



**PROJECT REPORT  
ON**

**Guest House Reservation  
Website**

**SUBMITTED TO – DEPARTMENT OF COMPUTER SCIENCE  
UNDER THE SUPERVISION OF Dr.Maria Vianny**

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## **DECLARATION**

I hereby declare that the project work titled, “**Guest House Reservation Website**” submitted as part of Bachelor’s degree in Computer Science, at Chitkara University, Punjab, is an authentic record of our own work carried out under the supervision of Dr. Maria Vianny

**Signature of Supervisor:**

**Verified by:**

**Signature(s):**

## **ACKNOWLEDGEMENT**

In the present world of competition there is a race of existence in which the hard working needs to come forward and succeed. Project is like a bridge between theoretical and practical working. With this willing we joined the project. Before we get into the thick of things, we would like to thank a few people who have supported and helped us throughout the journey of making this project.

We would like to thank our Dean Mrs. Meenu Khurana for giving us an opportunity to make this project.

We would like to express our sincere gratitude to Dr. Maria (LOP in charge) for his able guidance and support.

Also, we would like to Thank all our teachers who have taught us and helped us reach where we are right now.

Last but not the least we would like to thank our parents for their continuous support, love and encouragement.

## **INTRODUCTION**

A reservation simply means to reserve any service or place for an individual or group of individuals for to be used in future whether it's an hour, a day, several weeks or even months from present point of time. In today's world, people have no time as they want their work to be done as soon as possible. Also, the time wasted of doing something physically such as booking a guesthouse can be devoted to its organization's work.

The aim of this project is to decrease the time wasted by an employee of an organization and to keep the data of the reservations secured in the form of a digital database by building an online reservation website so that every employee of that organization can book the guesthouse from anywhere in the world hassle-free and putting the time saved to the organization's work. Deploying this shall increase in employee productivity and lesser load to those employees which were in-charge of handling the reservations.

## **ABSTRACT**

In today's world, people have no time as they want their work to be done as soon as possible. Also, the time wasted of doing something physically such as booking a guesthouse can be devoted to its organization's work.

Some people do not have time to go or call the specific part or branch of the organization just to book a guesthouse. The aim of this project is to build an online reservation website so that every employee of that organization can book the guesthouse from anywhere in the world hassle-free. Deploying this shall increase in employee productivity and lesser load to those employees which were in-charge of handling the reservations.

## **LITERATURE SURVEY**

The trend of 'Digitalization of work' has seen a massive rise since the past decade. This is due to the technological advancements made during that time which is resulting to help people around the world in many ways. Many businesses like shopping, booking, etc. can be seen to be moving away from 'physical mode' to 'virtual mode'.

Digitalization of work simply means that the work that was done physically in the past is now done through a digital medium such as software in computers or applications in a smartphone and also the websites that can be accessed through a internet-able device. This has resulted to decrease the time wasted during these tasks that happen to form long queues or those which generated long waiting times.

The company 'Amazon' which was launched back in 5<sup>th</sup> July, 1984 is the most successful example of this trend. It started out by selling books online and as the time passed, it became the top e-commerce company of the world. Its most important factor was to help decrease the tedious time which an individual had to consume to shop physically. The time saved can be put in other aspects of their lives.

In a similar way an organization can help to reduce the time wasted by its employees to physically go into a specific part\branch of the organization to book their guesthouse for their holidays or vacation days. Deploying this shall increase in employee productivity and lesser load to those employees which were in-charge of handling the reservations.

## **WORK DONE**

### **❖ DESCRIPTION:**

- Any person can view the website's landing page
- Only registered members can proceed to book the guest house.
- Registered members are to be verified by admin by their employee number
- There are four roles available: Visitor, Employee, Admin and Developer
  - Visitor can only view the landing page.
  - Employee can view and book the guesthouse room.
  - An admin has some extra privileges including that of Employee and Visitor:
    - \* Admin can verify the registered members.
    - \* Admin can delete the bookings made by an employee.
  - A developer can access the backend part of the website to add, remove or modify the rooms.

### **❖ WEB PAGESDETAILS:**

- LandingPage .....
- RegisterPage .....
- Sign-InPage.....
- HomePage.....
- RoomPage.....
- MyBookingsPage.....
- CancelBookingPage.....
- APIPage .....
- Developer View .....

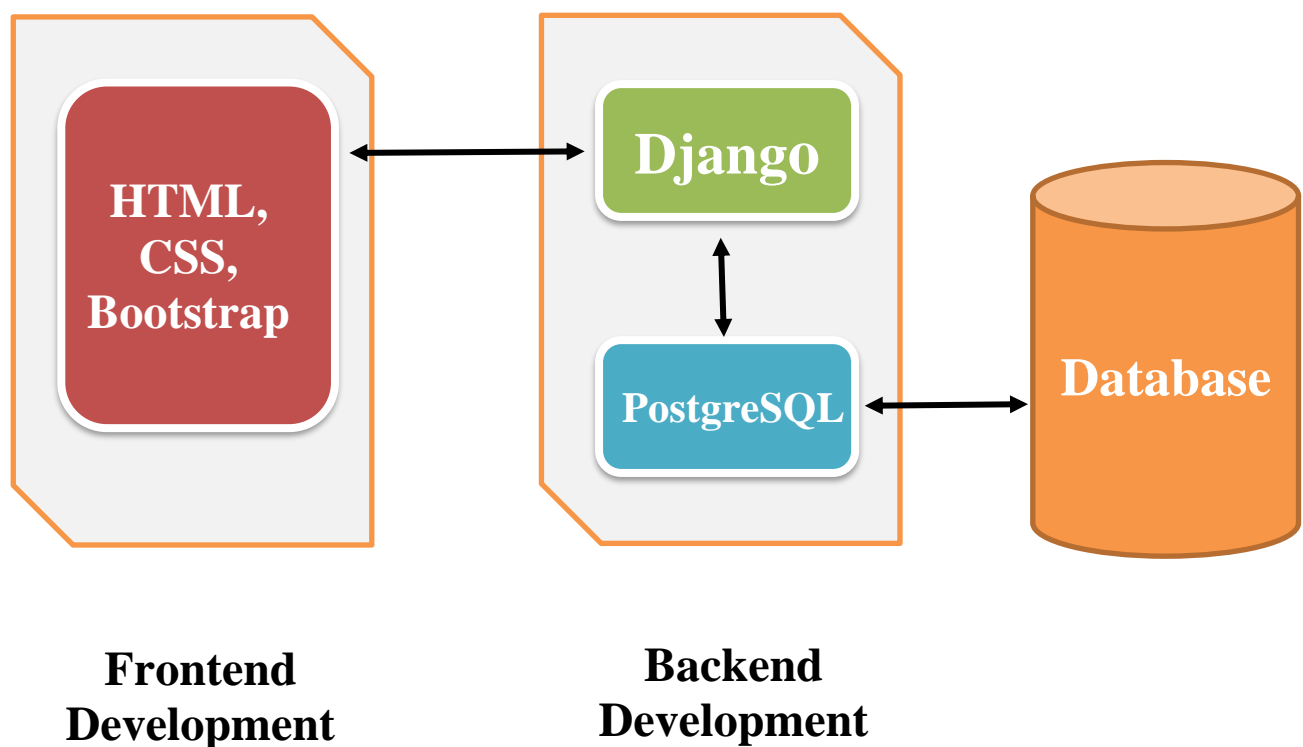


## ❖ DATABASEDETAILS:

1. **USERS-** All the visitors who become users fill up a registration form, all the details entered in that registration form are stored in users' table. Also, the details of the admin are also stored in this table. Contains id, Employee\_ID, Employee\_name, Employee\_email, Employee\_contact, isadmin.
2. **ROOMS-** The rooms created by the superuser by entering the detailed information of the products is stored in the rooms table. Also, the reviews entered by the users are also stored in this table. Contains id, Roomno.
3. **BOOKED-** The rooms reserved by the user are all stored in the orders table. It also contains the details entered by the user. It also contains the unique id given to the user in the users table so as to identify which user has reserved which room. Contains id, Roomno, Employee\_Id, Check\_in, Check\_out.

❖ **PROJECTDETAILS:**

**Guest House Reservation Website's  
ARCHITECTURE**



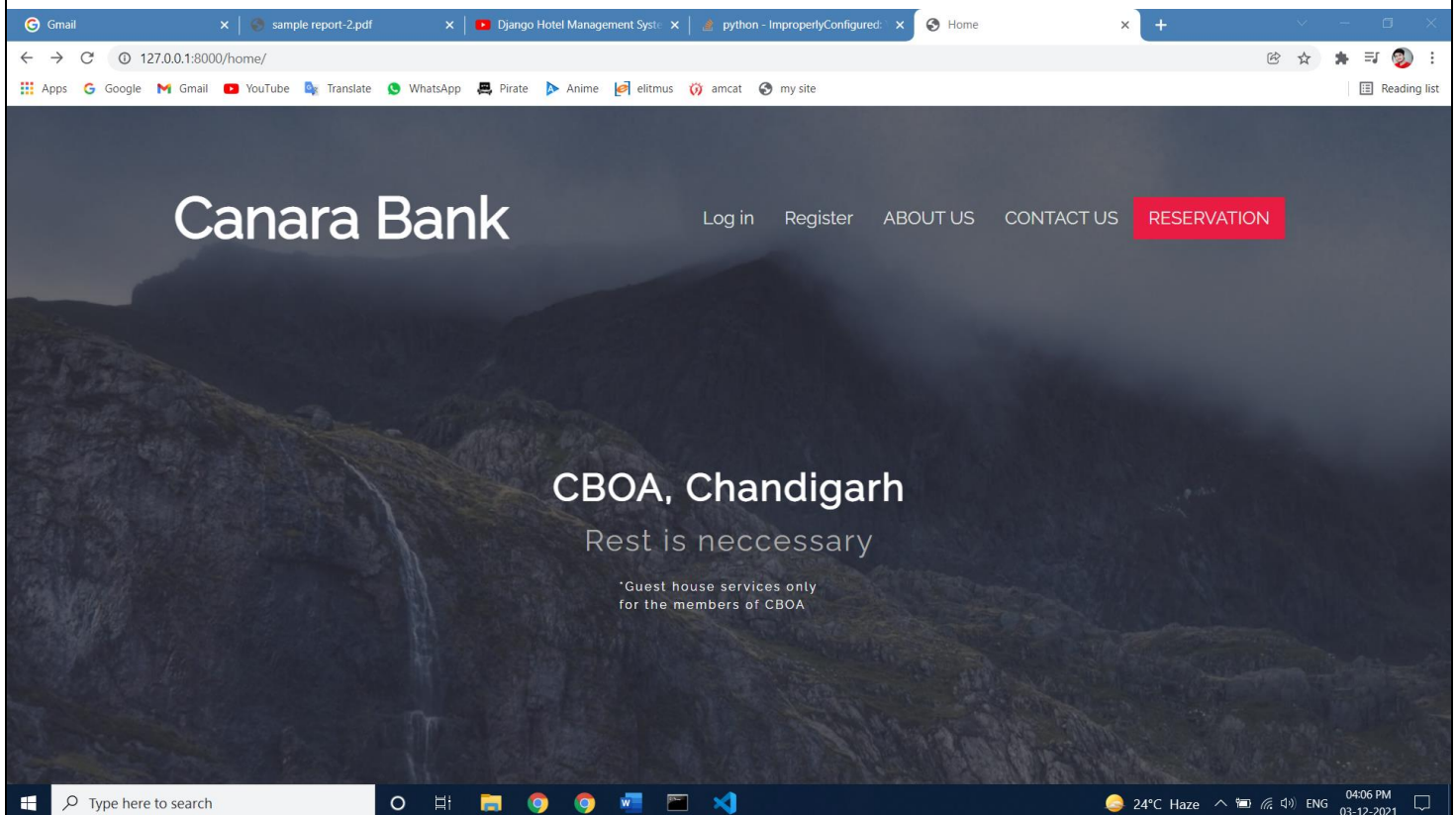
## **Guest House Reservation** **APPLICATION**

Anyone can view Eshop Spot portal and scroll through available products, but only registered users can login and order products. If a visitor wants to become a user he/she has to first register in order to avail the benefits of a user. Visitors can register by navigating to the registration page and then fill in the required details. Only admin has the access to delete the user. Only admin can change the role of user from user to admin. If a person registers by default he/she will be a user only.

## **USER VIEW**

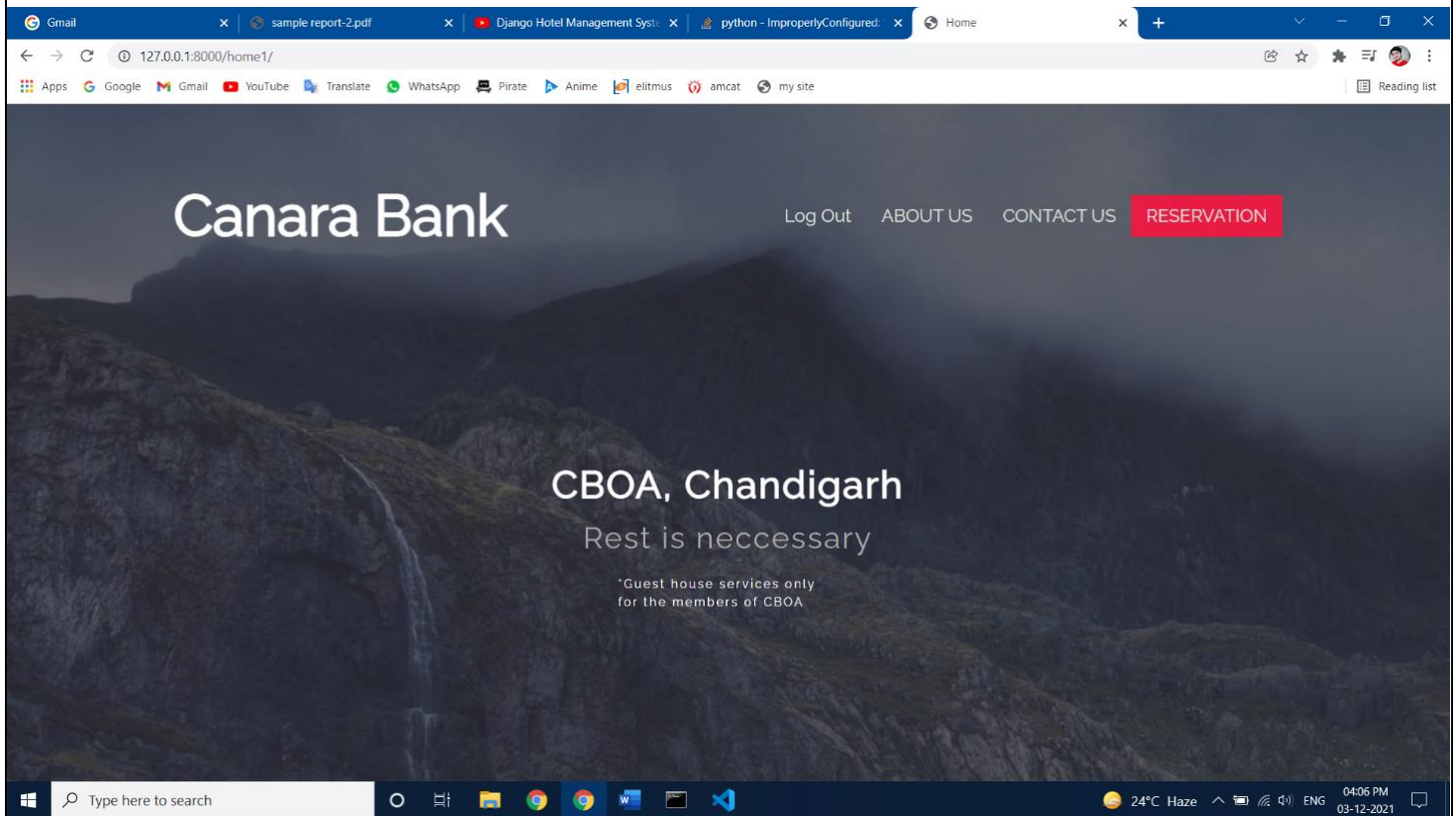
### **Landing Page:**

The Landing page is visible to all the types of users. It is the first page that is needed to be passed through in order to proceed to its main function.



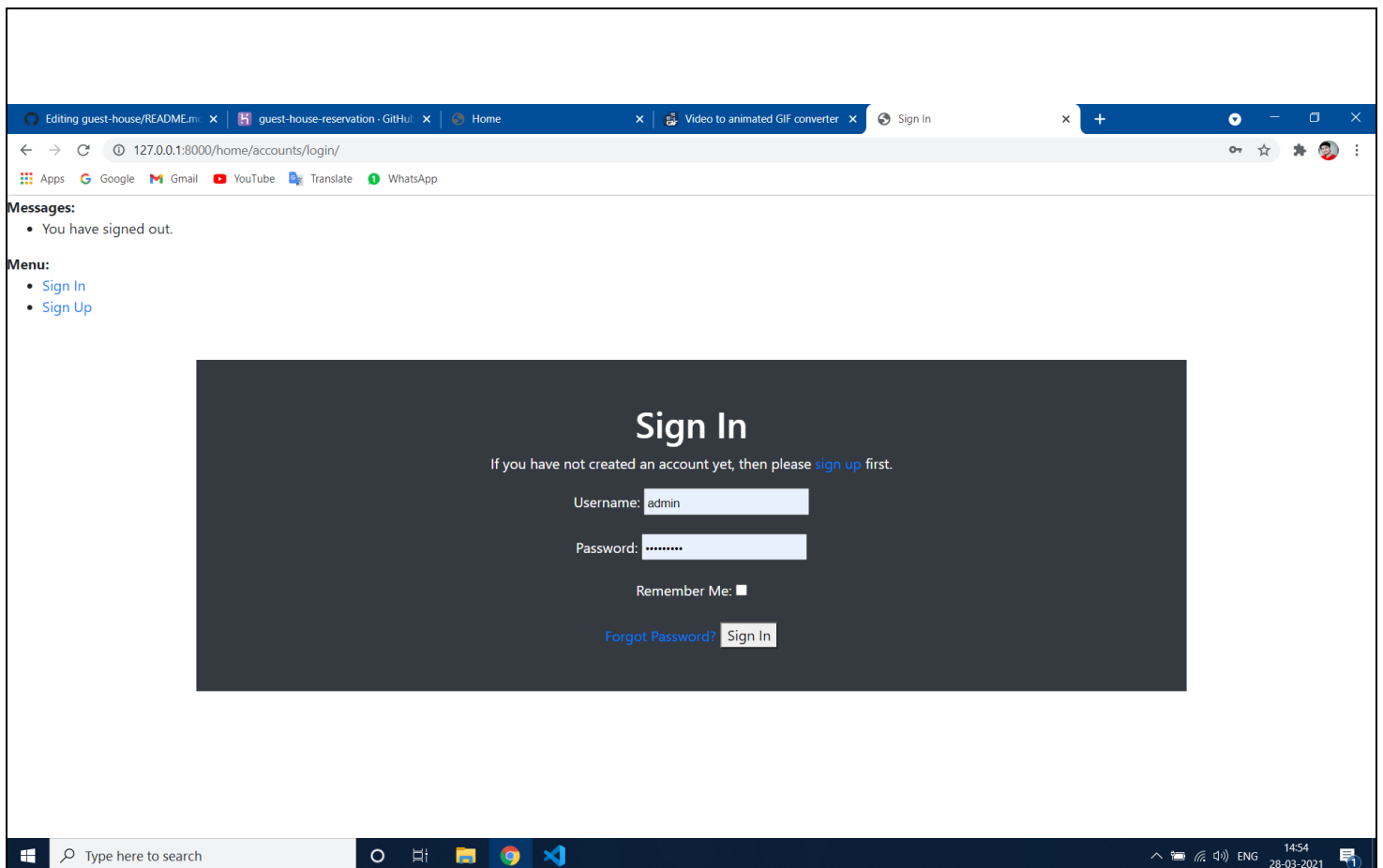
## **Landing Page(Signed in):**

Once the users have registered and verified by their employee id, after signing in they are able to access this webpage.



## **Sign in:**

This is the sign in page which the registered users are required to log in to access the website core function. The employee and admin can log in through this page.

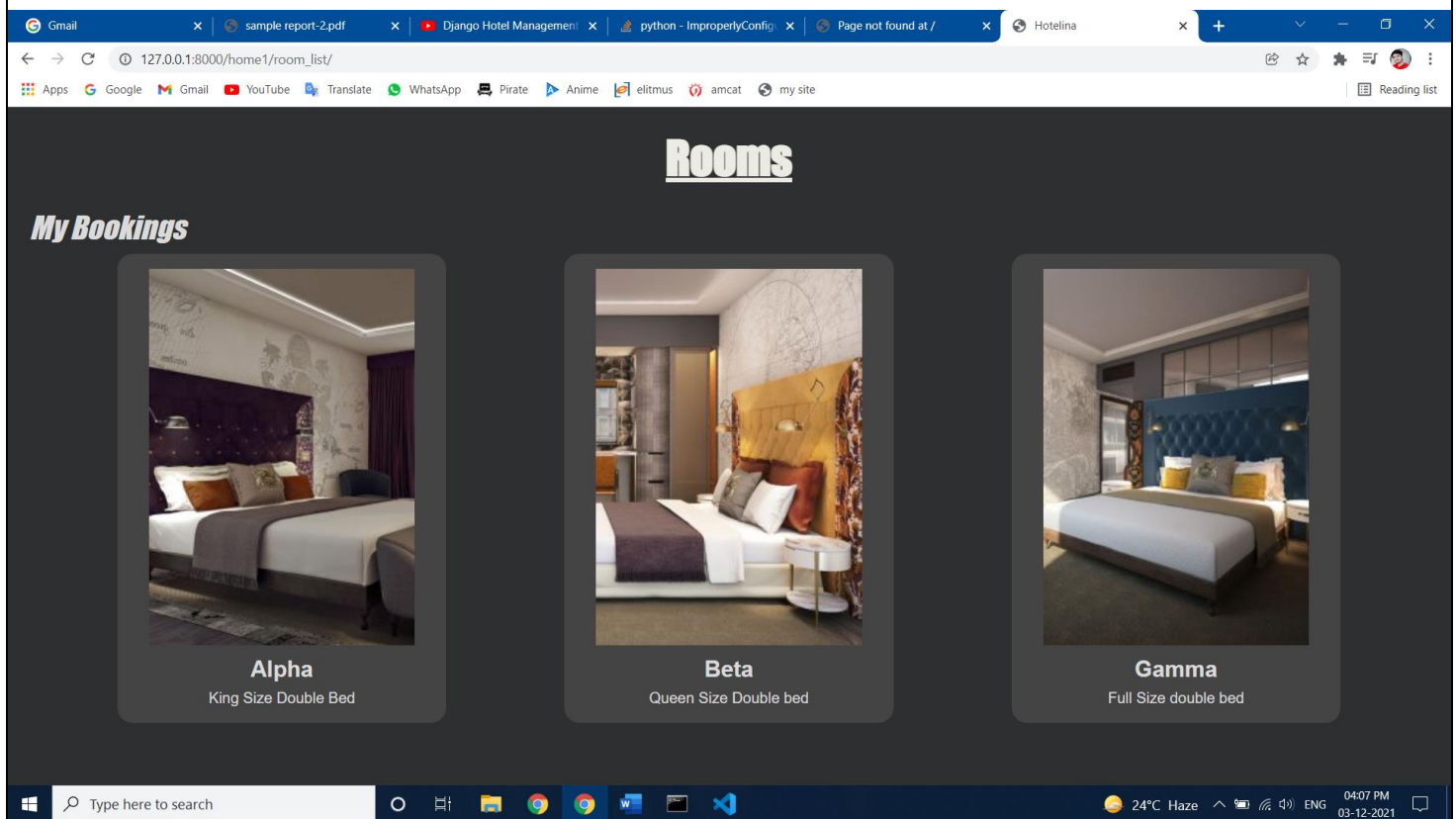


## **REGISTER PAGE:**

The register webpage is similar to the sign in page in terms of design and methodology. It needs to be fields to be filled and verified by the admin himself \herself, i.e., Name, Employee ID, company email and their phone number.

## **Home PAGE:**

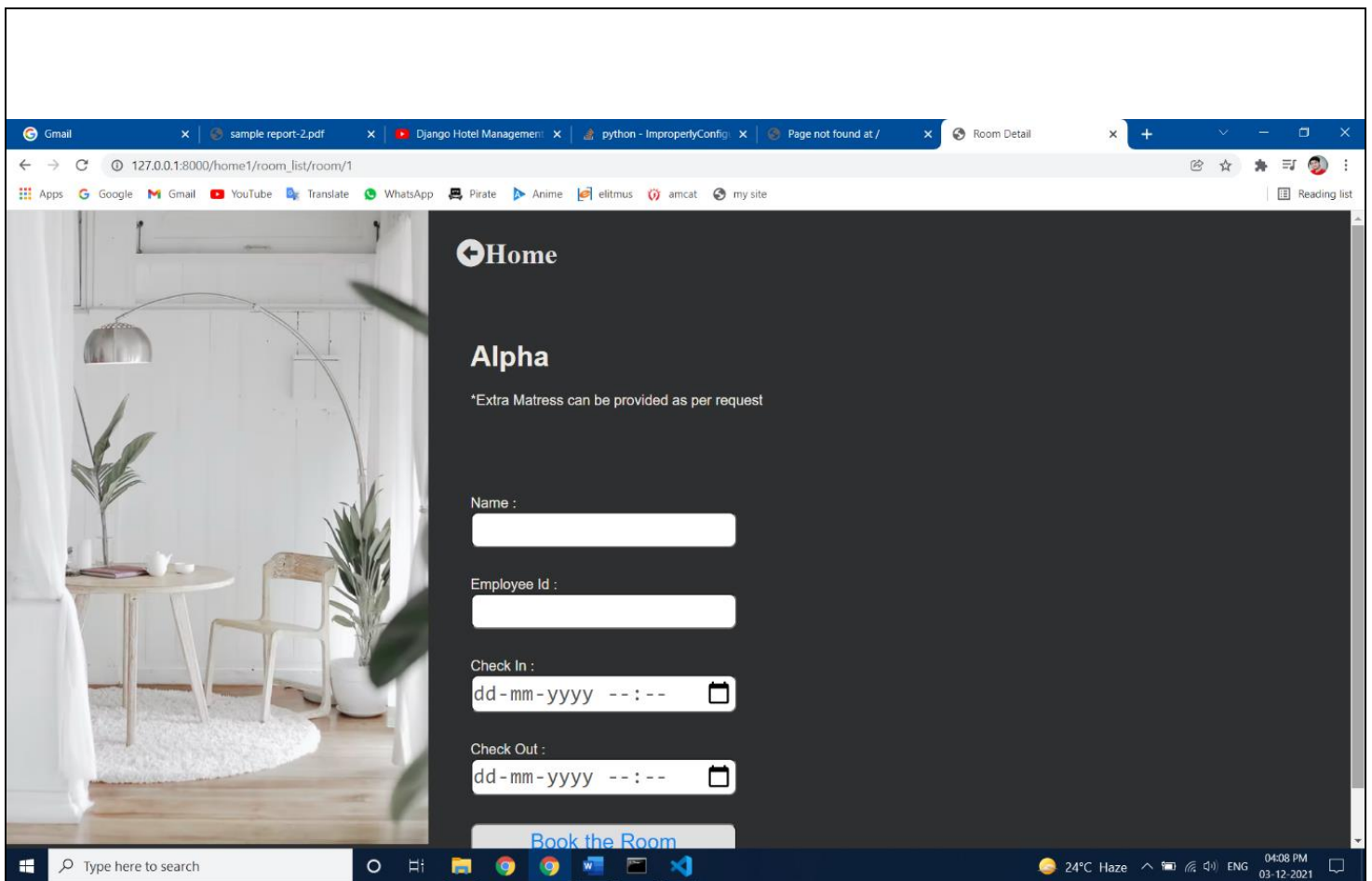
After the register user has logged in, he/she can access the home page to book the available room of their choice in the selected branch.



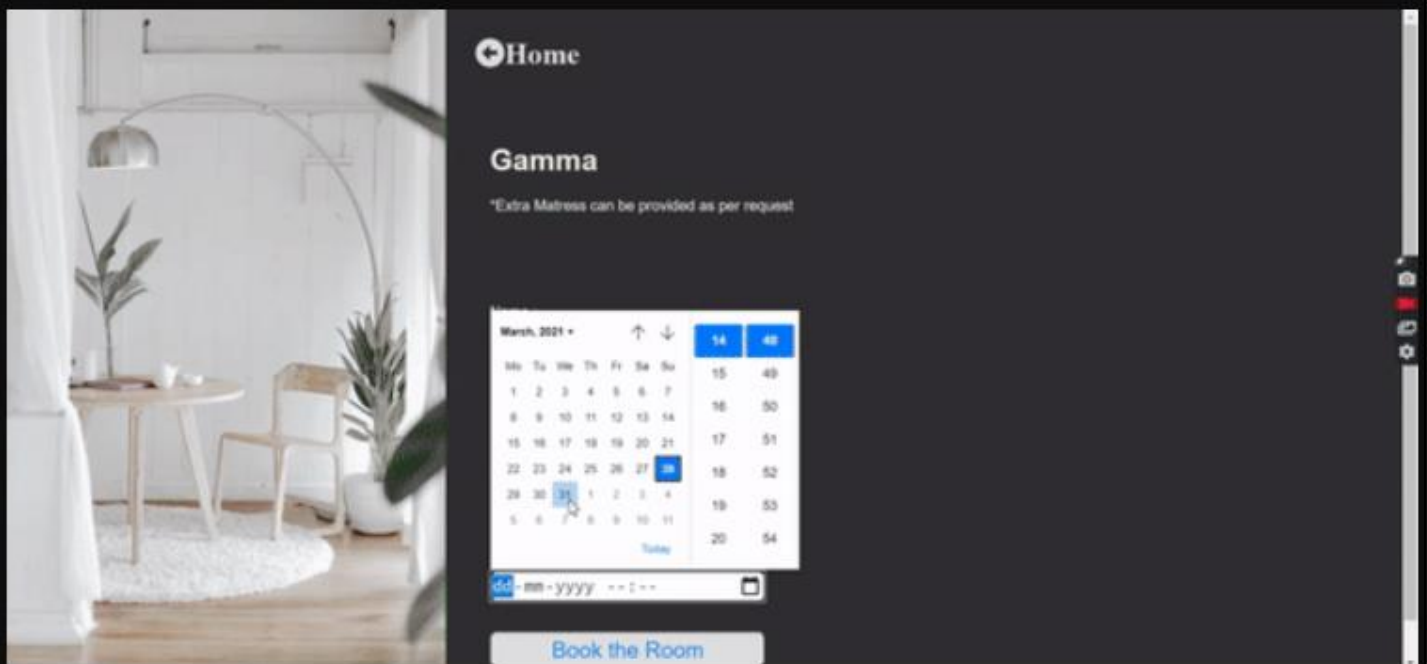
The Home page also contains a “My bookings” tab which can be selected to review\cancel their bookings.

## **Room PAGE:**

The room page appears when the employee has chosen his desired room and is now in process of booking the room for themselves.



They have to fill all of the following details in order to book their room:- Name, Employee id, Check in date, Check out date. Once filled and proceed to press “Book the Room” button. The website first checks whether the room is free for that period of time or not. If everything goes well, the room is booked with a “Room booked” confirmation and are sent to the “My bookings Tab”.



### **MY BOOKINGS PAGE:**

This webpage when accessed by an Employee shows their current room that is booked (An employee can only book one room at a time). Whereas when accessed by an admin, It shows all the rooms that are booked with respect to the booker's data so that the admin can verify it or cancel the booking.



Home

## Your Bookings

Welcome dear QWER

0000

Your booking is successful

Home

## Your Bookings

Welcome dear QWER



### Gamma

From: March 29, 2021,  
2:48 p.m.

To: March 31, 2021, 2:48  
p.m.

© Green Booking

0000



### **Cancel Booking PAGE:**

If the employee wants to cancel their booked room by accessing this webpage from “my bookings” tab. It just asks for the confirmation whether the employee really wishes to cancel their booking or not.

### **API PAGE:**

This webpage can be accessed by the superuser to check the API's status of the database or tables of the website. They can also manually fill the data that can be accessed through these APIs.

# User List

OPTIONS

GET

API endpoint that represents a list of users.

GET /users/

HTTP 200 OK  
Vary: Accept  
Content-Type: text/html  
Allow: GET, POST, HEAD, OPTIONS

```
{
  "count": 2,
  "next": null,
  "previous": null,
  "results": [
    {
      "email": "admin@example.com",
      "groups": [],
      "url": "http://127.0.0.1:8000/users/1/",
      "username": "admin"
    },
    {
      "email": "tom@example.com",
      "groups": [],
      "url": "http://127.0.0.1:8000/users/2/",
      "username": "tom"
    }
  ]
}
```

Username

Email

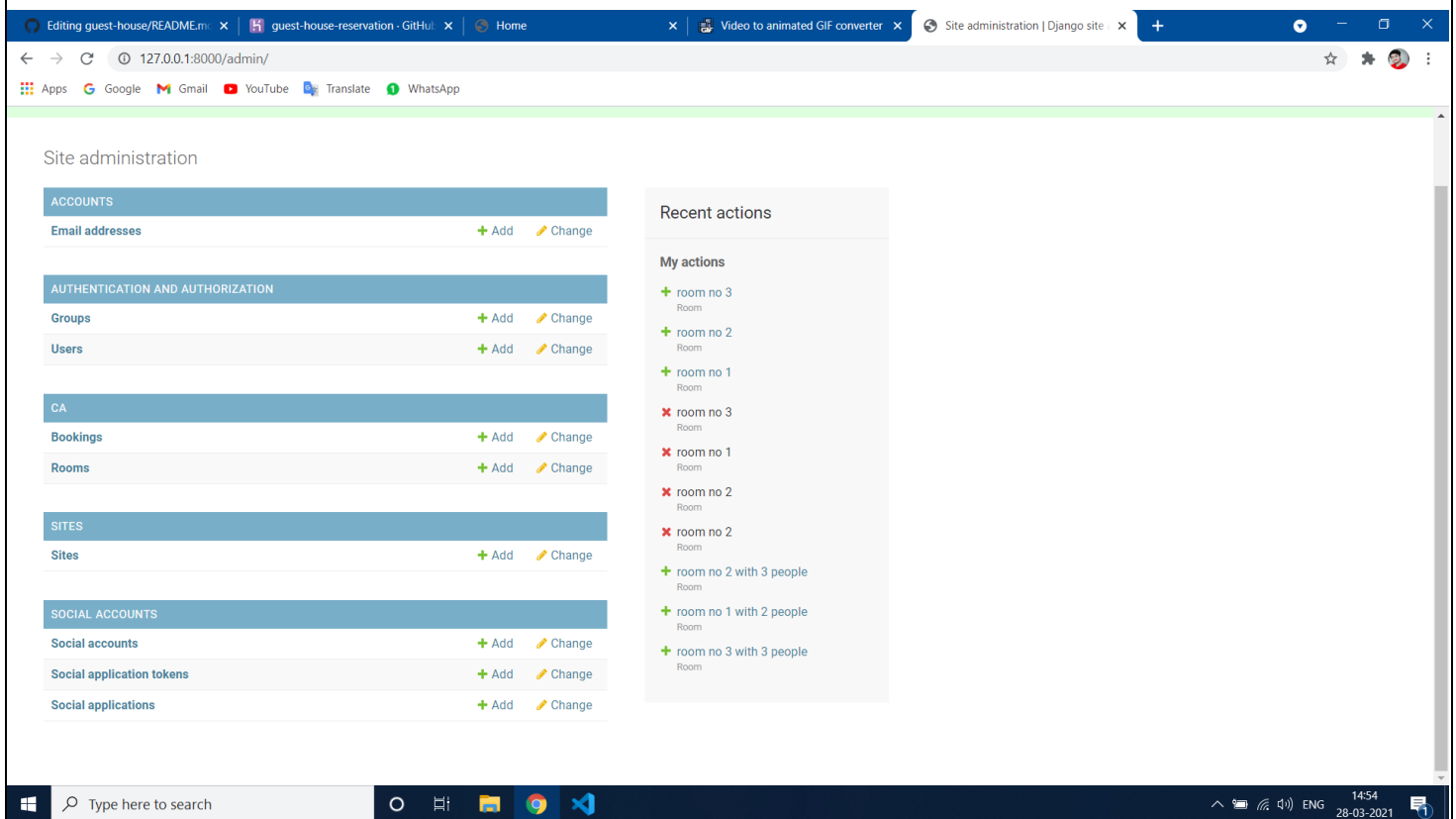
Groups

POST

## Developer's VIEW

The Superuser\Developer is the controller of the website. He/she can login using his own id and password. Our website can have only one superuser at a time because of the security issues.

Superuser's view is different than that of other users. They can access the backend part of the website easily to add/edit or remove the rooms by having an access to the database tables.



# User List

OPTIONS

GET ▾

API endpoint that represents a list of users.

GET /users/

HTTP 200 OK  
Vary: Accept  
Content-Type: text/html  
Allow: GET, POST, HEAD, OPTIONS

```
{
  "count": 2,
  "next": null,
  "previous": null,
  "results": [
    {
      "email": "admin@example.com",
      "groups": [],
      "url": "http://127.0.0.1:8000/users/1/",
      "username": "admin"
    },
    {
      "email": "tom@example.com",
      "groups": [],
      "url": "http://127.0.0.1:8000/users/2/",
      "username": "tom"
    }
  ]
}
```

Username

Email

Groups

POST

# **DATA MANAGEMENT**

## **DATA DESCRIPTION:**

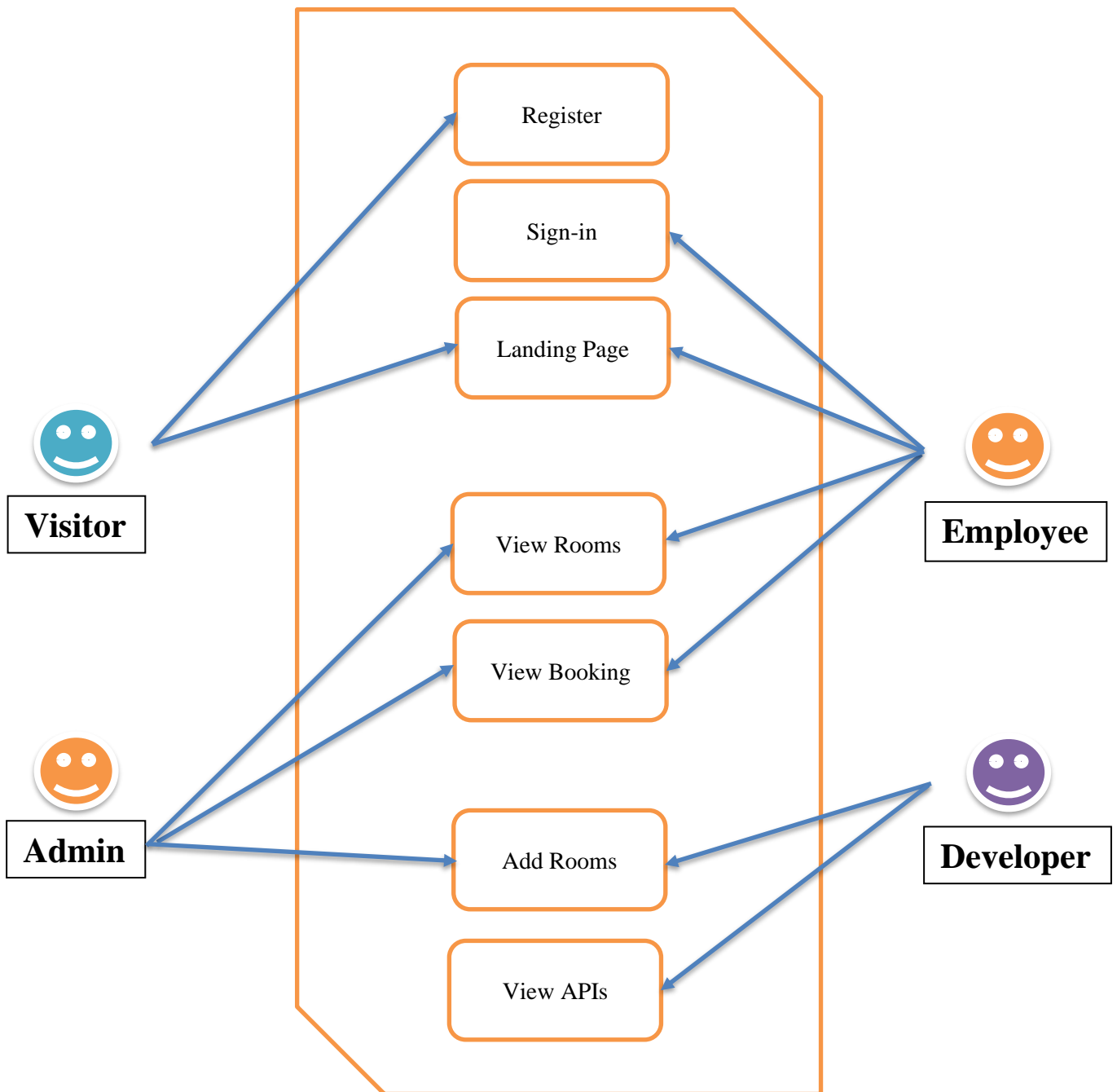
A database is the collection of data stored in an organized manner making it easy to access, update and manage data. Guest house reservation website's database consists of 3 tables – users, rooms and booked.

4. **USERS-** All the visitors who become users fill up a registration form, all the details entered in that registration form are stored in users' table. Also, the details of the admin are also stored in this table.
5. **ROOMS-** The rooms created by the superuser by entering the detailed information of the products is stored in the rooms table. Also, the reviews entered by the users are also stored in this table.
6. **BOOKED-** The rooms reserved by the user are all stored in the orders table. It also contains the details entered by the user. It also contains the unique id given to the user in the users table so as to identify which user has reserved which room.

## **DATA OBJECTS:**

- **USERS:** Id (ObjectId), isAdmin (Boolean), name (String), email (String), password(String), Employee\_Id(Int32).
- **ROOMS::** id (ObjectId), Room\_no(Int32)
- **BOOKED:** Id(ObjectId), Room\_no(Int32), check\_in(Date), check\_out(Date), Employee\_Id(Int32).

## USE CASE DIAGRAM





## **CONCLUSION AND FUTURE SCOPE**

The digitalization as a global trend and growth factor of the modern economy. The digital economy is the most important engine of innovation, competitiveness and economic growth in the world. The specific features of the modern digital economy are determined. The main indicators of measuring the level of digital economy are analyzed, the world countries' leaders are defined. Study shows that each of the indexes has different methodological approaches to determining the level of digitalization and contains various factors. Highly developed countries have the best level of digitization of their own economies, because they have high-quality access to the Internet, a high level of scientific and technological capacity development and wide information access. The indicators of Ukraine as a digital economy are analyzed. Article shows that Ukraine as a European country is only at the beginning of its development of a high-quality digital economy. The links between national economy's macroeconomic indicators development connecting with innovations are established.

There are many features that can be added in this website to increase its performance and boost productivity throughout and ensure security. One of them would be such that this website only runs on a device that is connected to only the office's WIFI. Another one would be add a branch selection tab for multiple branched offices. Depending on the feedback, to eliminate bugs or errors encountered by the users. Lastly to use React.js combined with APIs produced to create a more visually clean and beautiful website.

## **REFERENCES**

Tutorial: HTML: <https://www.w3schools.com/html/>

Tutorial: CSS: <https://www.w3schools.com/css/>

Tutorial: Bootstrap: <https://www.w3schools.com/bootstrap5/>

Tutorial: PostgreSQL: <https://www.w3spoint.com/postgresql-tutorial>

Tutorial: DjangoREST: [https://www.w3schools.com/js/js\\_api\\_intro.asp](https://www.w3schools.com/js/js_api_intro.asp)