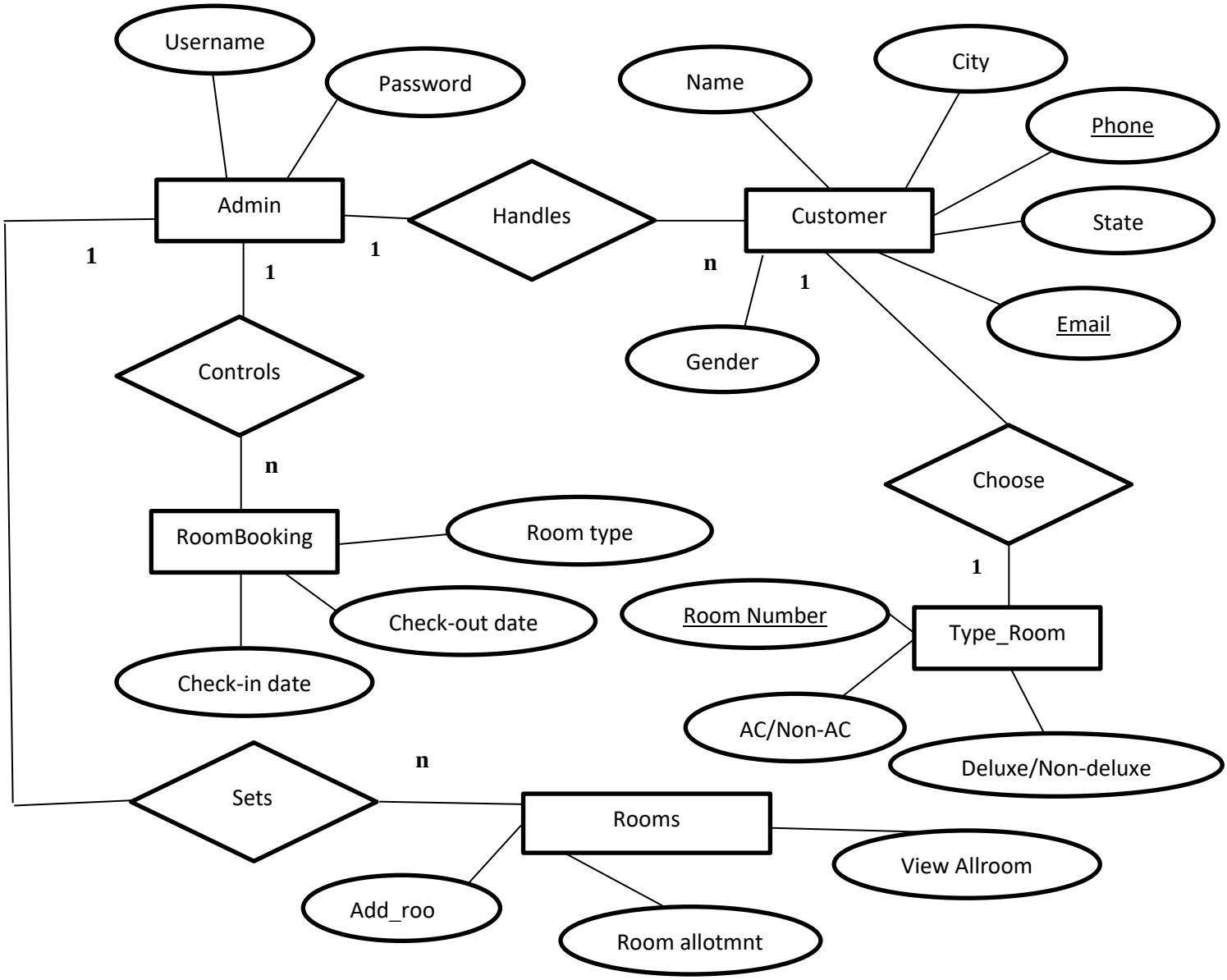

Fig-3.1: Entity Relationship Diagram

1:N

- One admin can handle many customer.
- One admin can control many booking.
- One admin can set many rooms
- One customer choose only one type_rooms

3.2 Schema Diagram

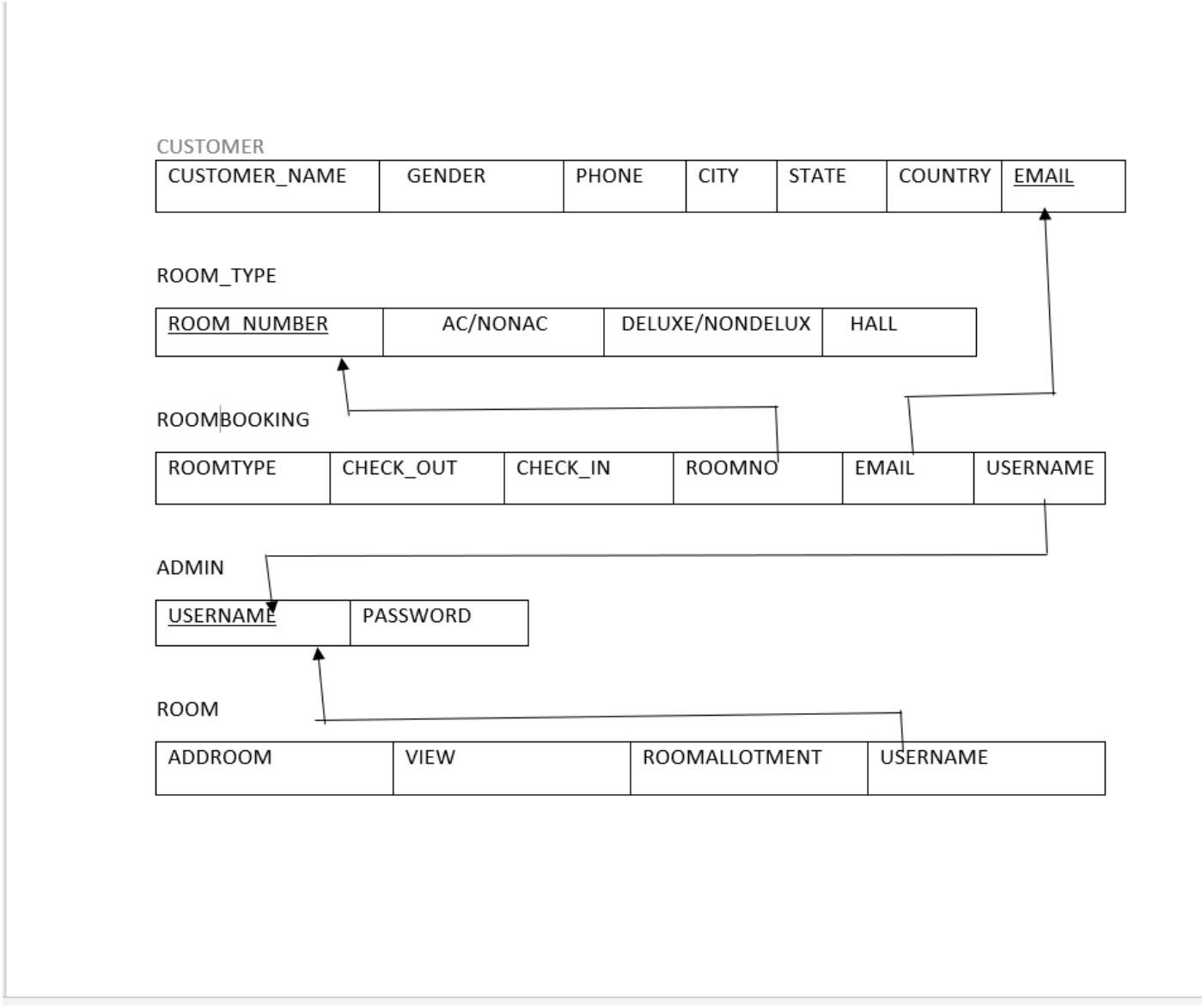

Fig-3.2: Schema Diagram

CHAPTER 4

IMPLEMENTATION

4.1 Tables

4.1.1 CUSTOMER

SNO	CUSTOMER_NAME	DATA_TYPE	DESCRIPTION
1	CUSTOMER_NAME	Varchar2	
2	GENDER	Varchar2	
3	CITY	Varchar2	
4	STATE	Varchar2	
5	COUNTRY	Varchar2	
6	PHONE	Integer	
7	EMAIL	Varchar2	PRIMARY KEY

```
CREATE TABLE CUSTOMER (
CUSTOMER_NAME VARCHAR 2(20) ,
GENDER VARCHAR2 (1),
CITY VARCHAR2(20),
STATE VARCHAR2(20),
COUNTRY VARCHAR2(20),
PHONE INTEGER,
EMAIL VARCHAR 2(30) PRIMARY KEY
);
```

4.1.2 ROOM_TYPE

SNO	COLUMN_NAME	DATA_TYPE	DESCRIPTION
1	ROOM_NUMBER	Varchar2	Primary Key
2	AC/NONAC	Varchar2	
3	DELUXE/NONDELUX	Varchar2	

4	HALL	Varchar2	

CREATE TABLE ROOM_TYPE (
ROOM_NUMBER VARCHAR2(20) PRIMARY KEY,
AC/NONAC VARCHAR2(20),
DELUXE/NONDELUX VARCHAR2(20) ,
HALL VARCHAR2(20) ,
);

4.1.3 ROOMBOOKING

SNO	COLUMN_NAME	DATA_TYPE	DESCRIPTION
1	ROOMTYPE	Varchar2	Primary Key
2	CHECK_IN	Date	
3	CHECK_OUT	Date	
4	ROOMNO	Varchar2	Foreign Key to Room_Type
5	EMAIL	Varchar2	Foreign Key to Customer
6	USERNAME	Varchar2	Foreign Key to Admin

CREATE TABLE BOOKING (
ROOM_TYPE VARCHAR2(20) PRIMARY KEY,
CHECK_IN DATE,
CHECK_OUT DATE,
FOREIGN KEY ROOMNO REFERENCES ROOM_TYPE(ROOM_NO)
FOREIGN KEY EMAIL REFERENCES CUSTOMER(EMAIL)
FOREIGN KEY USERNAME REFERENCES ADMIN(USERNAME));

4.1.4 ADMIN

SNO	COLUMN_NAME	DATA_TYPE	DESCRIPTION

1	USERNAME	Varchar2	Primary Key
2	PASSWORD	Varchar2	

```
CREATE TABLE ADMIN (
USERNAME VARCHAR2(20) PRIMARY KEY,
PASSWORD VARCHAR2(20),
);
```

4.1.5 ROOM

SNO	COLUMN_NAME	DATA_TYPE	DESCRIPTION
1	ADDROOM	Varchar2	
2	VIEW	Varchar2	
3	ROOMALLOTMENT	Varchar2	
4	USERNAME	Varchar2	Foreign Key to Admin

```
CREATE TABLE ROOM (
ADDROOM VARCHAR2(20),
VIEW VARCHAR2(20),
ROOMALLOTMENT VARCHAR2(20),
FOREIGN KEY USERNAME REFERENCES ADMIN(USERNAME));
```

4.2 TRIGGERS

```
CREATE TRIGGER `EXEC_TIME` BEFORE INSERT ON ROOMTYPES
 FOR EACH ROW INSERT INTO TRIGGER_TIME
VALUES(NOW());
```

4.3 Stored Procedures

```
DELIMITER $$
CREATE   PROCEDURE PROC ()
BEGIN
        SELECT CHECKINDATE, CHECKOUTDATE
        FROM ROOMBOOKING;
END$$
DELIMITER ;
```

CHAPTER 5

SNAPSHOTS

The following snapshot contains the login screen of the application where the username is tilak and password and password is 12345

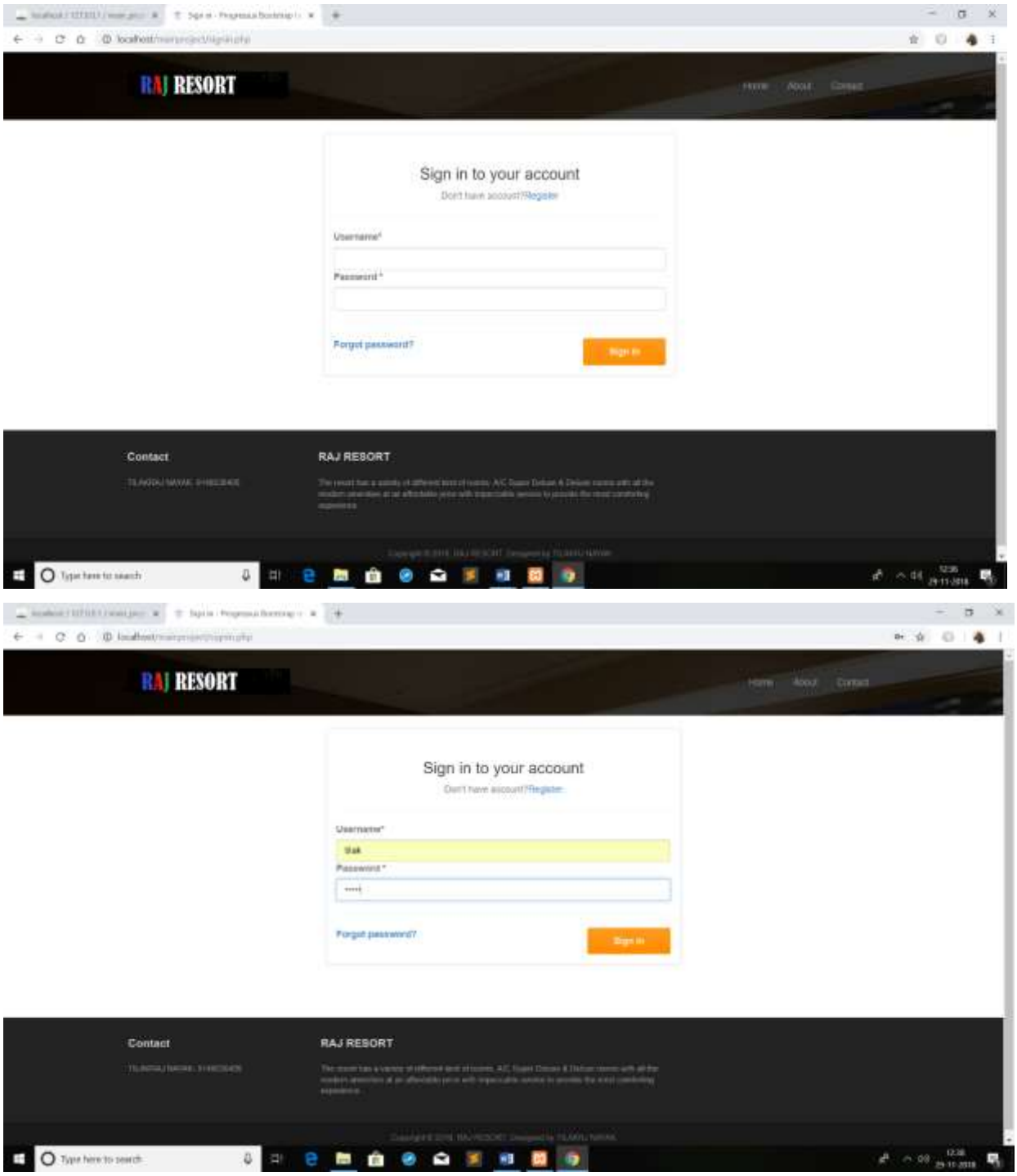

Fig-5.1: Snapshot of login window

The following snapshot contains the welcome screen of the online resort application.

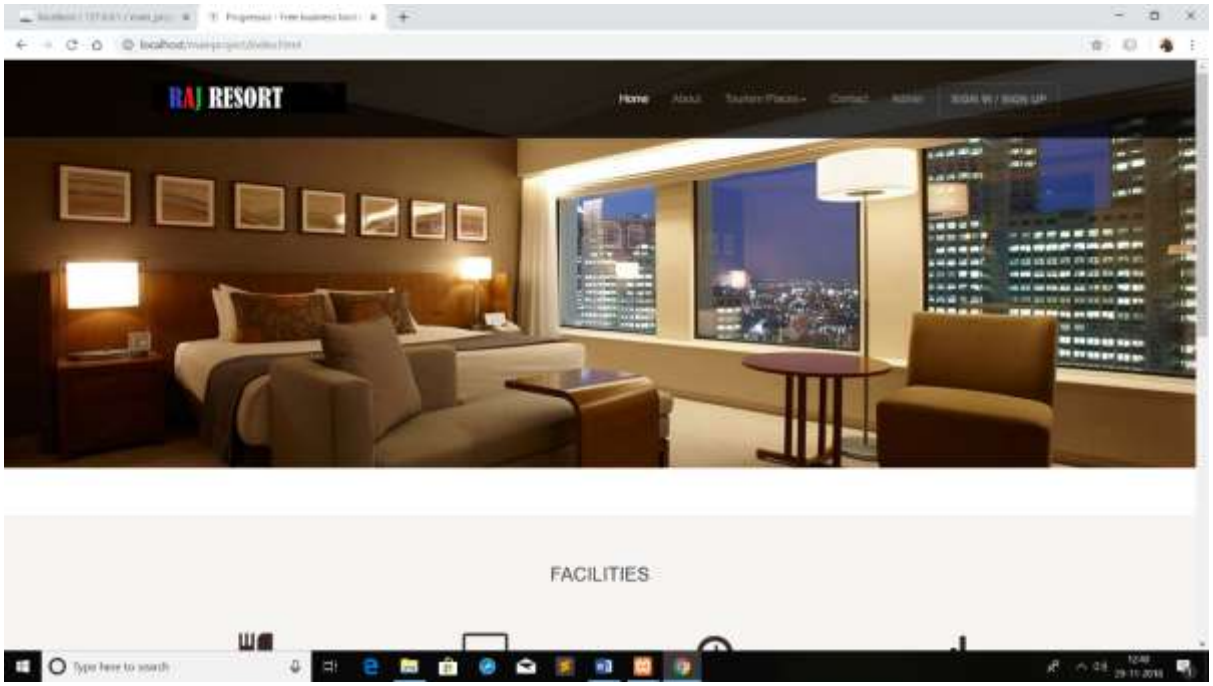

Fig-5.2: Snapshot of welcome screen

The following snapshot contains the booking section where the details of the booking will be added in the database.

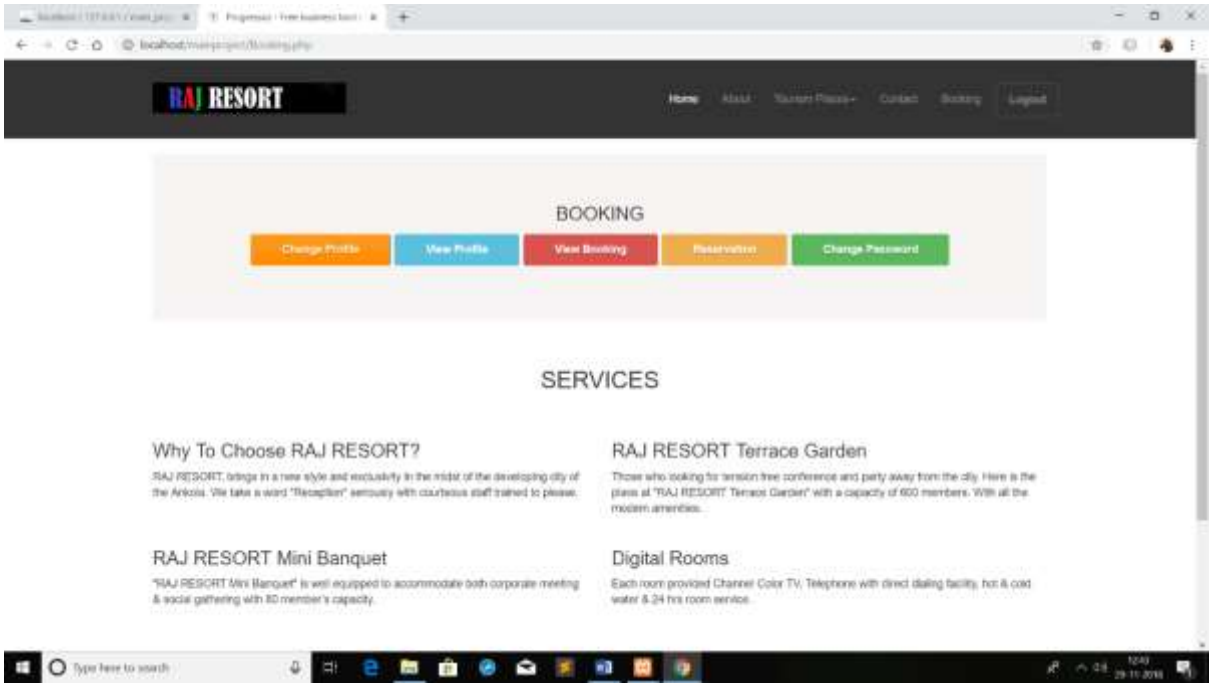

Fig-5.3: Snapshot of booking page

The following snapshot contains the details of changing the profile by logging into the customer loginpage

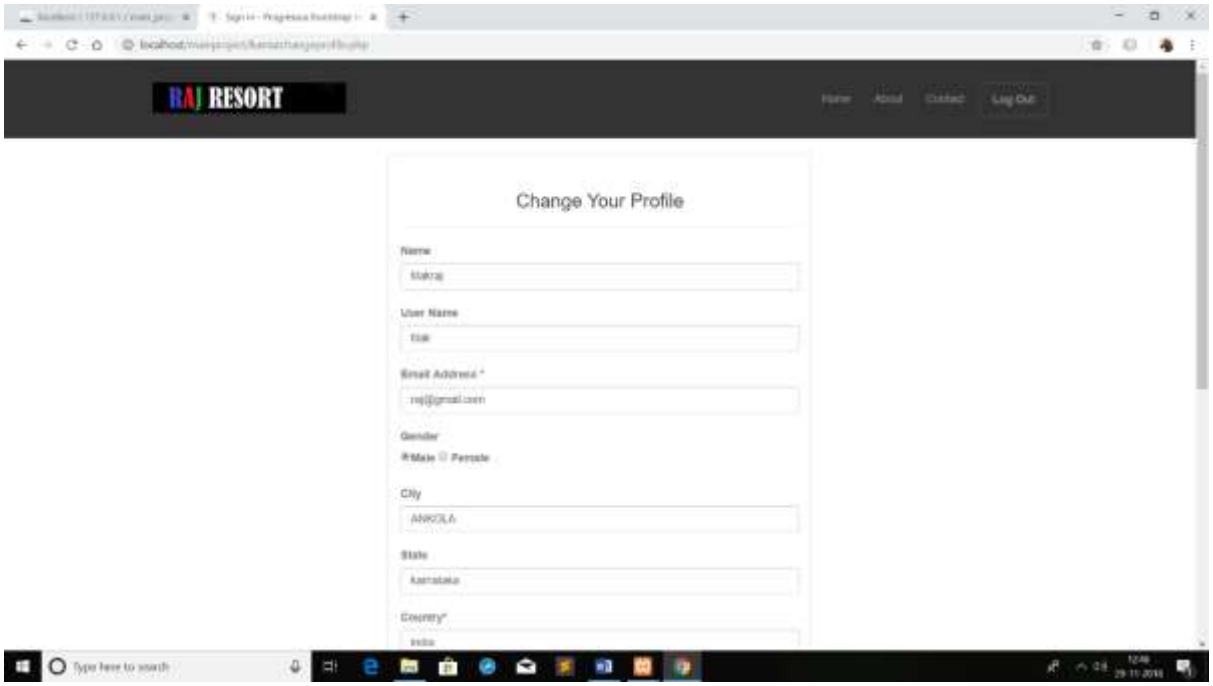

Fig-5.4: Snapshot of change profile

The following snapshot contains the details of the updated profile.

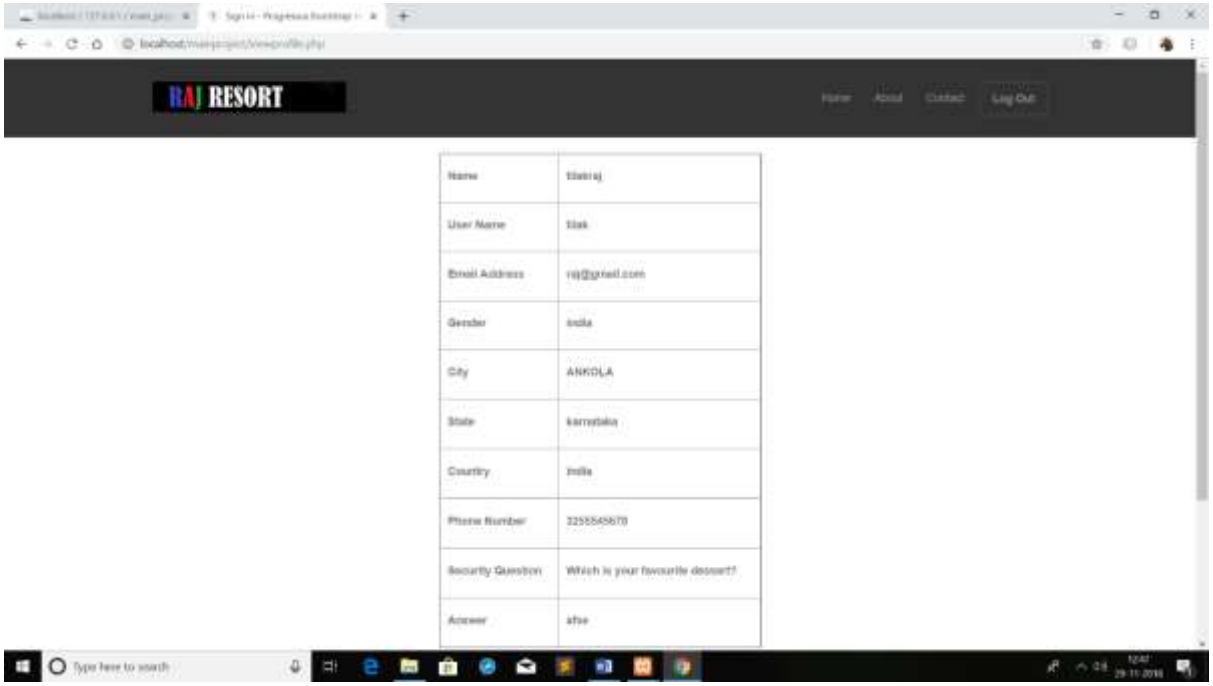

Fig-5.5: Snapshot of the updated profile

The following snapshot contains the details of the earlier registrations done by the customer

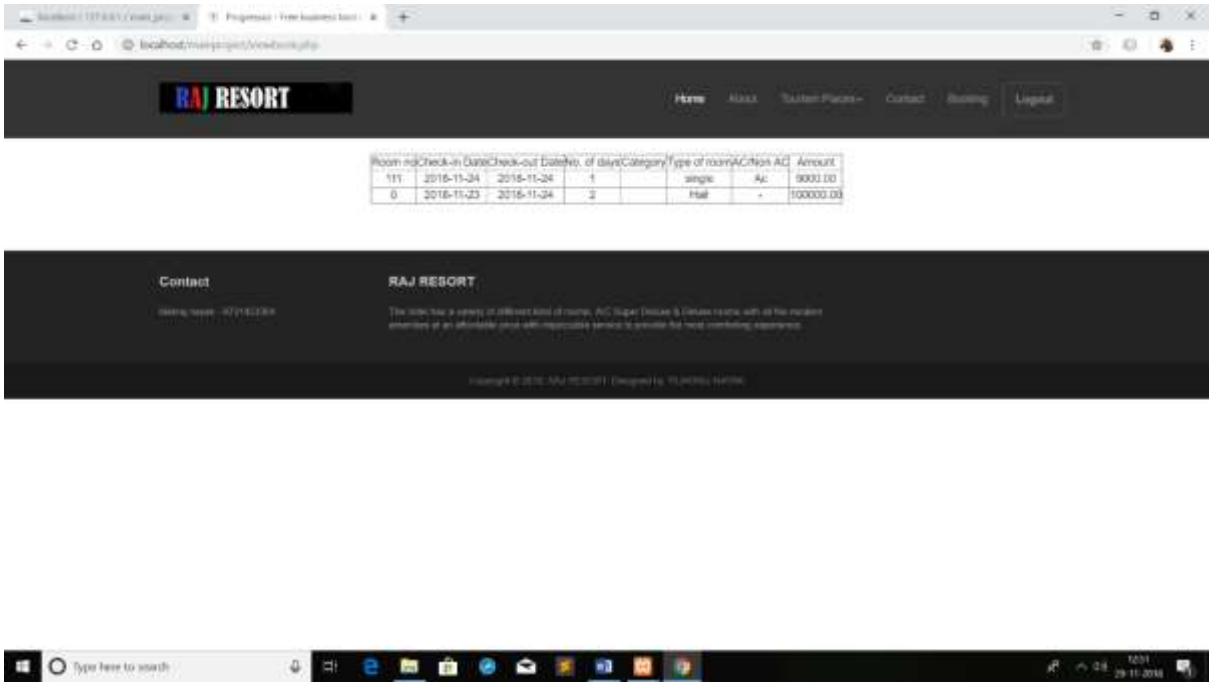

Fig-5.6: Snapshot of the previous registration

The following snapshot contains the details of the types of rooms available in the resort.

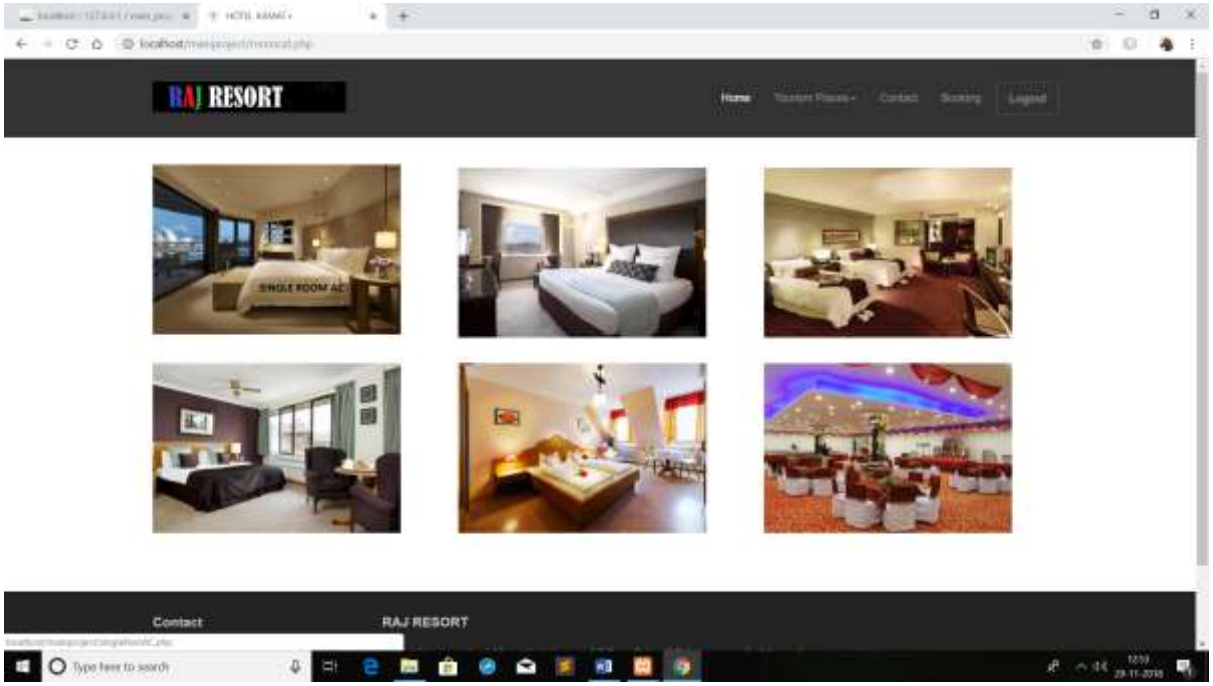

Fig-5.7: Snapshot of types of rooms available

The following snapshot displays the details to be provided during reservation

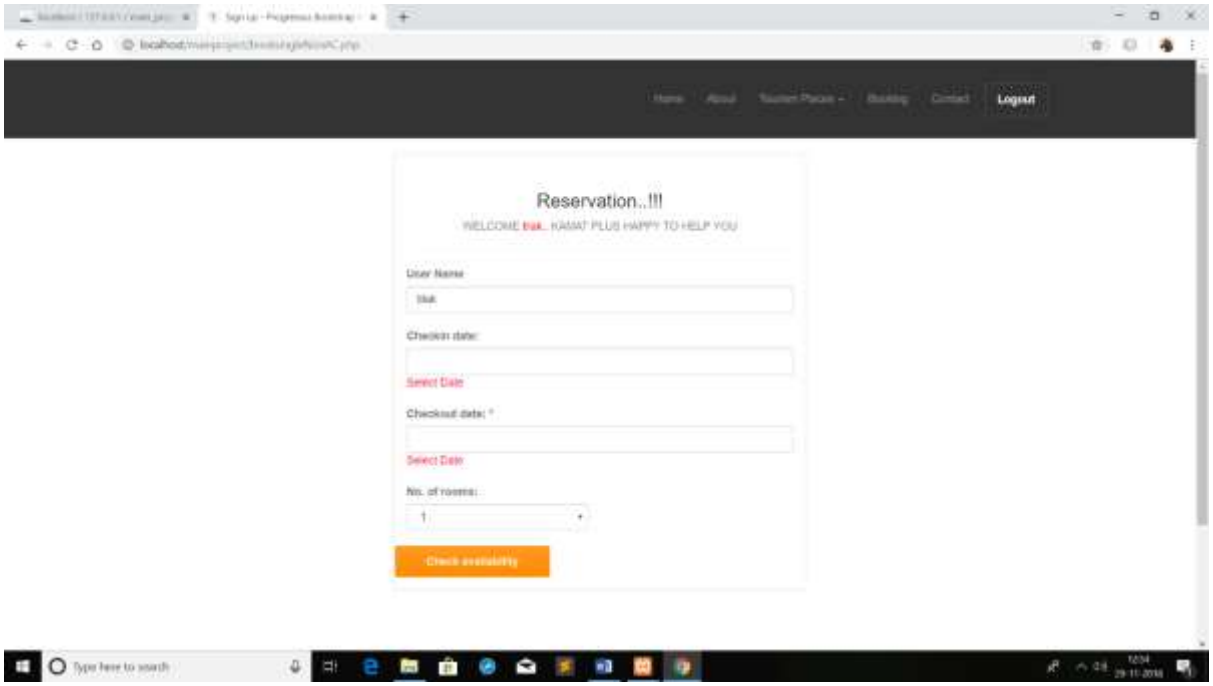

Fig-5.8: Snapshot of Reservation page

The following snapshot is of the admin login

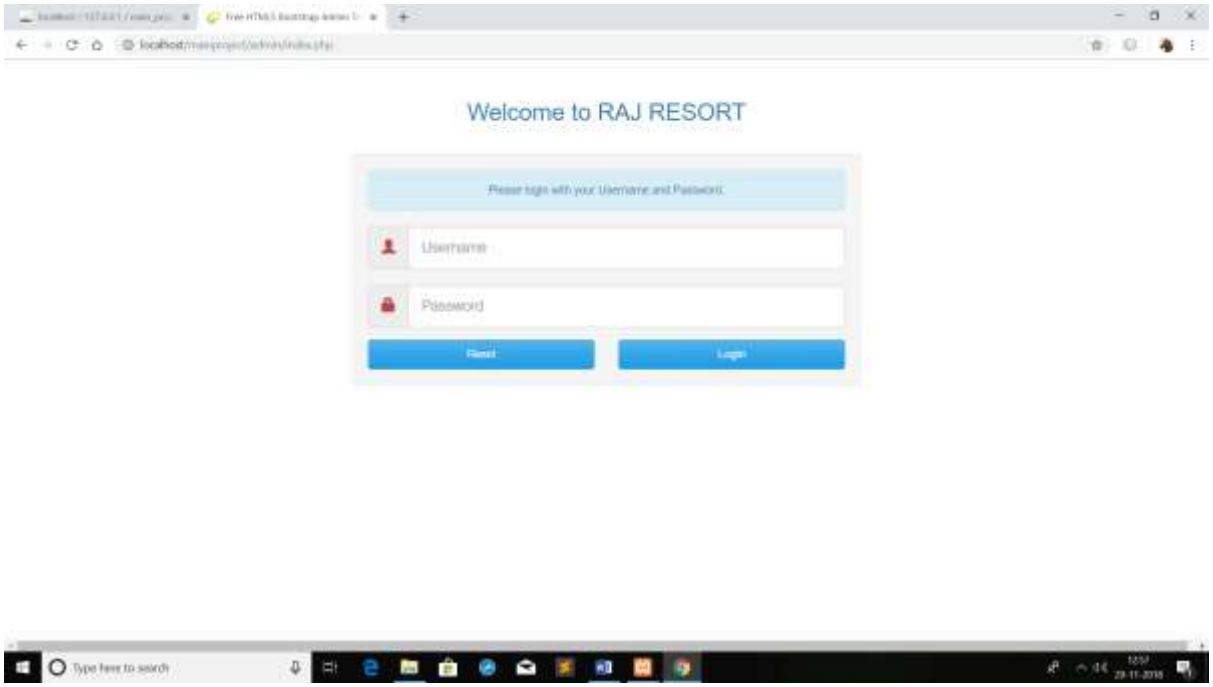

Fig-5.9: Snapshot of adminlogin

The following snapshot displays home page of admin

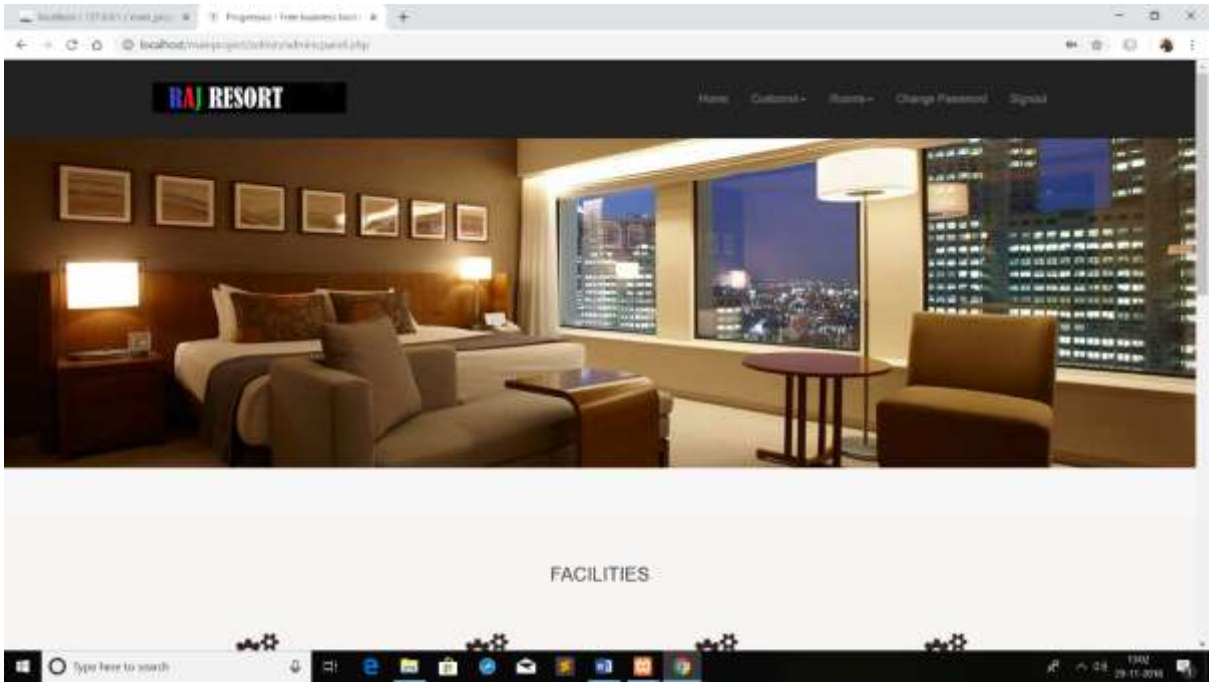

Fig-5.10: Snapshot of admin homepage

The following snapshot contains the view of all registration details

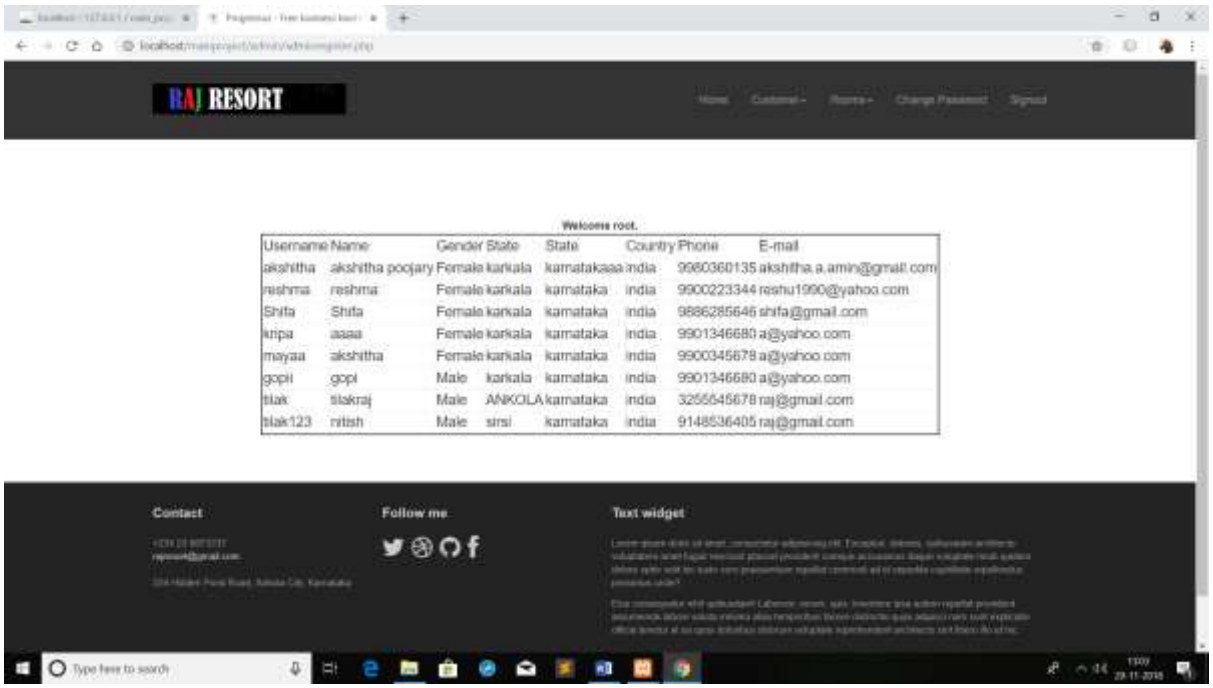

Fig-5.11: Snapshot of registration details

The following snapshot contains enquiry details

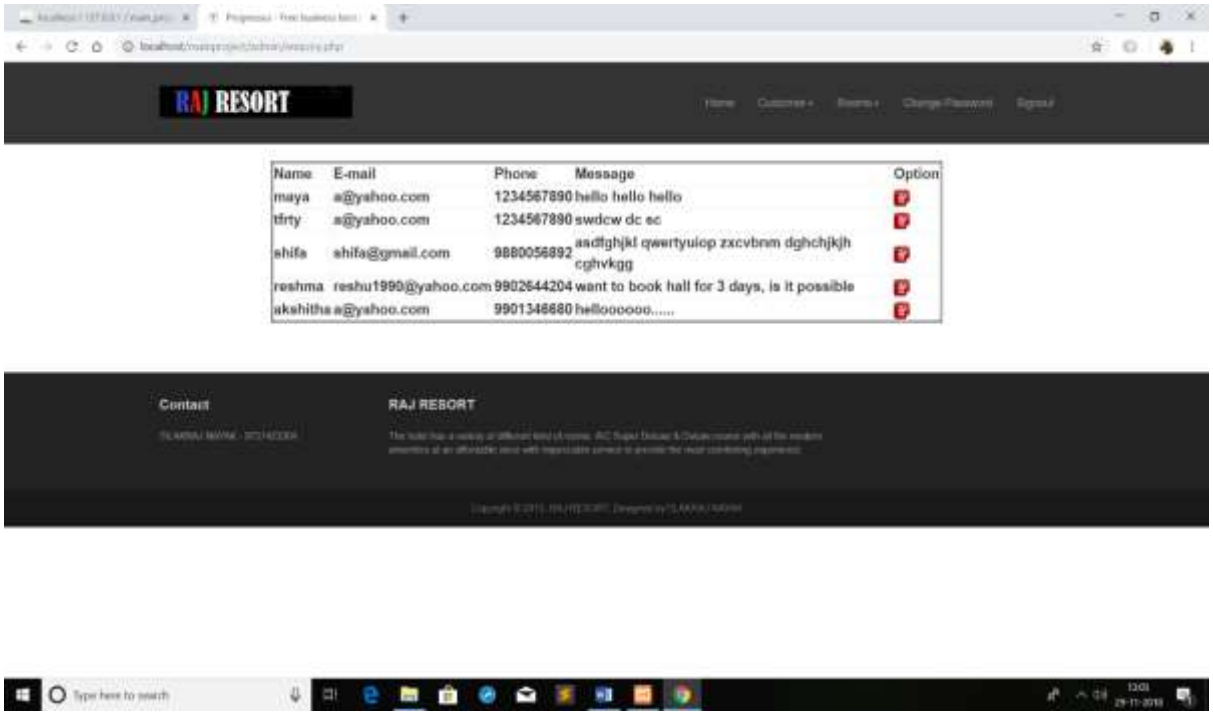

Fig-5.12: Snapshot of enquiry details

The following snapshot contains of add _new room

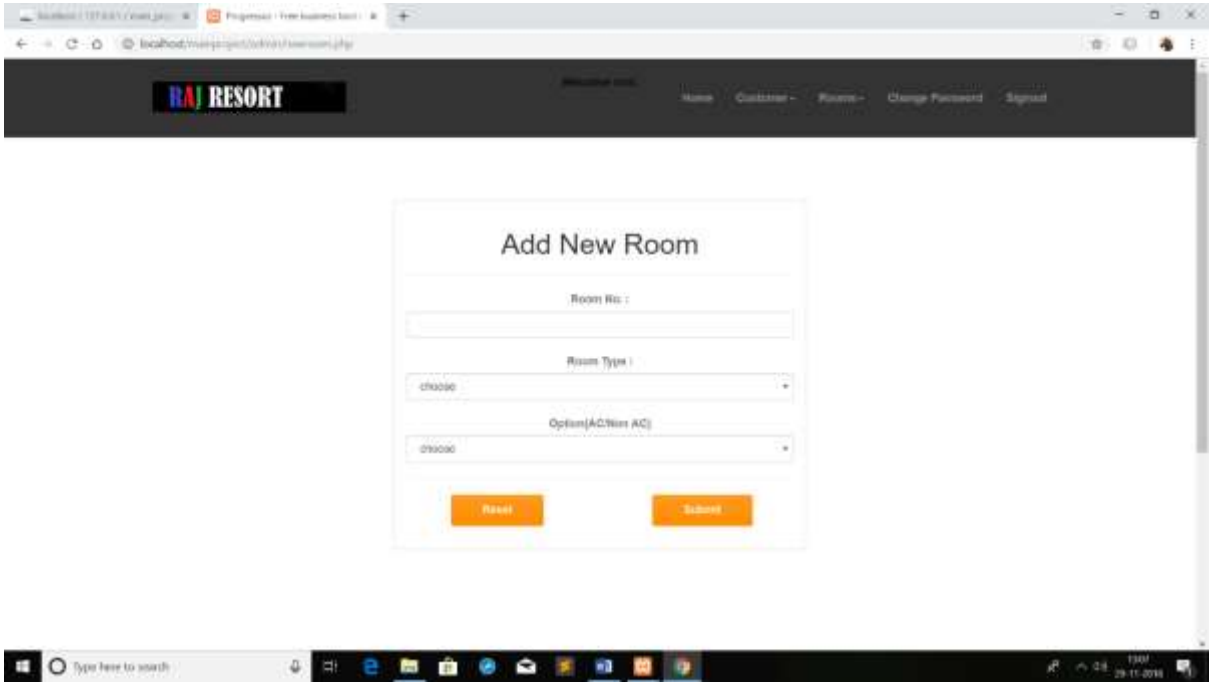

Fig-5.13: Snapshot of add new room

The following snapshot contains of view of all room

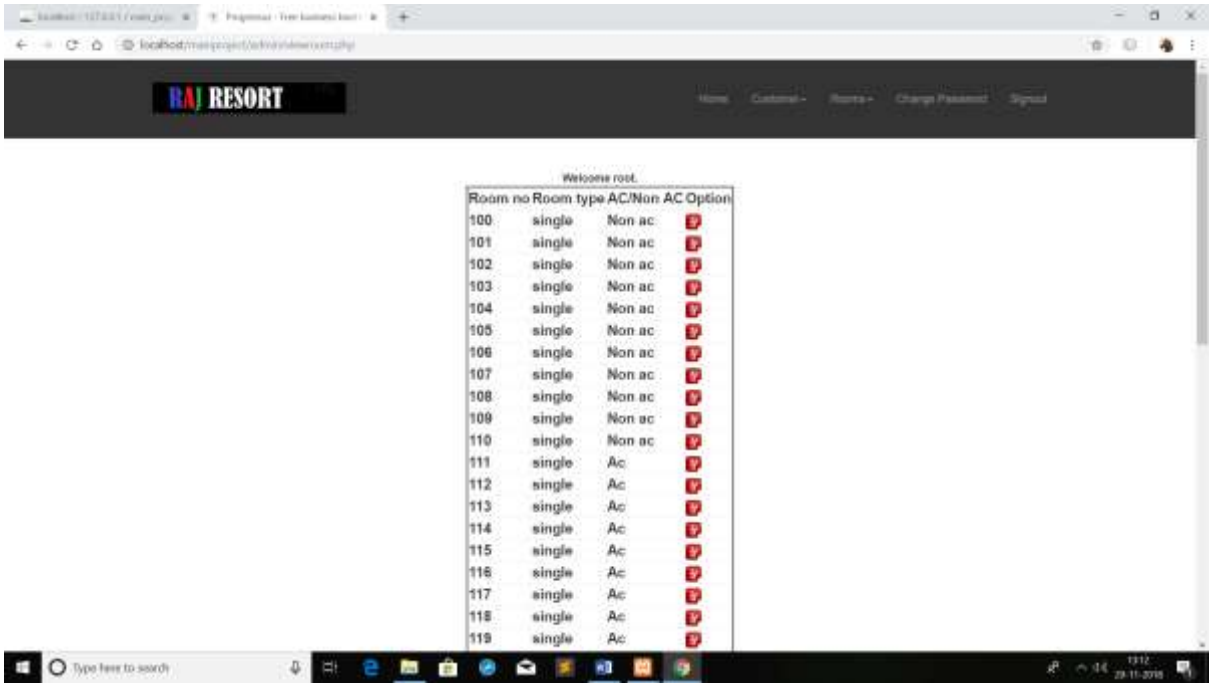

Fig-5.13: Snapshot of view all room

The following snapshot contains records of all rooms allotted

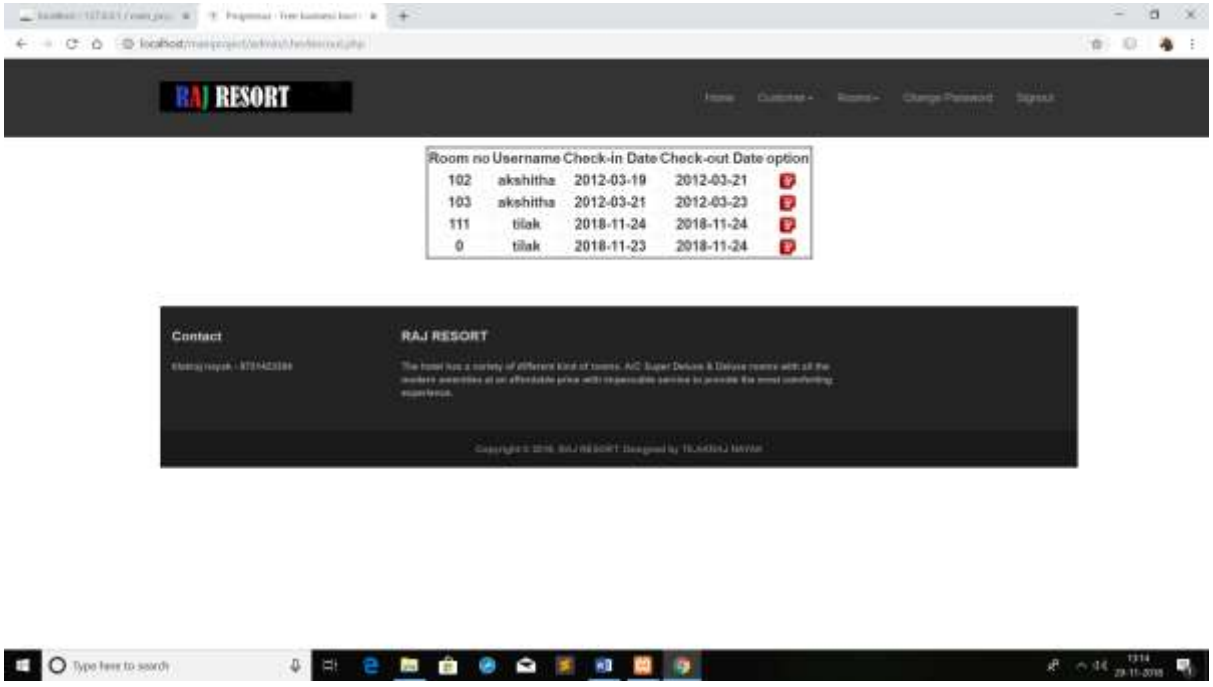

Fig-5.13: Snapshot of rooms allotted in the resort.

CONCLUSION & FUTURE ENHANCEMENT

Conclusion

Resort Management System is a Web-portal Development Company specializing in providing custom solutions for small businesses. We strive to build solutions to your specific needs to get the job done right the first time. We pay special attention to the ease of use and utilize the latest in technology.

This system is developed for the exclusively for the people of Karnataka. It provides facilities to the user with user friendly modules with sub modules. This system is developed in understandable approach which can be easier to the layman of the computers. This system is developed totally GUI based and with smart links.

Future Enhancement

- Presently we are able to show the information only in English, this can be modified by using regional languages also.
- In further we will include SMS Registration, Digital Signature, and Barcode reader.

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