# B2B Travel Platform - Admin Panel Backend Specification

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Project Name: [B2B Travel Platform]

## 1. Project Summary

Overview: Provide a brief description of the B2B platform's purpose, highlighting that it's a system where agents can fill out details and obtain travel package rates from the admin.

Objectives: Outline primary goals, such as facilitating smooth travel package rate requests, centralized agent management, and easy transaction handling.

## 2. Scope of Work

Describe the main areas covered by the admin panel, such as agent and manager management, package handling, wallet and payment management, and reporting.

## 3. Feature Details and Functional Requirements

Each feature section should contain Description, Functional Requirements, User Interactions, and Technical Details where needed.

### 3.1 Agent and Manager Management

Description: This module handles the creation, approval, and assignment of agents and managers.

Functional Requirements:

- Agent Registration: System to allow agent self-registration and admin approval process.

- Admin-Created Agents: Admin can create new agent accounts directly.

- Agent Approval Workflow: New agents registered by themselves require admin approval to activate.

- Manager Role Creation: Admins can create manager roles with defined permissions and assign them to agents.

### 3.2 Package and Information Management

Description: Admins manage package details, including customer info, hotel, transport, and sightseeing options.

Functional Requirements:

- Basic Information Table: Store core package details like customer name, contact, destination, date, and time.

- Country-City Tables for Service Details:

- Hotel Details and Seasonal Pricing: Include country, city, hotel name, and seasonal rates.

- Transportation Modes: Define transport types, schedules, and seasonal rates.

- Sightseeing Options: Time, price, and add-ons managed here.

### 3.3 Package Approval System

Description: Admins review and approve packages requested by agents.

Functional Requirements:

- Approval Workflow: Track package status (e.g., Pending, Approved, Rejected) and notify agents of changes.

### 3.4 Wallet and Payment Management

Description: A virtual wallet for agents, tracking deposits and payments to admins.

Functional Requirements:

- Wallet for Each Agent: Track funds in the agent's account.

- Payment Flow: Agents deposit funds in the wallet to make bookings, with transaction tracking.

- Payment Confirmation: Send email/SMS confirmations upon payment.

### 3.5 Notifications and Communication

Description: Notifications for agents and vendors on booking status.

Functional Requirements:

- Automated Notifications: Email/SMS for booking confirmations, status updates.

- Vendor Notifications: Notify vendors like hotels or transport providers about bookings.

### 3.6 Data Management

Description: Admin capabilities to edit and update all categories, such as agent data and rates.

Functional Requirements:

- Editable Fields: Admins can modify package details, hotel rates, transport options, and more.

- Real-Time Updates: Ensure all changes are immediately visible to agents.

### 3.7 Reporting and Reward System

Description: Track agent performance and reward eligible agents.

Functional Requirements:

- Performance Reports: Monitor agent performance (e.g., bookings, revenue).

- Reward Tracking: System for managing rewards based on agent achievements.

## 4. Technical Requirements

- Database Design: Outline database schema for agents, managers, packages, hotels, etc.

- Role-Based Access Control (RBAC): Describe access levels for each role (admin, manager, agent).

Integration Requirements:

- Payment Gateway Integration: Include API integrations for wallet transactions.

- Email/SMS Integration: Specify services like Twilio for SMS and an email provider for notifications.

- Security: List security measures, such as encrypted storage, authentication, and access control.

## 5. User Flows

Include diagrams or text-based flowcharts to show how each role interacts with the system, such as:

- Agent Registration and Approval Process

- Package Creation and Approval Workflow

- Wallet Deposit and Payment Process

## 6. Reporting and Metrics

Define metrics tracked by the system, such as agent performance metrics, package approval rates, and revenue from bookings.

## 7. Timeline and Milestones

Define timelines and development phases for completing modules like agent management, wallet, payment integration, and reporting.

## 8. Testing and Quality Assurance

Outline testing procedures for each feature, including unit tests for backend functionality, security tests, and data validation checks.