

Project Report On

Tour and travel Management

Submitted in fulfillment of the requirements of the degree of
Diploma in Information Technology

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(February - 2025)

CERTIFICATE

□ This is to certify that Project work of course Project -II (1CE2606) embodied in this semester entitled “Tour and Travel Management” was carried out by following students studying at B. S. Patel Polytechnic, Ganpat University for partial fulfillment of degree of Diploma Engineering in Computer Engineering. This Project work has been carried out under my supervision and is up to my satisfaction.

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Head of Department

Date: _____

Place: _____

Declaration

- I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Acknowledgements

- We would first like to thank my thesis Guide Asst. Prof. Vruta Patel Department of Computer Engineering at Institute of Technology, Ganpat University. The door to Professor's office was always open whenever we ran into a troublespot or had a question about my/our project or writing. He has always showed enough gratitude and patience towards us. He consistently allowed this work to be our own work, but steered us in the right direction whenever he thought we needed it.
- We would also like to thank the experts who were involved in the validation survey for this project especially our HOD Prof. B N Patel and the experts who participated. Without their passionate participation and validation, the survey could not have been successfully conducted. We are also thankful to B. S. Patel Polytechnic, Ganpat University for providing us the platform to grow and explore our knowledge without any hindrance.
- Finally, We must express our very profound gratitude to our parents and colleagues for providing us with unfailing support and continuous encouragement throughout our study and through the process of researching and writing this report. This accomplishment would not have been possible without them.

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1.1 ABSTRACT

In this Project a detailed review of tour and travels management systems. The main objectives of this website are to know the package related to the trip and journey with the best facility and current offer. Searching will be very easy. At a single click will be able to fetch the required data. Nowadays, there are multiple travel packages existing from the various websites to approximately all the locations all over the world.

This Project will give travelers the best travel package among all the packages relevant information such as image, hotel facility, Google map facility, transport facility and the places where they want to visit. The tour and travel management system will be helpful for tourism. Users can customize tour and travel management.

INTRODUCTION

1. Introduction

1.1 Purpose

The purpose of this document is to define the requirements for a Tour and Travel Management System that facilitates online booking, itinerary planning, customer management, and travel package management for users and administrators.

1.2 Scope

This system is intended to serve travel agencies, customers, and administrators. The platform will provide features like tour package creation, online booking, itinerary customization, payment integration, and customer support. It will be accessible via web and mobile devices.

1.3 Definitions, Acronyms, and Abbreviations

- **Admin:** System administrator responsible for managing the system.
- **User:** Customers using the platform to book tours or travel-related services.
- **Tour Package:** A predefined travel package including transportation, accommodation, and activities.

1.4 References

- Travel agency process documentation
- Industry standards for online booking systems
- Payment gateway APIs documentation

2. System Overview

The **Tours and Travels Management System** is a web-based application designed to streamline the process of booking travel packages, managing customer bookings, and providing an intuitive interface for users and administrators. The system serves two main user groups: **Travelers (Customers)** and **Admins**.

The main purpose of the system is to allow users to browse, filter, and book tour packages based on various preferences such as destination, date, price range, and duration. Users can register, log in, view package details, make secure payments, and receive booking confirmations. They can also leave reviews and manage their bookings through a personal dashboard.

On the admin side, the system provides a dedicated panel to manage tour packages, view user bookings, update content, and respond to customer queries. The backend is powered by **Node.js** and **MongoDB**, while the frontend is built using **HTML, CSS, and JavaScript** for responsive and modern UI/UX.

This system aims to replace traditional manual booking methods and provide a seamless, convenient, and efficient experience for both travelers and tour operators.

3. Functional Requirements

This section outlines the core functionalities the system must provide to meet user needs.

3.1 User Registration and Login

- The system shall allow users to **register** using their email, phone number, and password.
- The system shall allow users to **log in** using their registered credentials.
- The system shall validate user input and provide error messages for incorrect login attempts.

3.2 Tour Browsing

- The system shall allow users to **view available tour packages**.
- The system shall support filtering of tours by **location, price, duration, and category**.
- The system shall display detailed information for each tour, including **images, description, itinerary, cost, and reviews**.

3.3 Tour Booking

- The system shall allow users to **book a tour package** by selecting the date and number of travelers.

- The system shall allow users to **view the total cost** before confirming the booking.
- The system shall store and manage the booking information.

3.4 Payment Integration

- The system shall provide a **secure payment gateway** for online payments.
- The system shall support multiple payment options such as **credit/debit cards, UPI, net banking**.
- The system shall generate a **payment receipt** and send a **confirmation email/message** after successful payment.

3.5 User Dashboard

- The system shall provide a user dashboard to **view, manage, and cancel bookings**.
- The system shall display **booking history and status**.

3.6 Admin Panel

- The system shall allow admins to **log in** securely.
- The system shall allow admins to **add, edit, and delete** tour packages.
- The system shall allow admins to **view user bookings**, manage payments, and handle queries.

3.7 Reviews and Feedback

- The system shall allow users to **rate and review** tour packages.
- The system shall display average ratings and reviews for each tour.

3.8 Contact and Support

- The system shall have a **Contact Us** form for inquiries.
- The system shall allow users to send **feedback or queries** to the admin.
- The system shall provide **FAQs and live chat** options (if included).

4. Non-Functional Requirements

These are the quality attributes and constraints the system must fulfill to ensure optimal performance, reliability, and user satisfaction.

4.1 Performance Requirements

- The system shall respond to user actions (e.g., page load, booking) within 2 seconds under normal load.
- The system shall be capable of handling at least 500 concurrent users without degradation in performance.

4.2 Reliability

- The system shall maintain 99.9% uptime, excluding scheduled maintenance.
- The system shall ensure data is not lost during failures, with regular backups.

4.3 Scalability

- The system shall be scalable to accommodate increasing numbers of users and bookings over time.
- The system architecture shall support horizontal and vertical scaling.

4.4 Security

- User data such as passwords shall be encrypted before storage.
- The system shall use HTTPS for secure communication.
- The system shall protect against common vulnerabilities like SQL injection, XSS, CSRF, etc.
- The admin panel shall only be accessible to authenticated admin users.

4.5 Usability

- The system shall have an intuitive and user-friendly interface.
- The system shall provide clear navigation and visually appealing tour listings.
- The platform shall be accessible to users of varying tech skills.

4.6 Compatibility

- The system shall work seamlessly on modern web browsers (Chrome, Firefox, Edge, Safari).
- The system shall be responsive and function properly on mobile, tablet, and desktop devices.

4.7 Maintainability

- The code shall be written in a modular and well-documented manner to support easy maintenance and future updates.
- The system shall be able to integrate with new features or third-party tools with minimal disruption.

4.8 Availability

- The system shall be available 24/7 for both users and admins.
- Downtime shall be minimized and limited to predefined maintenance windows.

5. System Design Constraints

This section defines the limitations and restrictions that affect the system's design and implementation.

5.1 Hardware Constraints

- The system must be accessible through **standard computing devices** such as desktops, laptops, tablets, and smartphones.
- The server hosting the backend must have enough resources (RAM, storage, and processing power) to support expected user traffic.

5.2 Software Constraints

- The system will be developed using:
 - **Frontend:** HTML5, CSS3, JavaScript
 - **Backend:** Node.js with Express.js
 - **Database:** MongoDB
- The system must run on **cross-platform compatible** browsers (Chrome, Firefox, Edge, Safari).
- Admin and user dashboards must be developed to follow **responsive design principles** using CSS frameworks or media queries.

5.3 Standards Compliance

- The system must comply with **W3C standards** for web technologies (HTML, CSS).
- It must adhere to **security best practices**, including encryption, secure authentication, and secure data handling.

5.4 Security Constraints

- Passwords must be stored using **hashing algorithms** (e.g., bcrypt).
- All communication must occur over **HTTPS** to ensure secure data transfer.
- Admin functionalities must be **access-restricted** via role-based authentication.

5.5 Operational Constraints

- The system must be available **24/7**, with minimal downtime for maintenance.
- The system should be easy to update or upgrade without affecting live operations significantly.

5.6 Legal and Privacy Constraints

- The system must comply with applicable **data protection laws** (e.g., GDPR or local privacy laws).
- User data must not be shared with third parties without explicit consent.

6. Assumptions and Dependencies

This section outlines the assumptions made during the development of the system and any external dependencies that could affect system performance or delivery.

6.1 Assumptions

1. Internet Connectivity

Users and administrators are assumed to have stable internet access to use the web application.

2. User Device Compatibility

It is assumed that users will access the system through modern devices (smartphones, tablets, laptops, desktops) with updated browsers.

3. Payment Gateway Integration

The payment gateway used (e.g., Razorpay, PayPal, Stripe) will provide proper

API access and documentation for smooth integration.

4. **User Input Accuracy**

It is assumed that users will provide accurate and valid information (email, contact number, travel dates) during registration and booking.

5. **Single Admin Role (Initial Phase)**

Initially, the system assumes a single admin role to manage all administrative tasks. Multi-admin support may be considered in future updates.

6. **Tour Data Availability**

All tour package information (images, pricing, itineraries) will be available from the tour operator or travel company before development begins.

6.2 Dependencies

1. **Third-Party Services**

The system depends on third-party services such as:

- Payment gateway APIs (for handling transactions)
- Email/SMS APIs (for sending notifications)
- Map/location services (optional, for displaying destinations)

2. **Hosting Platform**

The performance and availability of the system depend on the hosting provider (e.g., Vercel, Render, or Heroku for backend, Netlify for frontend).

3. **MongoDB Database**

All user and booking data depend on the availability and proper configuration of the MongoDB database.

4. **Browser Support**

The system's frontend functionality is dependent on modern browsers supporting HTML5, CSS3, and JavaScript.

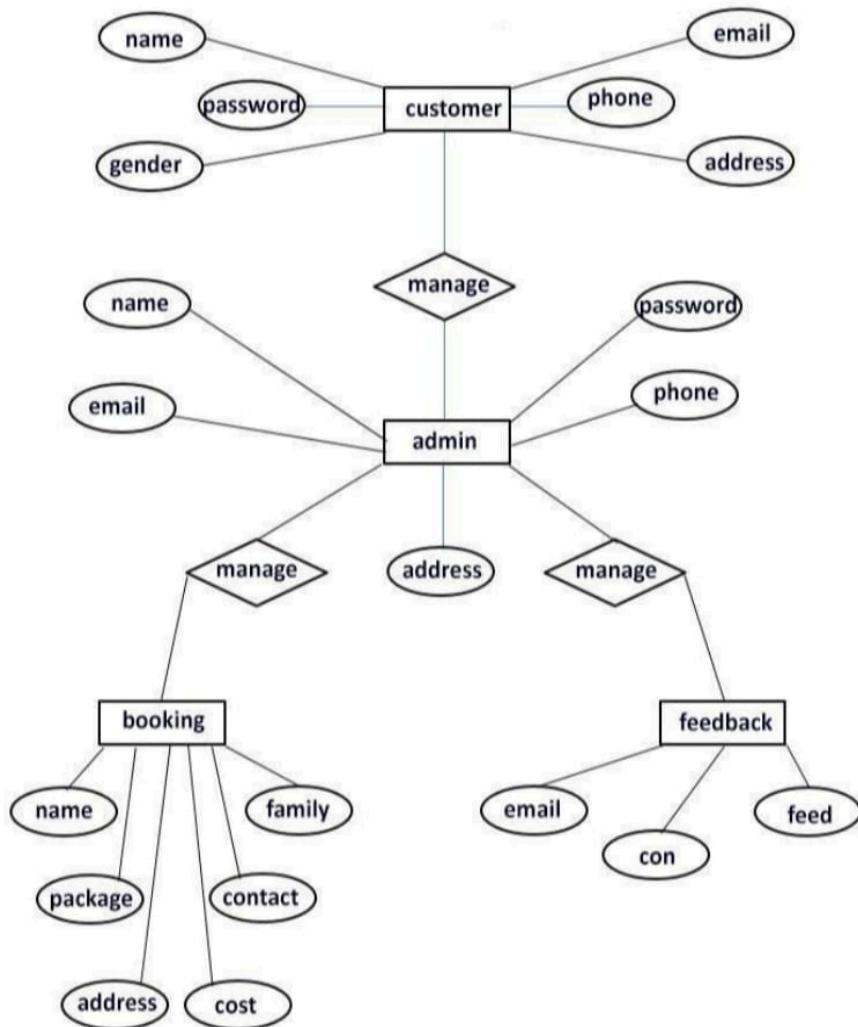
7.1 Advantages:

- Automates operations, saving time and costs.
- Enhances customer experience with easy booking and updates.
- Centralizes data for better management and decision-making.
- Provides real-time updates and personalized services.
- Accessible on multiple platforms.

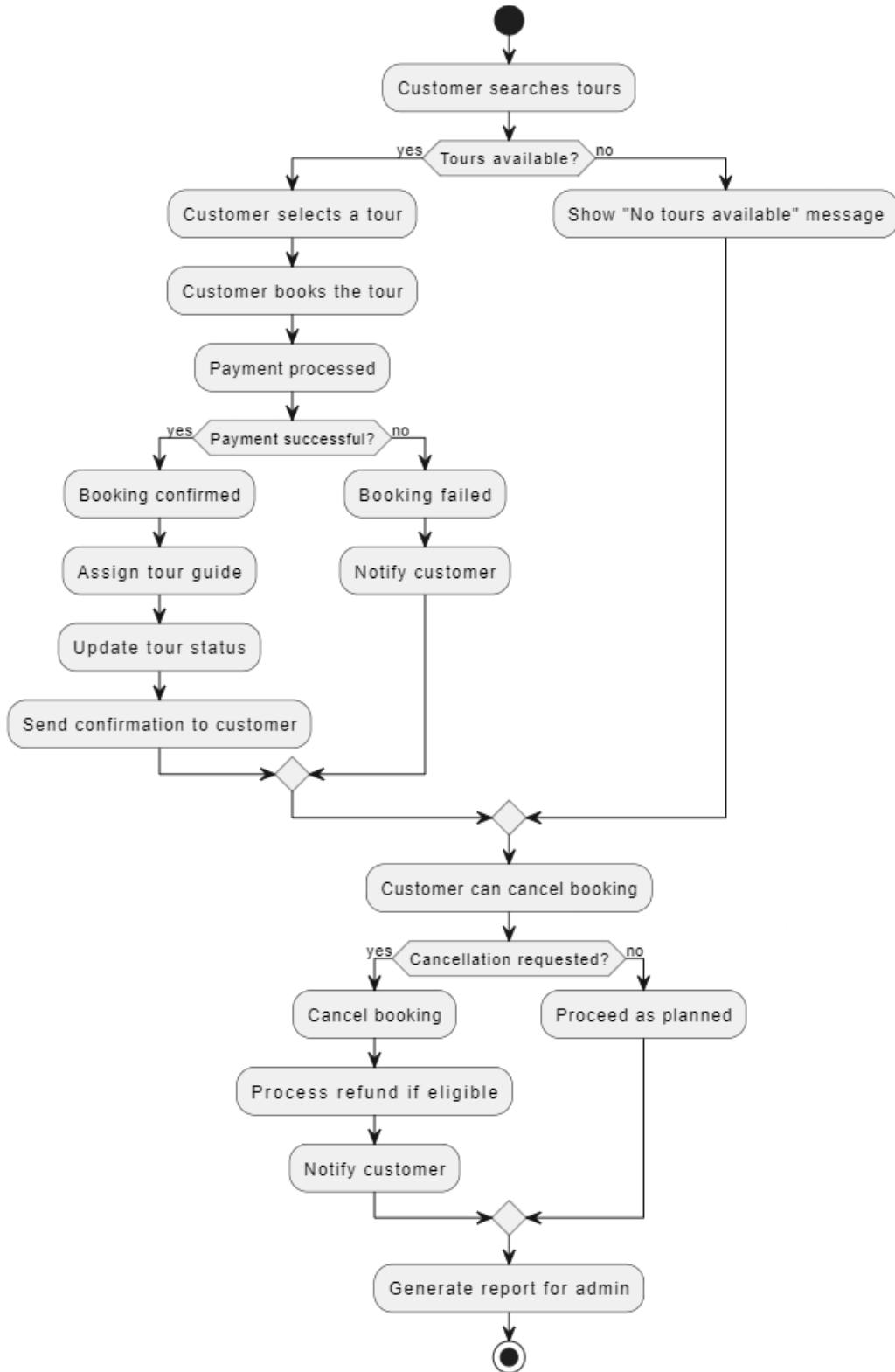
7.2 Disadvantages:

- High initial costs and technical expertise needed.
- Risks of downtime and data breaches.
- Difficult for non-tech-savvy users.
- Challenges in customization, integration, and scalability.

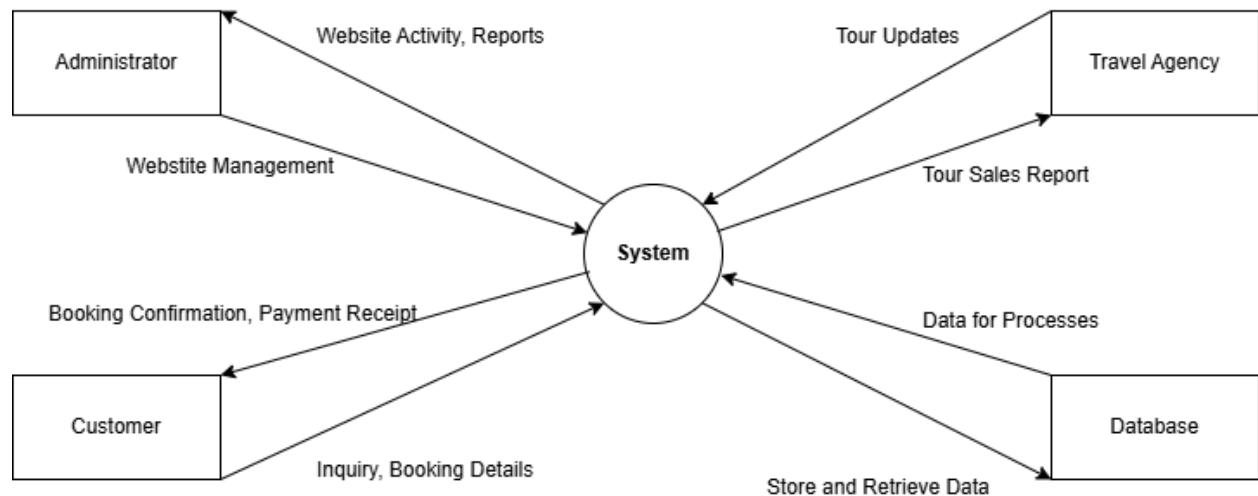
8. ER DIAGRAM



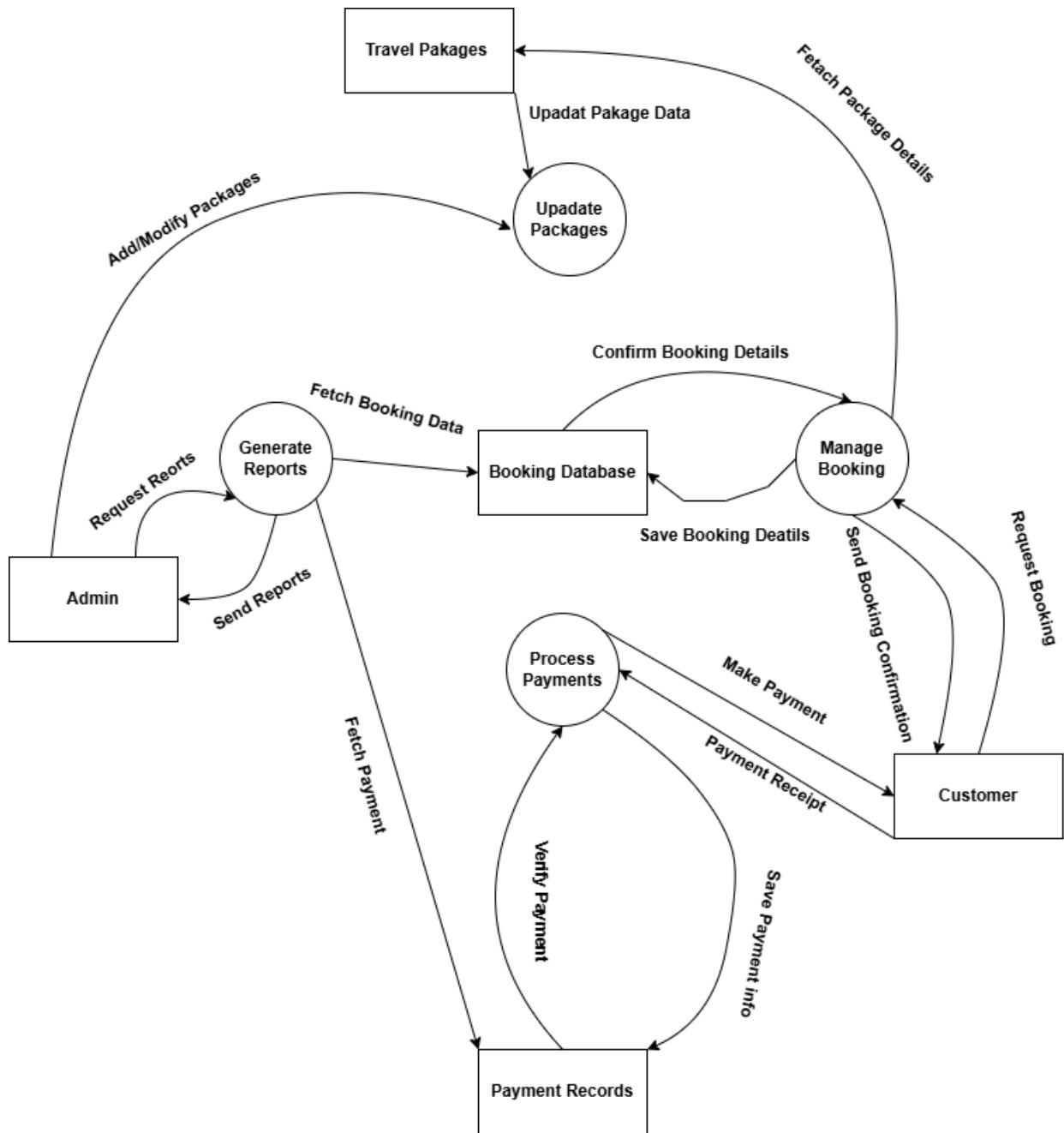
9. ACTIVITY DIAGRAM



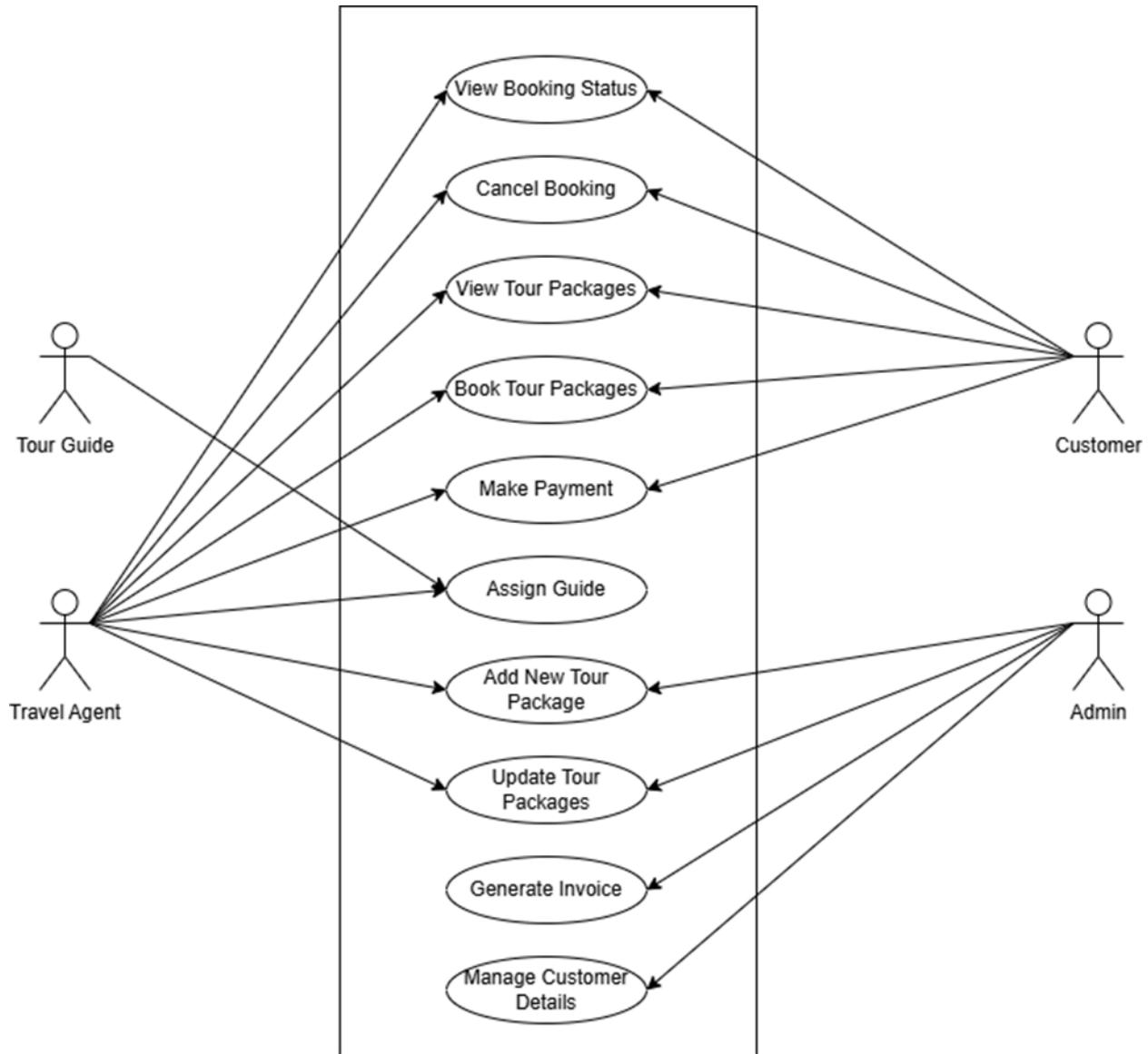
10.1 DATA FLOW DIAGRAM



10.2 DFD LEVEL 1



11. USE CASE DIAGRAM

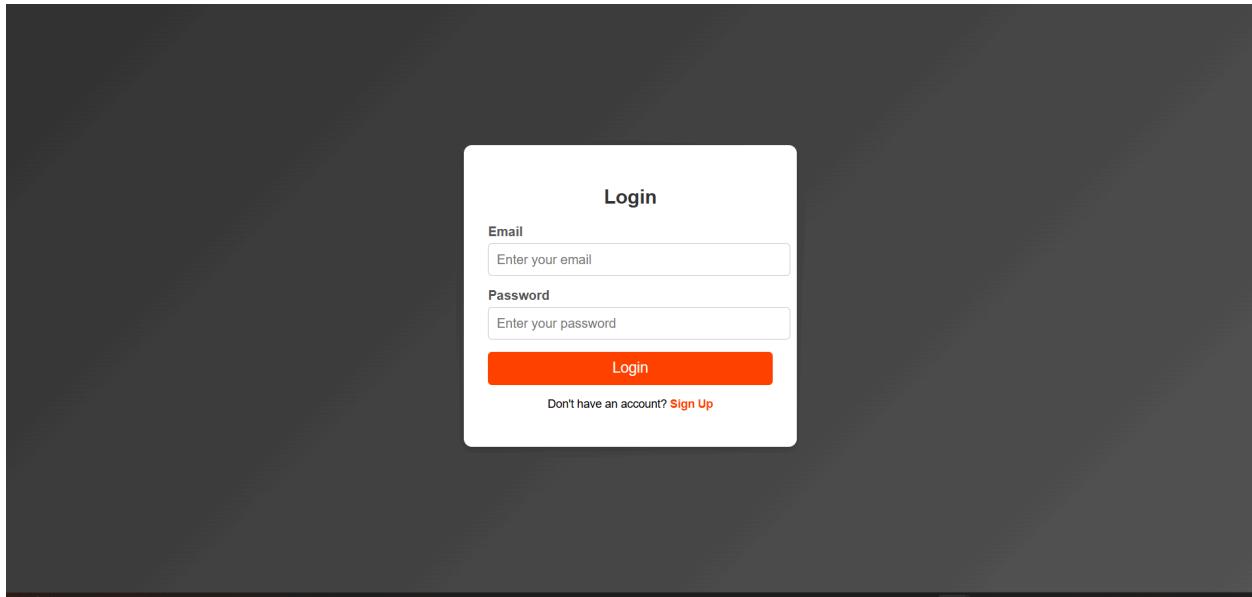
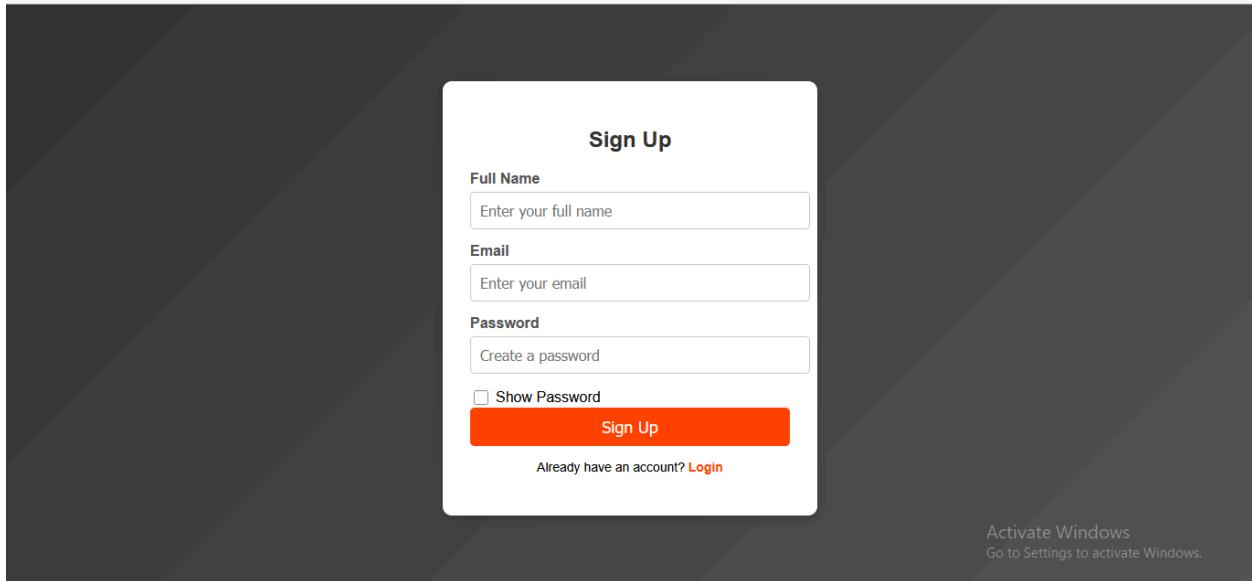


12.1 Admin login page

The screenshot displays an admin login interface. On the left, a dark blue sidebar titled "Admin Panel" contains links for Dashboard, Users, Reports, Settings, and Logout. The main area is titled "Welcome, Admin" and has a sub-section titled "Overview". It includes a brief description: "This is your admin dashboard. Use the sidebar to navigate through various sections." Below this are three summary cards: "Users" (1,200), "Reports" (34), and "Revenue" (\$12,300).

Category	Value
Users	1,200
Reports	34
Revenue	\$12,300

12.2 Customer login page



13. Tours and Travels

Tours and Travels

Home Destinations About Us Contact

Login Sign Up

Explore the World with Us

Your dream vacation awaits. Discover beautiful destinations!

[View Destinations](#)

Popular Destinations





Paris, France
The City of Lights awaits you!
[View Details](#)

Tokyo, Japan
Experience the perfect blend of tradition and modernity.
[View Details](#)

Bali, Indonesia
A tropical paradise with stunning beaches.
[View Details](#)

Ram Mandir
Experience the perfect blend of tradition and modernity.
[View Details](#)



Bangkok, Golden palaces
Since the founding of Bangkok as the Nations capital by King Rama I, The Grand Palace has been the major architectural symbol of The Thai Royal Family.
[View Details](#)

Lakshadweep
Settled off the Kerala coast on Laccadive sea, Lakshadweep translates to 'a hundred thousand islands'. A club of 36 atolls and coral reefs, the nature tourism destination is known for preserved ecology and water sports.
[View Details](#)

Dubai
The official tourism slogan for Dubai for 2025 is "Only in Dubai".
[View Details](#)

New York
"Excelsior," meaning "ever upward," and the iconic tourism slogan is "I Love New York".
[View Details](#)

[View Details](#)

and modernity.
[View Details](#)



Bangkok, Golden palaces

Since the founding of Bangkok as the Nations capital by King Rama I, The Grand Palace has been the major architectural symbol of The Thai Royal Family.

[View Details](#)

Lakshadweep

Settled off the Kerala coast on Laccadive sea, Lakshadweep translates to 'a hundred thousand islands'. A club of 36 atolls and coral reefs, the nature tourism destination is known for preserved ecology and water sports.

[View Details](#)

Dubai

The official tourism slogan for Dubai for 2025 is "Only in Dubai".

[View Details](#)

New York

"Excelsior," meaning "ever upward," and the iconic tourism slogan is "I Love New York".

[View Details](#)

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- ✓ 7D/6N Twin-share luxury hotel
- ✓ Daily breakfast & welcome drink
- ✓ Eiffel Tower guided tour
- ✓ Seine River dinner cruise
- ✓ Shopping experience at Champs-Élysées

[Read More](#)

14. Data Bass

The screenshot shows the MongoDB Atlas interface for a cluster named 'Cluster0'. The left sidebar includes sections for Overview, DATABASE (Clusters), SERVICES (Atlas Search, Stream Processing, Triggers, Migration, Data Federation), SECURITY (Quickstart, Backup, Database Access, Network Access, Advanced), and Goto. The main panel displays the 'tourstravels' database with its 'users' collection. The collection has 4 documents and 10 indexes. A search bar at the top right allows for natural language queries. Below the search bar, there are tabs for Find, Indexes, Schema Anti-Patterns, Aggregation, and Search Indexes. A 'Filter' field is present with the query '{ field: 'value' }'. The 'Find' results show two documents:

```
_id: ObjectId('67af019b62b6cc929d4a08b3')
name : "KAI 495"
email : "ka1495@gmail.com"
password : "ka1@495"
__v : 0

_id: ObjectId('67af01ce62b6cc929d4a08b6')
name : "DEVIL FF"
```

This screenshot is identical to the one above, but it shows a document in the 'users' collection being edited. The document's details are displayed in a modal window, and edit icons are visible next to the fields. The document is:

```
_id: ObjectId('67af01ce62b6cc929d4a08b6')
name : "DEVIL FF"
email : "devil007@gmail.com"
password : "devil@007"
__v : 0
```

15. Tools and program

This section describes the software and tools used in the development, testing, and deployment of the Tours and Travels system.

15.1 Programming Languages

- HTML5, CSS3, JavaScript – For frontend development.
- Node.js – For backend server-side scripting.
- Express.js – For handling HTTP requests and routing.
- MongoDB – As the database to store user, booking, and tour data.

15.2 Development Tools

- **Visual Studio Code** – Primary source code editor.
- **chatGTP** –

15.3 Database Tools

- **MongoDB Atlas / Compass** – For managing MongoDB databases and visualizing data.

15.4 Browsers for Testing

- **Google Chrome**
- **Mozilla Firefox**
- **Microsoft Edge**

15.6 Deployment Tools

- **Render / Vercel / Netlify** – For deploying frontend code.
- **Railway / Render / Heroku** – For hosting the Node.js backend.

- **Domain & Hosting** – GoDaddy, Namecheap, or other providers for live deployment.

15.7 Communication & Project Management

- **Trello / Notion** – For project task management and documentation.
- **WhatsApp / Slack / Email** – For communication among team members.