

# Train Ticket Booking System

## PHASE-1

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Phase-1: Problem Understanding and Industry Analysis

### 1. Requirement Gathering

- **Functional Requirements**

- a) **Train Schedule Search**

- Users can search for trains by:
      - Source Station
      - Destination Station
      - Date of Travel
    - Display availability of seats.
    - Show departure and arrival times for available trains.

- b) **Ticket Booking**

- Allow customers to book tickets for selected trains.
    - Collect customer details (Name, Contact Info, etc.).
    - Reserve seats automatically upon booking.
    - Generate unique Booking ID.
    - Send booking confirmation via email/SMS.

- c) **Ticket Cancellation / Rescheduling**

- Allow customers to cancel booked tickets.
    - Automatically update seat availability after cancellation.
    - Process refund in wallet(not real-time).

- d) **Real-Time Updates**

- Provide real-time updates of:
      - Seat availability
      - Train delays or cancellations
      - Booking confirmation status
    - Notify customers automatically via email/SMS about status updates.

- e) **AI-Powered Customer Support (AgentForce Chatbot)**

- Handle customer queries such as:
    - Train schedule information
    - Baggage policies
    - Refund process
    - Booking modification requests
  - Assist users step-by-step in booking, cancelling, or rescheduling tickets via conversational UI
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- **Non-Functional Requirements**

- a) **Performance**

- System must respond to search requests in less time .
    - Booking and cancellation transactions must be processed within less seconds.

- b) **Availability**

- System should be available 24/7, with planned maintenance only during off-peak hours.
  - Specific needs such as 24/7 customer service, real-time availability, and personalized travel suggestions.
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## 2. Stakeholder Analysis:

- **Primary Stakeholders:**
    - Passengers (end users): Expect easy booking, quick support, and real-time updates.
    - Railway Operations Team: Need efficient booking management, scheduling, and report generation.
    - Customer Support Agents: Require tools for handling queries and managing bookings.
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## 3. Business Process Mapping:

- The new automated process flow:
  1. Customer searches for available trains →
  2. Selects schedule and books ticket →
  3. AI AgentForce assists with FAQs, booking changes, or cancellations →
  4. Payment is processed →
  5. Confirmation & real-time notifications sent →
  6. Management monitors bookings via dashboards.

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#### **4. Industry-specific Use Case Analysis:**

- **Use Case 1:** Passenger search the trains with source and destination
  - **Use Case 2:** Passenger books a train ticket and receives instant confirmation.
  - **Use Case 3:** Passenger cancels or reschedules a booking via chatbot.
  - **Use Case 4:** AI AgentForce answers common customer queries (e.g., baggage policy, refund rules).
  - **Use Case 5:** Railway management views real-time booking trends and customer feedback through dashboards.
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#### **5. AppExchange Exploration:**

- Automation app
- Item:Email template for sending emails