

## **MERN Stack Training**

**Company:** Sensation Software Solutions

**Student Name:** Gurvinder Singh

**Training Duration:** 6 Months

**Days:** 100

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### **Objective of the Day**

The focus of the day was to ensure that:

- Only **logged-in users** can book tours
- Booking data is **securely validated and stored**
- Users receive a **clear booking confirmation**
- Frontend and backend booking logic remain **perfectly synchronized**

This day played a crucial role in transforming JourneyJoy from a UI-based project into a **functional travel booking application**.

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### **Understanding the Booking Flow**

Before implementation, the complete booking journey was analyzed:

1. User selects a tour
2. User opens Tour Details page
3. User fills Booking Form
4. System checks authentication
5. Booking request sent to backend
6. Backend validates and stores booking
7. User receives booking confirmation

This flow was designed to simulate **real-world tour and travel platforms**.

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## Auth-Protected Booking Submission

### 1. Authentication Check (Frontend Level)

The booking form was updated to ensure **authentication is mandatory**.

Frontend logic included:

- Checking JWT token before submission
- If user is not logged in:
  - Show warning message
  - Redirect user to Login page
- If user is logged in:
  - Allow booking submission

This improved security and prevented unauthorized bookings.

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### 2. Booking Form Enhancements

The booking form contained:

- Full Name
- Email
- Phone Number
- Travel Date
- Number of Travelers

Enhancements added:

- Pre-fill name and email for logged-in users
- Disable email editing to maintain data integrity
- Client-side validation for empty and invalid fields

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## 2. Booking Model Design

The **Booking model** included:

- User ID (reference)
- Tour ID
- Traveler Name
- Email
- Phone Number
- Travel Date
- Number of Travelers
- Booking Status (Pending/Confirmed)
- Created At timestamp

This structure ensured **future scalability** such as booking history and admin management.

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## Booking Confirmation Implementation

### 1. Confirmation Message (Frontend)

After successful booking:

- User was redirected to **Booking Confirmation page**
- Confirmation message displayed:
  - Booking successful
  - Tour name
  - Travel date
  - Number of travelers
- UI styled with success indicators

This gave users **confidence and clarity**.

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## 2. Backend Confirmation Response

Backend sent:

- Success message
- Booking ID
- Booking summary details

Frontend used this data to populate the confirmation screen dynamically.

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## Handling Booking Failures

Special care was taken to handle failure scenarios:

- User not logged in
- Token expired
- Invalid booking data
- Server errors

Frontend showed:

- Friendly error messages
- Retry guidance
- Login redirect if needed

This ensured a smooth experience even during errors.

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## Manual Testing

The following cases were tested:

- Booking without login (blocked)
  - Booking after login (successful)
  - Invalid input handling
  - Booking confirmation rendering
  - Page refresh behavior
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## Conclusion

Day 100 marked the **completion of the core booking feature** of the JourneyJoy Tour & Travel Booking System. With authentication-protected booking submission and a clear booking confirmation mechanism, the project now reflects **real-world travel booking platforms**.