



# Lab Oriented Project

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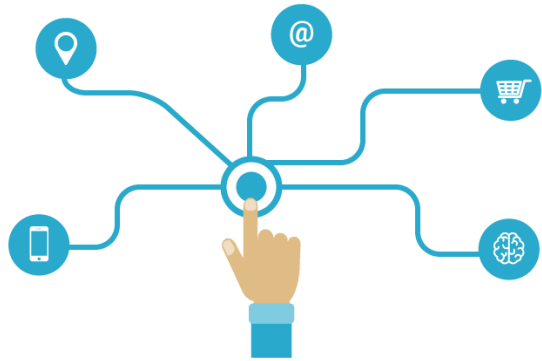
## Guest House Reservation System

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# 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 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'.
- Thus, this website was built in order to digitalize their process of booking their guesthouse.

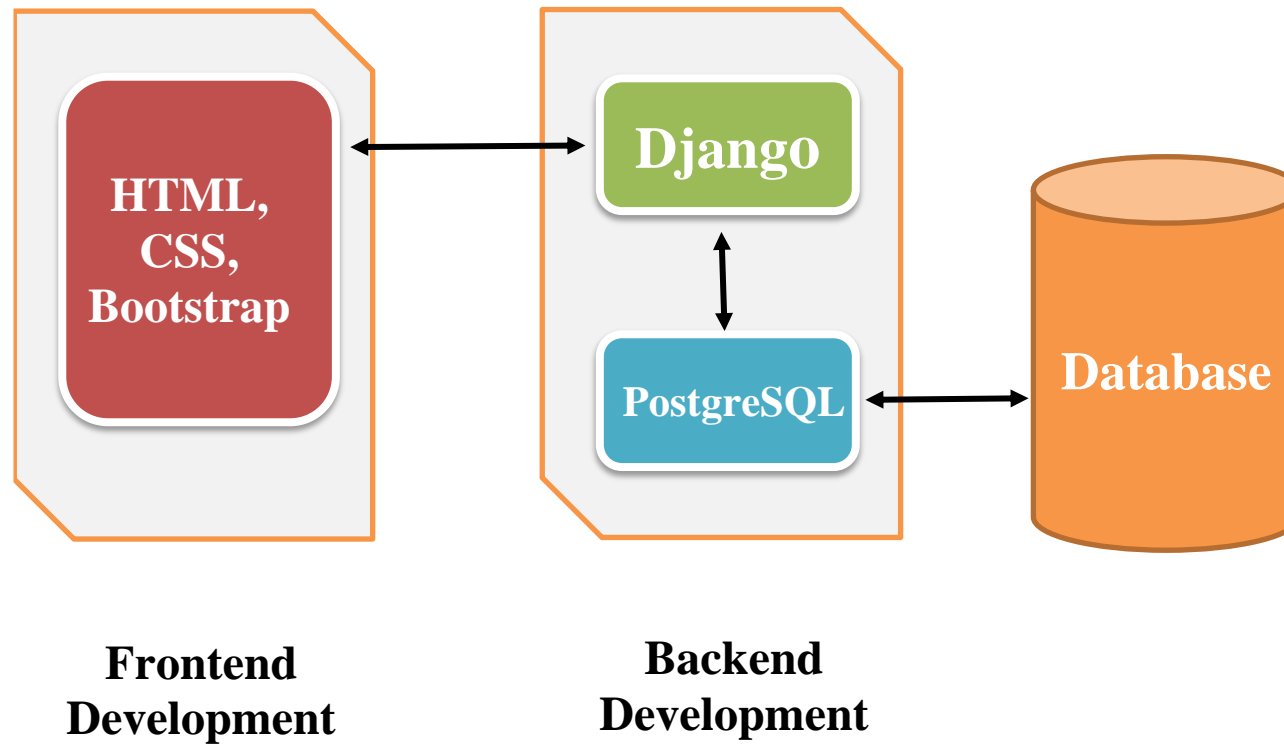
## Aim

- 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.

## Technologies Used

- For the Frontend part: HTML, CSS, Bootstrap were used to make the website more user friendly and presentable.
- Django Framework was used to handle all the Backend part of the website.
- For the database containing tables, PostgreSQL was used.
- Django REST Framework was used for the creation of APIs.
- Finally, the website was deployed using Heroku.

# Architecture



## 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 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.



## Database Details

- There are currently three tables in the database containing all the necessary information.
- 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.

Id	Employee_Id	Employee_Name	Employee_Contact	Isadmin
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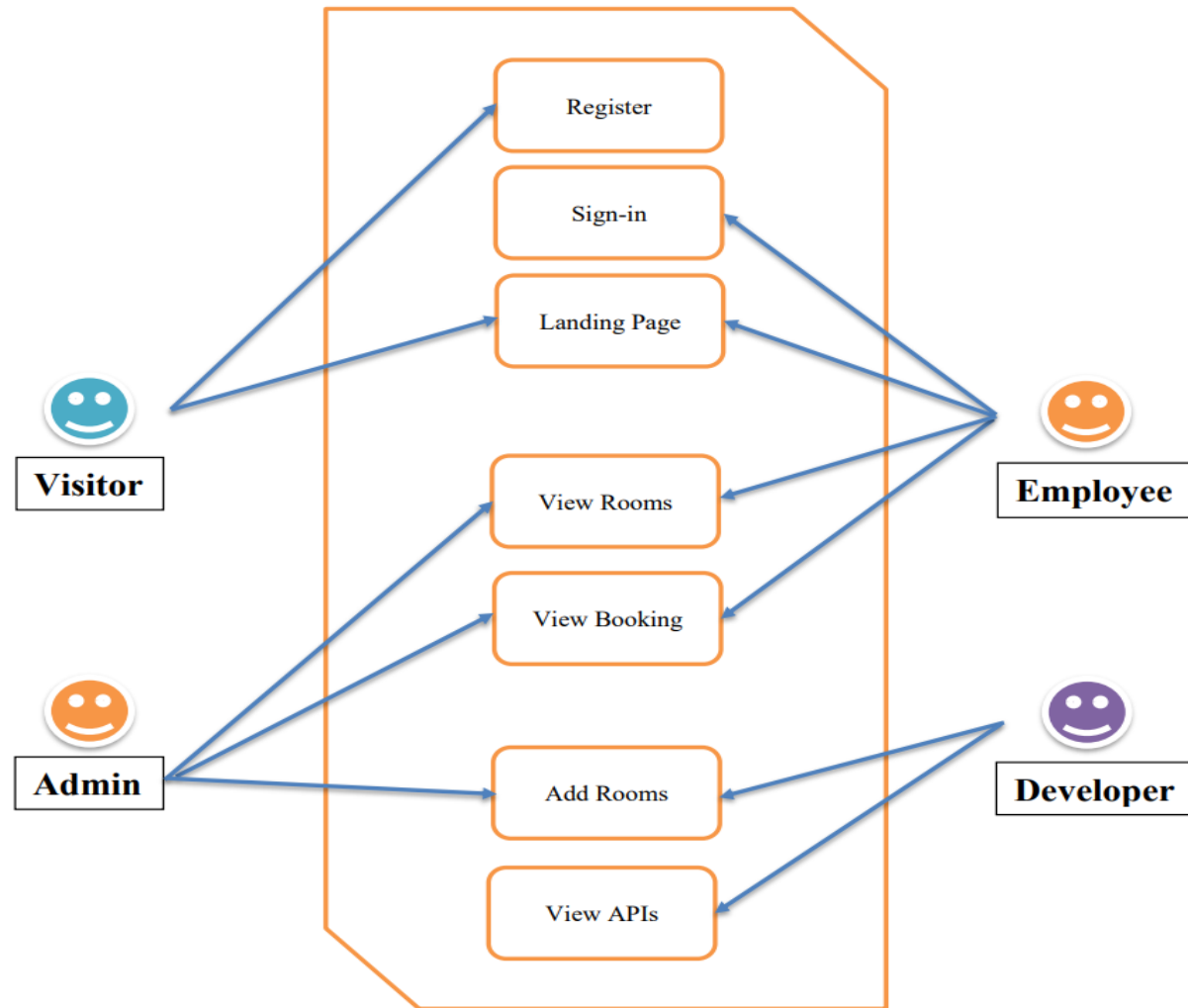
- ROOMS- The rooms created by the superuser by entering the detailed information of the products is stored in the rooms table. Also, the reviews entered by the users are also stored in this table.

Id	Room_no
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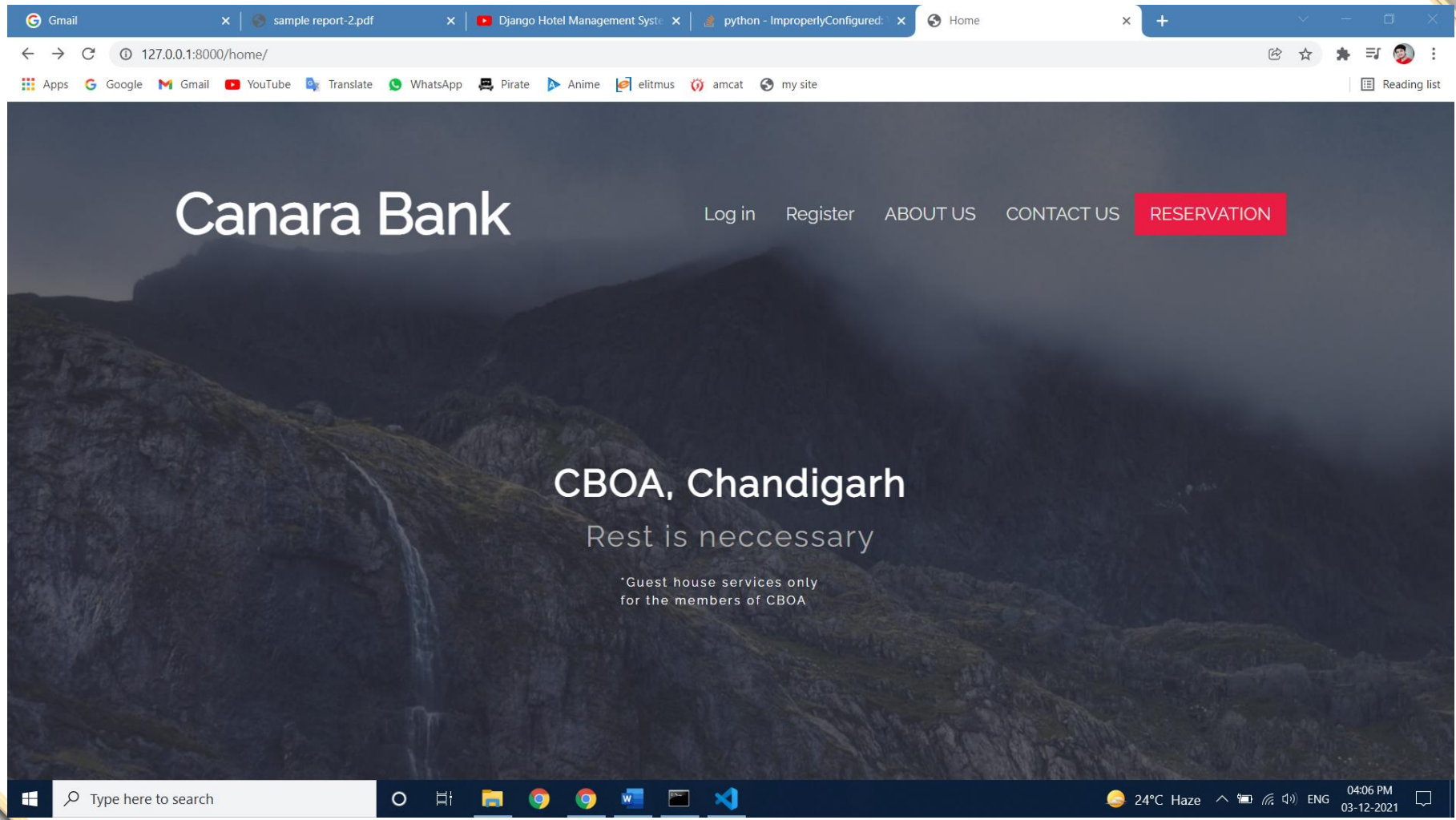
- BOOKED- The rooms reserved by the user are all stored in the orders table. It also contains the details entered by the user. It also contains the unique id given to the user in the users table so as to identify which user has reserved which room.

Id	Employee_Id	Room_no	Check_in	Check_out
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# Use Case Diagram



# Landing Page



Sign in Page

**Messages:**

- You have signed out.

**Menu:**

- [Sign In](#)
- [Sign Up](#)

## Sign In

If you have not created an account yet, then please [sign up](#) first.

Username:

Password:

Remember Me: ☐

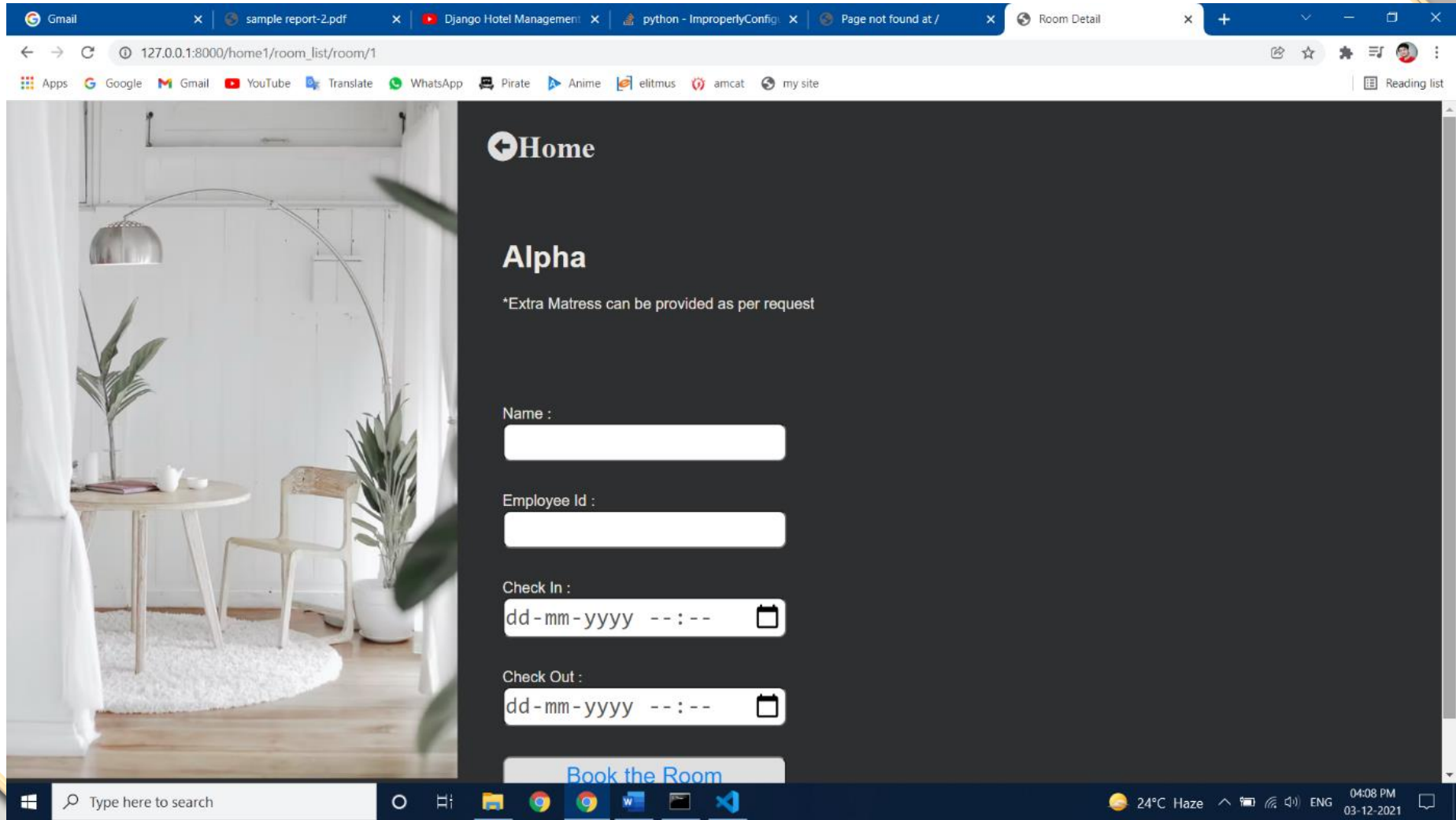
[Forgot Password?](#)

# Home Page





# Room Page



# My Bookings

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.

[Cancel Booking](#)

Cancel Booking

Home

## Your Bookings

Welcome dear QWER



### Gamma

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

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

[Cancel Booking](#)

<https://guest-house-destination-berkeley.com/bookings/cancel/4>

## Developer View

- The Developer or superuser account can access both the API page and the Django administration page to gain access to the database and its tables.



API Page

## 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

# Django Administration

## Site administration

### ACCOUNTS

Email addresses

+ Add ✎ Change

### AUTHENTICATION AND AUTHORIZATION

Groups

+ Add ✎ Change

Users

+ Add ✎ Change

### CA

Bookings

+ Add ✎ Change

Rooms

+ Add ✎ Change

### SITES

Sites

+ Add ✎ Change

### SOCIAL ACCOUNTS

Social accounts

+ Add ✎ Change

Social application tokens

+ Add ✎ Change

Social applications

+ Add ✎ Change

## Recent actions

### My actions

- + room no 3  
Room
- + room no 2  
Room
- + room no 1  
Room
- ✗ room no 3  
Room
- ✗ room no 1  
Room
- ✗ room no 2  
Room
- ✗ room no 2  
Room
- + room no 2 with 3 people  
Room
- + room no 1 with 2 people  
Room
- + room no 3 with 3 people  
Room

## Conclusion & 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.

- 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.



Thank You!