

## Project Overview: Bus Ticket Booking Application

The Bus Ticket Booking App is a digital platform where customers can easily search, select, and book bus tickets. The system supports multiple user types—Customers, Admin, and Agents—to streamline ticket booking and commission management.

### Key Objectives:

- Provide users with a simple and fast way to book bus tickets.
- Allow multiple agents to log in and book tickets for their customers.
- Automate commission calculation for each agent.
- Ensure smooth management of buses, routes, timings, bookings, and payments.

### User Roles:

#### 1. Customer:

- Search buses by route, date, and time
- View seat availability
- Book tickets & make payments
- Download e-ticket

#### 2. Agent:

- Login to the agent dashboard
- Book tickets on behalf of customers
- Earn commission per ticket
- View total earnings and booking history

#### 3. Admin:

- Manage buses, routes, tickets, and bookings
- Add/update/remove agents
- Set commission percentage
- Track daily sales & reports

### Core Features:

#### For Customers:

- Bus search (source → destination)
- Seat selection
- Online payment

- Ticket cancellation

- Booking history

For Agents:

- Separate login

- Book tickets for customers

- Commission auto-calculation

- Wallet system (optional)

For Admin:

- Bus & route management

- Agent management

- Commission settings

- Reports & revenue dashboard

Revenue & Commission System:

- Admin sets commission percentage (5–10%).

- System auto-calculates commission for each agent's booking.

- Payments can be released weekly/monthly.

Suggested Tech Stack:

- Frontend: React / Flutter

- Backend: Node.js + Express

- Database: MongoDB / MySQL

- Hosting: AWS / DigitalOcean

- Payment Gateway: Razorpay / Paytm