

TripMate

Bachelor of Technology
Computer Science and Engineering

A project report Submitted by

Aadya Agrawal (2115990001)

Ankit Anand (201500092)

Manvi Singhal (201500390)

Vidisha Singhal (201500782)

Under the Guidance of

Mr. Bhanu Kapoor



Department of Computer Engineering &
Applications

GLA UNIVERSITY
Mathura-281406,
2022-2023

Declaration

We hereby declare that the work which is being presented in the Project Report “**TripMate**”, in partial fulfillment of the requirements for Project is an authentic record of my own work carried under the SUPERVISION of **Mr. Bhanu Kapoor**, Technical Trainer T&D Department, GLA University, Mathura.

Sign:

Aadya Agrawal
2115990001

Sign:

Ankit Anand
201500092

Sign:

Manvi Singhal
201500390

Sign:

Vidisha Singhal
201500782

Course: B.Tech (Computer Science and Engineering)

Year: 3rd

Semester: 6th

Certificate

This is to certify that the above statements made by the candidates are correct to the best of my/our knowledge and belief.

Supervisor

Mr. Bhanu Kapoor

Technical Trainer

Dept of CEA, GLA University

Project Mentor

(Mr. Bhanu Kapoor)

Program Coordinator

(Mr. Subhash Chand Agrawal)

Acknowledgement

It gives us immense pleasure to present the report of the B Tech. Full Stack Project undertaken during B Tech. Third year. This project itself is an acknowledgement for all those people who have given us their heartfelt co-operation in making this project a grand success. The project would have never seen the light of the day without the help and guidance that we have received.

We extend our sincere thanks to Mr. Akash Chaudhary, Technical Trainer at “GLA University, Mathura” for providing his valuable guidance at every stage of this projectwork. We are profoundly grateful towards the unmatched services rendered by him.

And last but not least, we would like to express our deep sense of gratitude and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the project.

Abstract

The purpose of Hotel Website is to automate the existing manual system by the help of computerized equipment's 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 required software and hardware are easily available and easy to work with.

Hotel Website, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

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About the Project

TripMate is a tourist agent which provides the facilities for booking hotels, holiday apartments and other accommodations for customers. Any customers need to book hotel, ins or apartment they need to visit their office. It will help them to manage the customers booking easily and also to keep the customers data safer. It will also help staffs to keep in track their customer's online booking request as well as easily to reply feedback to the customers. A hotel reservation system enables guests to schedule dates and length of stay, room selection, extras, and payment all in one place.

In this documentation it shows how the web-based system will be implemented and looks like (User Interface).

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: Basically, the project describes how to manage for good performance and better services for the clients

Motivation

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order. there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of time while entering records and retrieving records. One more problem was that it was very difficult to find errors while entering the records. Once the records were entered it was very difficult to update these records.

The reason behind it is that there is lot of information to be maintained and have to be kept in mind while running the business For this reason we have provided features Present system is partially automated (computerized), actually existing system is quite laborious as one has to enter same information at three different places.

Introduction

The main objective of the Project on Hotel Website is to manage the details of Hotel, Room, Category, Booking, Facility. It manages all the information about Hotel, Employee, Facility. Hotel. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Hotel, Room, Employee, Category. It tracks all the details about the Category, Booking, Facility.

Functionalities provided by Hotel Website are as follows:

- Provides the searching facilities based on various factors. Such as Hotel, Category, Booking.
- Hotel Website also manage the Employee details online for Booking details, Facility details, Hotel.
- It tracks all the information of Room, Booking, User etc.
- Manage the information of Room
- Shows the information and description of the Hotel Category

Scope of Project

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to Hotel Website. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.

Our project aims at Business process automation, i.e. we have tried to computerize various processes of Hotel Website.

- In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.
- In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.
- To assist the staff in capturing the effort spent on their respective working areas To utilize resources in an efficient manner by increasing their productivity through automation. The system generates types of information that can be used for various purposes.
- It satisfy the user requirement
- Be easy to operate and have good user interface
- Be easy to understand by the user and operator

Requirements

a). Software Requirements:

- Technology Implemented: Web Technology
- Languages/Technologies Used: MERN Technologies.
- IDE Used: VSCode
- Web Browser: Google Chrome
- GitHub: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Repository: A GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images). A GitHub repository should also include a license file and a README file about the project. A GitHub repository can also be used to store ideas, or any resources that you want to share.

b). Hardware Requirements:

- Processor Required: Intel i3
- Operating System: Windows 10
- RAM: 4GB
- Hardware Devices: Computer System
- Hard Disk: 256G

Technologies

HTML:

HTML is the standard markup language for creating Web pages. The first Version of HTML was written by Tim Berners-Lee in 1993.

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

CSS:

CSS is the language we use to style a Web page. Cascading Style Sheets is used to style and layout web pages — for example, to alter the font, color, size, and spacing of your content, split it into multiple columns, or add animations and other decorative features.

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files

JavaScript:

JavaScript was invented by Brendan Eich in 1995.

It was developed for Netscape 2, and became the ECMA-262 standard in 1997.

JavaScript is a scripting language that is one of the three core languages used to develop websites. Whereas HTML and CSS give a website structure and style, JavaScript lets you add functionality and behaviors to your website, allowing your website's visitors to interact with content in many imaginative ways.

JavaScript is primarily a client-side language, meaning it runs on your computer within your browser. However, more recently the introduction of Node.js has allowed JavaScript to also execute code on servers.

Since its release, JavaScript has surpassed Java, Flash, and other languages because it is relatively easy to learn, has a free and open community, and, most importantly, is incredibly useful, allowing developers to quickly create apps with audiences in the millions.

ReactJS:

React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces based on components. It is maintained by Meta (formerly Facebook) and a community of individual developers and companies.

React is used to build single-page applications.

React allows us to create reusable UI components.

NodeJs:

Node.js is a cross-platform, open-source server environment that can run on Windows, Linux, Unix , macOS, and more. Node.js is a back-end JavaScript runtime environment, runs on the JavaScript Engine, and executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting.

The Benefits of Node.js: Easily Scalable. Scaling your applications is actually pretty easy with Node.js. ... Quick Learning Curve. Because JavaScript is as popular as it is, using Node.js makes sense. ... Single Programming Language. When it comes to writing the applications on the server-side, Node.js allows you to use JavaScript.

MongoDB:

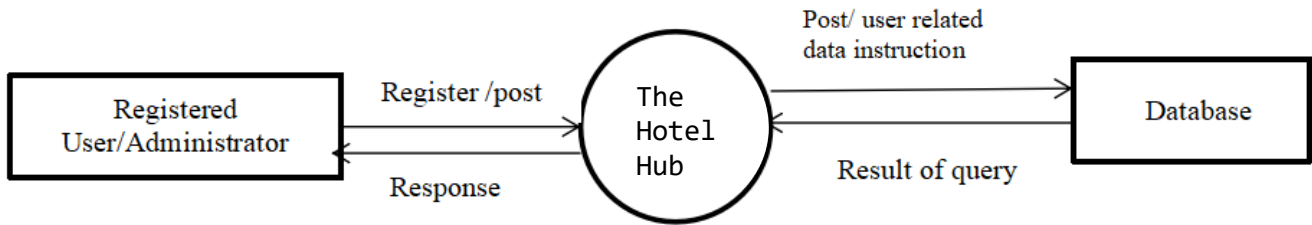
MongoDB, Inc. is an American software company that develops and provides commercial support for the source-available database MongoDB, a NoSQL database that stores data in JSON-like documents with flexible schemas.

MongoDB, the most popular NoSQL database, is an open-source document-oriented database. The term 'NoSQL' means 'non-relational'. It means that MongoDB isn't based on the table-like relational database structure but provides an altogether different mechanism for storage and retrieval of data. This format of storage is called BSON (similar to JSON format).

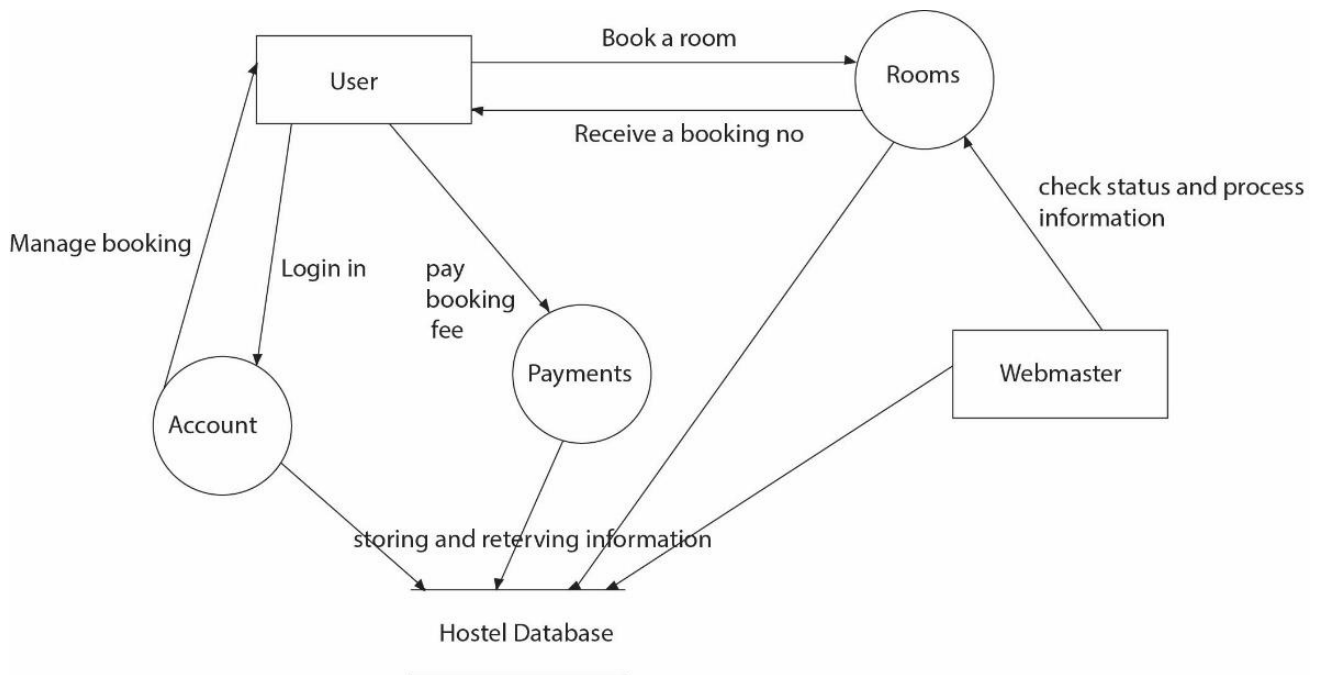
ExpressJS:

Express.js is a small framework that works on top of Node.js web server functionality to simplify its APIs and add helpful new features. It makes it easier to organize your application's functionality with middleware and routing. It adds helpful utilities to Node.js HTTP objects and facilitates the rendering of dynamic HTTP objects.

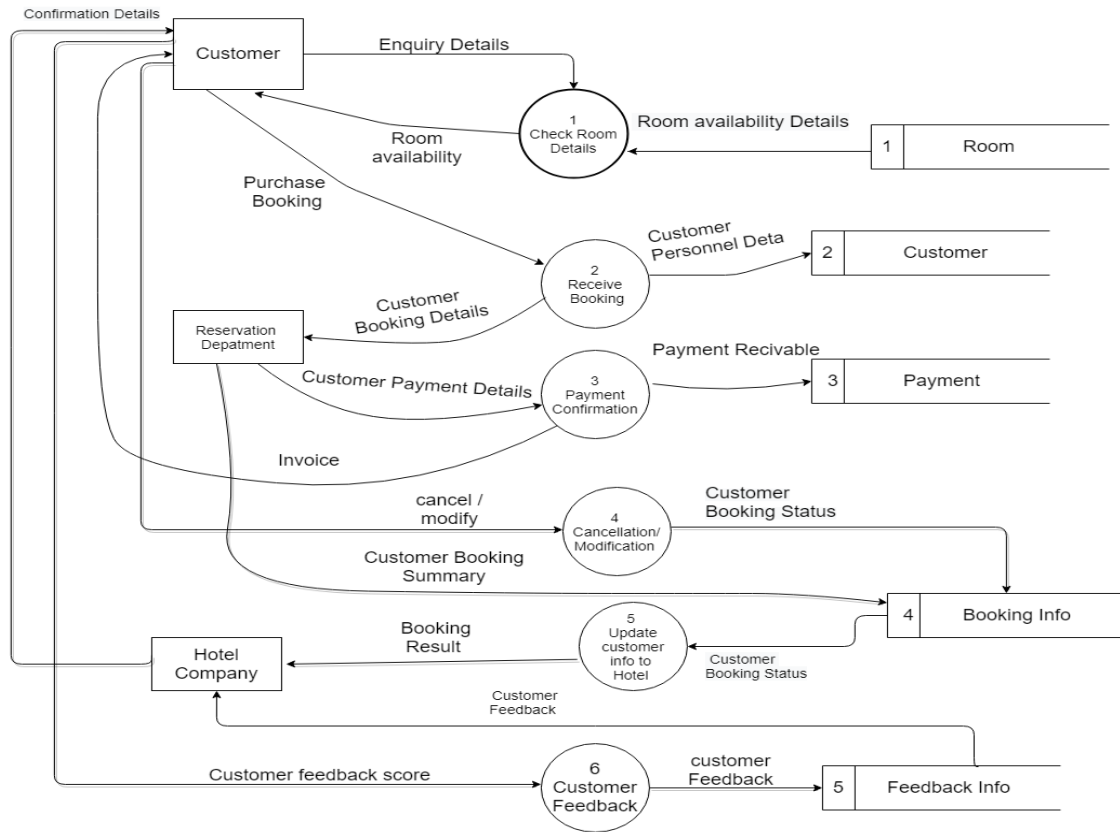
DATA FLOW DIAGRAMS



Level 0 DFD



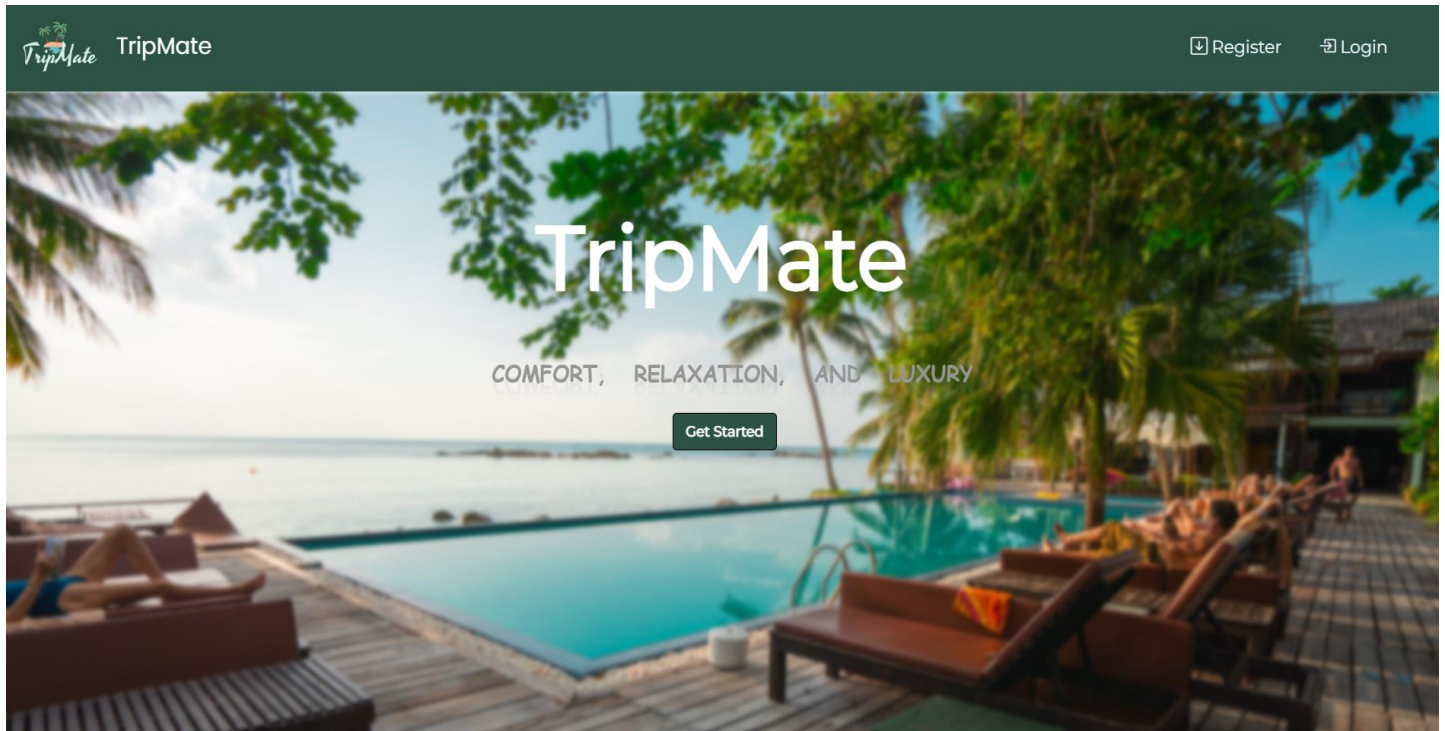
Level 1 DFD



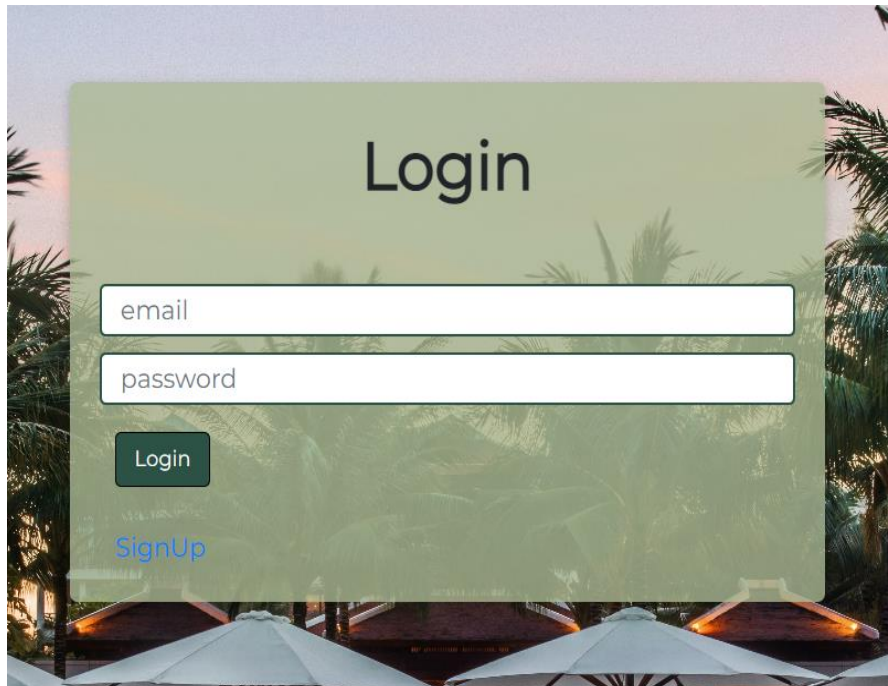
Level 2 DFD

List of Figures

1. Landing Page:



2.Login :

A login form is displayed as a semi-transparent green overlay on a background image of palm trees and beach umbrellas at dusk. The form has a title 'Login' at the top. Below it are two input fields: 'email' and 'password'. A dark green 'Login' button is positioned below the password field. At the bottom left of the form, there is a blue 'SignUp' link.

Login

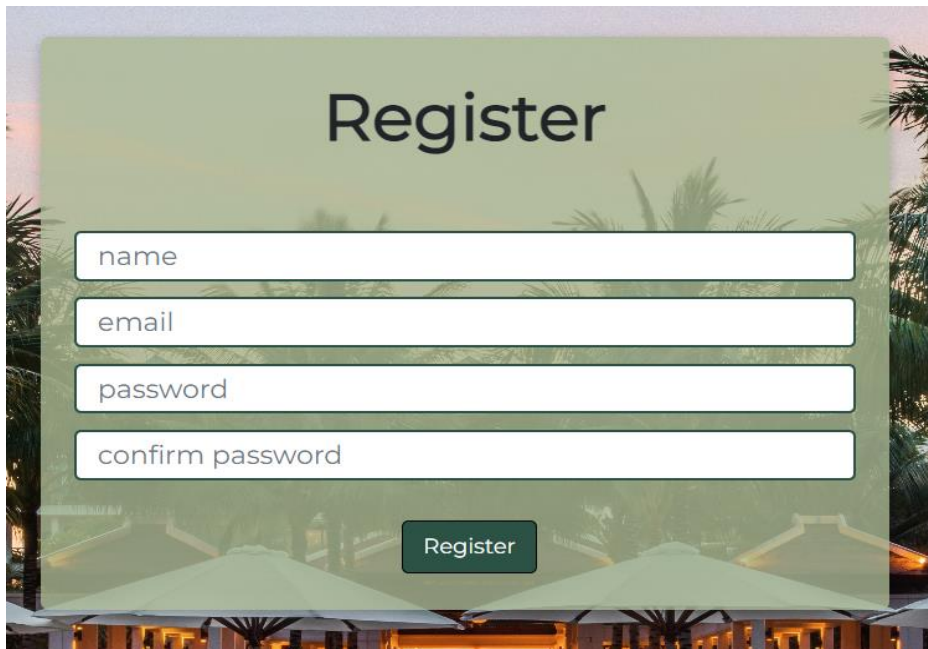
email

password

Login

[SignUp](#)

3.Registration/SignUp:

A registration form is displayed as a semi-transparent green overlay on the same tropical background as the login form. The form has a title 'Register' at the top. Below it are four input fields: 'name', 'email', 'password', and 'confirm password'. A dark green 'Register' button is located at the bottom center of the form.

Register

name

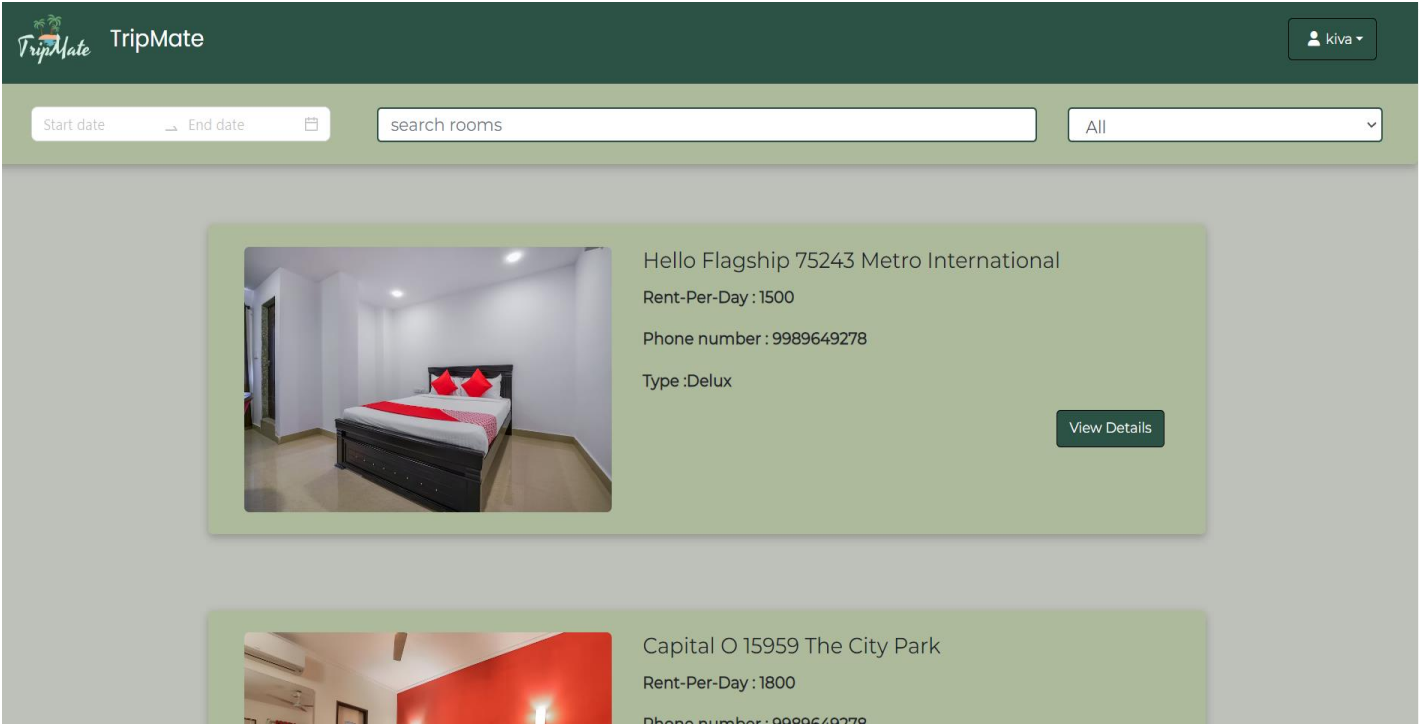
email

password

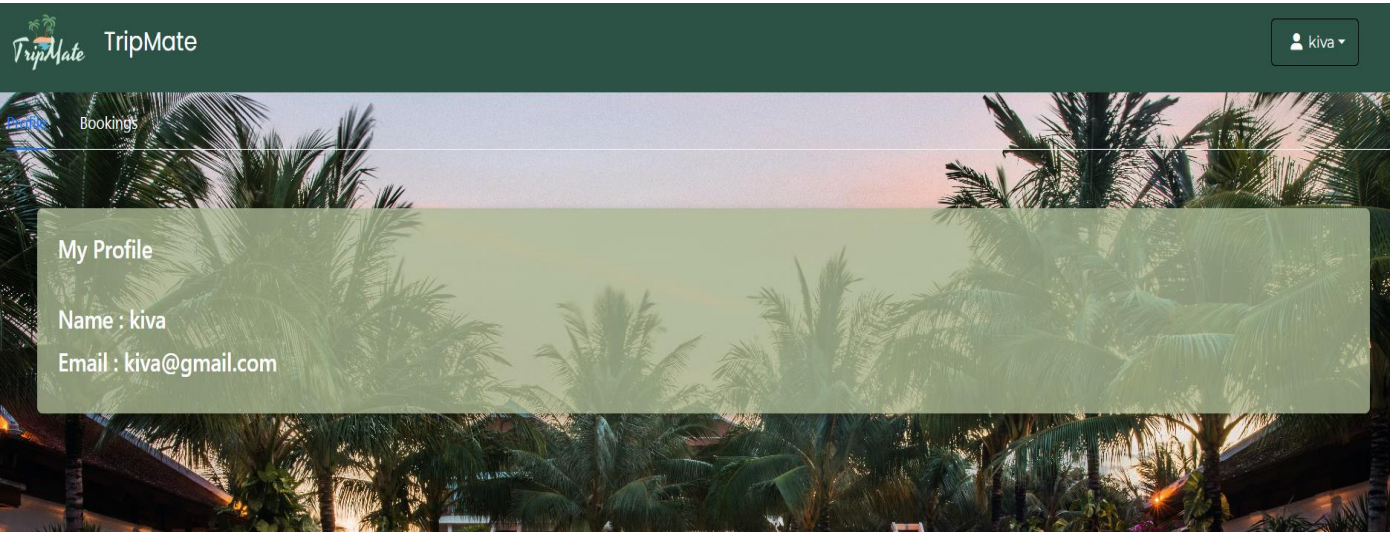
confirm password

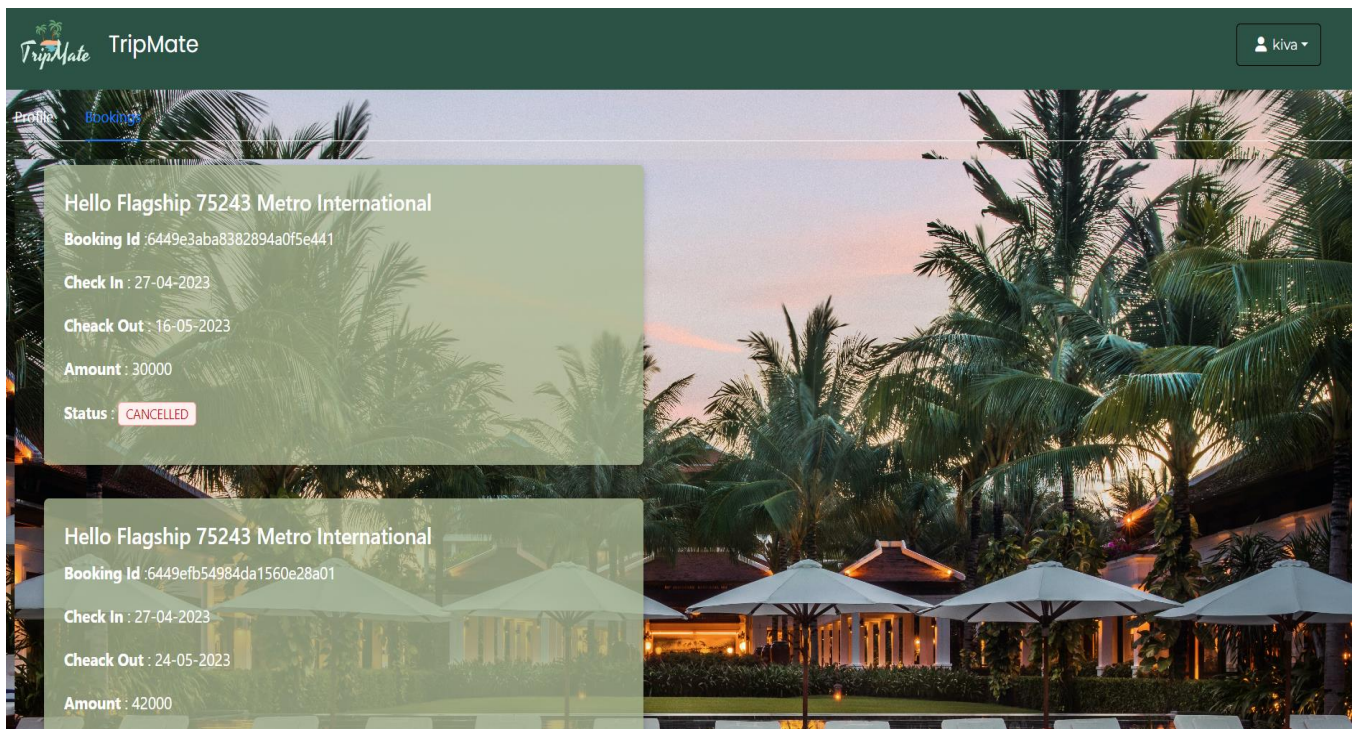
Register

4.Home Page:

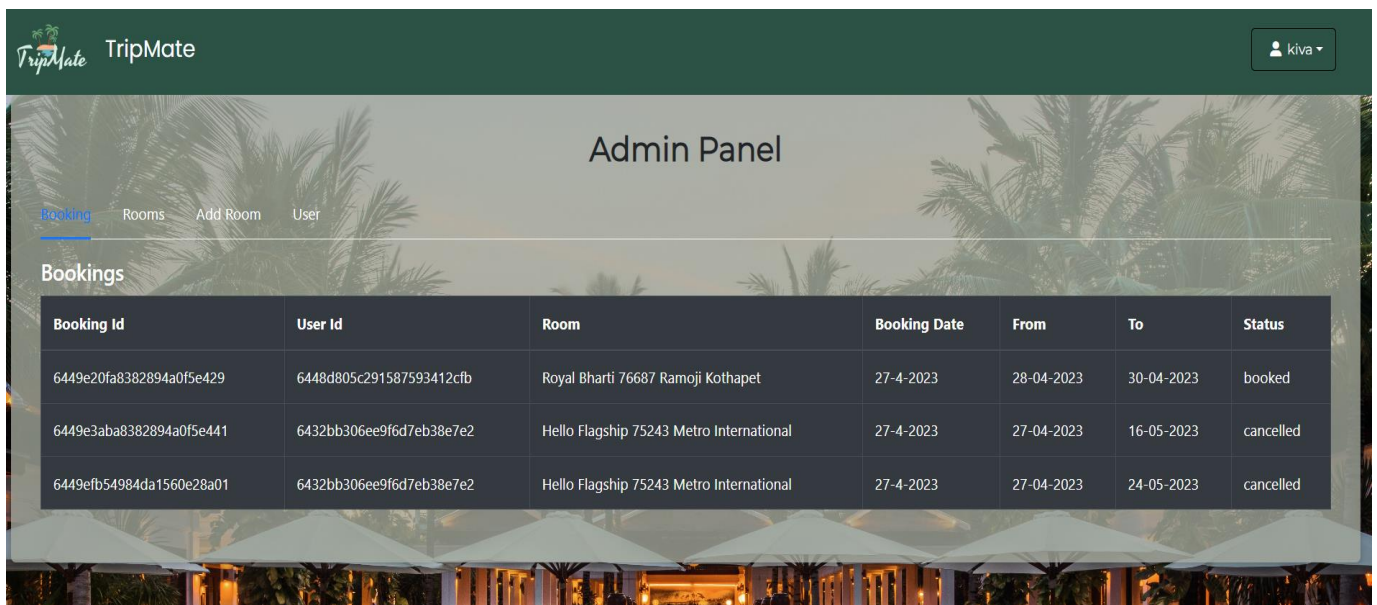



5.Profile Page:






6.Admin Page:




TripMate



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Admin Panel

[Booking](#)
[Rooms](#)
[Add Room](#)
[User](#)

Rooms


Room Id	Name	Type	Rent per day	Max Count	Phone Number
64206ffb61546317774ef6da	Hello Flagship 75243 Metro International	Delux	1500	3	9989649278
64206ffb61546317774ef6dd	Capital O 15959 The City Park	Non-Delux	1800	3	9989649278
64206ffb61546317774ef6db	Royal Bharti 76687 Ramoji Kothapet	Non-Delux	2000	3	9989649278
64206ffb61546317774ef6d9	SPOT ON 37669 Hotel Shiva Sai Lodge Near Regimental Bazaar, Shivaji Nagar, Hyderabad	Delux	1500	3	9989649278
64206ffb61546317774ef6dc	Brijwasi Landsinn Collection O Sri Navya Grand	Non-Delux	1600	4	9989649278



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Admin Panel

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[Rooms](#)
[Add Room](#)
[User](#)


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Admin Panel

[Booking](#)
[Rooms](#)
[Add Room](#)
[User](#)

Users

User	Name	Email
6432bb306ee9f6d7eb38e7e2	kiva	kiva@gmail.com
6432d0ef4cfd91cfc309d1b7	david	david@gmail.com
6448d805c291587593412cfb	Ankit	ankit@gmail.com
6448dbc96ae9efa131c3c3b3	Ankit	anand@gmail.com

Conclusion

We have completed our project within time limit with the coordination of our team members under the supervision of our mentor Mr. Akash Chaudhary.

Our project repository is available at

<https://github.com/codeBurner0/TripMate>

References

- <https://legacy.reactjs.org/>
- <https://expressjs.com/>
- <https://nodejs.org/en>
- <https://getbootstrap.com/docs/>