



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

**PROJECT TITLE**

## **Online Travel Booking Management System**

**The domain of the Project:**

**Full Stack Development (FSD)**

**COURSE NAME**

**Bachelor of Computer Science – 3rd Year**

**Team Mentors (and their designation):**

**Project Mentor**

Mr. Suhail Khan

**Project – Full Stack Development  
SURE Trust**

**Team Members:**

Mr. Dushyant Saket

**Period of the project**

**March 2025 to August 2025**



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## Declaration

The project titled “Online Travel Booking Management System” has been mentored by Mr. Suhail Khan organised by SURE Trust, from April 2023 to August 2023, for the benefit of the educated unemployed rural youth for gaining hands-on experience in working on industry relevant projects that would take them closer to the prospective employer. I declare that to the best of my knowledge the members of the team mentioned below, have worked on it successfully and enhanced their practical knowledge in the domain.

Team Members:

Ms. --- **Mr. Dushyant Saket** Signature

Mentor's Name    Mr. Suhail Khan  
Designation—Company Name

Mentor's  
Designation—Company Name  
Project Mentor — SURE Trust

Prof. Radhakumari  
Executive Director & Founder  
SURE Trust



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## **1. EXECUTIVE SUMMARY**

The **Online Travel Booking Management System** is a web application developed to provide users with a unified platform for booking flights, hotels, and car rentals. The system offers search, booking, and confirmation functionalities with a user-friendly interface.

This project demonstrates real-world implementation of frontend and backend technologies, focusing on usability, scalability, and structured data handling. The application reflects industry-level practices in modern web development.

## **2. INTRODUCTION**

### **Background and Context**

With the rapid growth of digital travel services, there is a demand for efficient and centralized travel booking platforms. This project aims to meet that demand using modern web technologies.

### **Problem Statement**

Existing travel platforms can be complex and difficult to navigate. The objective is to design a simplified, responsive, and efficient system.

### **Scope and Limitations**

- Covers flight, hotel, and car rental booking
- Uses mock data for demonstration
- No real-time payment gateway integration

## **3. PROJECT OBJECTIVES**

- To develop a travel booking web application
- To implement search and booking functionality
- To enhance practical knowledge of full-stack development
- To follow industry-standard project architecture

## **Expected Outcomes** **4. METHODOLOGY & RESULTS**



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### **Technologies Used**

- Frontend: React.js, HTML, CSS, JavaScript ,

### **Tools / Software Used**

- Visual Studio Code
- Git & GitHub
- Vite
- Postman
- Functional web application
- Clean and responsive UI
- GitHub-hosted source code

### **Project Architecture**

- Frontend for UI and interaction
- Database for user and booking data

### **Project Output**

- Flight booking module
- Hotel search and booking
- Car rental booking
- Booking confirmation pages

## **5. SOCIAL / INDUSTRY RELEVANCE OF THE PROJECT**

- Helps users plan travel efficiently
- Demonstrates industry-level development practices
- Improves employability through real-world skills
- Can be scaled for commercial use

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## **6. LEARNING & REFLECTION**

### **Technical Learnings**

- Full Stack Development workflow
- React component-based design
- API handling and database integration

### **Overall Experience**



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This project provided hands-on industry exposure, improved problem-solving skills, and enhanced confidence in building scalable web applications.

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## **7. FUTURE SCOPE & CONCLUSION**

### **Conclusion**

The project successfully achieved its objectives by delivering a functional and scalable travel booking system while strengthening full-stack development skills.

### **Future Scope**

- Real-time API integration
- Online payment gateway
- Admin dashboard
- Mobile application development



### ***Executive Summary***

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- A concise overview of the project's objectives, methods, key findings, and recommendations.
- Highlights the most important aspects of the project for executives or stakeholders.

## **Executive Summary**

The **Online Travel Booking Management System** is a web application developed to provide users with a single, integrated platform for booking flights, hotels, and car rentals. The primary objective of this project is to simplify the travel planning process by offering a user-friendly interface, efficient search functionality, and secure booking management.

The system is designed using modern web technologies, with a responsive frontend and a robust backend to handle business logic and data management. The application allows users to search for travel services, view details, make bookings, and receive booking confirmations. Mock data is used to simulate real-world scenarios and demonstrate the working of the system.

Key outcomes of the project include improved understanding of full stack development concepts, implementation of industry-standard architecture, and hands-on experience with frontend and backend integration. The project demonstrates scalability and can be further enhanced by integrating real-time APIs and secure payment gateways.

Mock data is used to simulate real-world booking scenarios and demonstrate system functionality.

The project follows industry-standard architecture and development practices.

Key outcomes include improved technical skills, hands-on experience in full stack development, and understanding of real-world application workflows.

The project can be enhanced in the future by integrating real-time APIs, online payment gateways, and admin dashboards.

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### *Project Objectives*

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- Clearly defined objectives and goals of the project
- Expected outcomes and deliverables.

#### **Project Objectives**

- To design and develop an **Online Travel Booking Management System** using full stack technologies.
- To provide a **user-friendly and responsive interface** for booking flights, hotels, and car rentals.
- To implement **search, filter, and booking functionalities** for different travel services.
- To understand and apply **frontend, backend, and database integration** in a real-world project.
- To follow **industry-standard development practices** and project architecture.

#### **Expected Outcomes and Deliverables**

- A fully functional **full stack web application**.
- Well-structured and reusable source code.
- Booking and confirmation modules for travel services.
- A **GitHub repository** containing complete project code.
- Practical exposure to **industry-relevant full stack development skills**.



## **Methodology and Results**

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- Methods/Technology used
- Tools/Software used
- Data collection approach (if applicable)
- Project Architecture (Clearly describe the architecture)
- Final project working screenshots along with supporting explanation
- Project GitHub Link

### **Methodology and Results**

#### **Methods / Technology Used**

- **Frontend:** Developed using **React.js, HTML5, CSS3, and JavaScript**.
  - Implemented **RESTful APIs** to connect frontend and backend.
  - Ensured responsive design for accessibility on different devices.
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#### **Tools / Software Used**

- **Visual Studio Code** – Main Integrated Development Environment (IDE).
  - **Git and GitHub** – For version control and source code management.
  - **Vite** – For fast frontend development and bundling.
  - **Postman** – To test and validate API endpoints.
  - **Web Browsers** (Google Chrome / Microsoft Edge) – For functional testing and UI verification.
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#### **Data Collection Approach**

- User inputs captured through interactive forms for:
    - Search queries (flights, hotels, cars)
    - Booking details (names, dates, preferences)
  - Mock data used to simulate real travel service lists.
  - Collected form data sent to backend APIs and stored in the database.
  - No external APIs used; static/mock data simulates real usage.
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#### **Project Architecture**

The system follows a **client–server architecture** (3-tier design):



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## 1. Presentation Layer (Frontend)

- Built with React.js.
- Handles all user interfaces.
- Sends requests to backend via API calls.

### **Final Project Working (Screenshots + Explanation)**

**Note:** Attach these screenshots in your Word document under this section. Write a small explanation below each image.

#### 1. Homepage / Landing Page Screenshot

*Shows navigation options and search interface.*

#### 2. Search Results Screenshot

*Shows results for flights/hotels/cars based on user input.*

#### 3. Booking Screen Screenshot

*Demonstrates how user enters booking information.*

#### 4. Confirm Booking Screenshot

*Shows confirmation message with booking details.*

#### 5. User Dashboard / Booking History Screenshot

*Displays stored bookings and user interaction.*

(Add screenshots in your document here with short captions.)

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### **Project GitHub Link**

📌 GitHub Repository:

<https://github.com/dushyantsaket/SureTrust-FinalProject-G28FSD>



### *Learning and Reflection*

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- Document every team member's new learnings (in terms of technology, management, etc)
- Document every team member's experience. (overall experience)

#### **New Learnings**

##### **Technical Learnings**

- Gained practical knowledge of **Full Stack Development** including frontend, backend, and database integration.
- Learned to develop reusable components using **React.js**.
- Understood API creation and integration using **Node.js and Express.js**.
- Learned how to manage and store data using **MongoDB**.
- Improved skills in debugging, testing, and error handling.

##### **Management & Professional Learnings**

- Learned effective **time management** and task planning.
- Understood the importance of **version control** using Git and GitHub.
- Improved **problem-solving and analytical skills**.
- Developed better documentation and reporting skills.

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##### **Overall Experience**

- The project provided **hands-on industry-level experience** in full stack development.
- Working on a real-world project improved confidence and technical competence.
- Guidance from the mentor helped in understanding professional coding standards.
- The internship enhanced teamwork, responsibility, and self-learning abilities.
- Overall, the project was a valuable learning experience that prepared the team member for future software development roles.



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### ***Conclusion and Future Scope***

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- Recap objectives and achievements
- Future scope of this project

#### **Conclusion and Future Scope**

##### **Conclusion**

- The **Online Travel Booking Management System** was successfully designed and developed using full stack technologies.
- The project achieved its main objectives of providing a **user-friendly platform** for booking flights, hotels, and car rentals.
- It demonstrated effective integration of frontend, backend, and database components.
- The project helped in gaining **practical, industry-relevant experience** in full stack development.
- Overall, the project strengthened technical skills and understanding of real-world application development.

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##### **Future Scope**

- Integration of **real-time APIs** for flights, hotels, and car rentals.
- Implementation of a **secure online payment gateway**.
- Development of an **admin dashboard** for managing bookings and users.
- Addition of **user authentication and role-based access control**.
- Deployment of the application on cloud platforms.
- Development of a **mobile application** version of the system.



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