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MIDLAB SOFTWARE DESIGN AND ARCHITECTURE
SMART TRAVEL MANAGEMENT SYSTEM

1-WHICH PRINCIPLES AND PATTERNS I USED
2-USECASE DIAGRAM
3-COMMUNICATION DIAGRAM

Software Design Principles and Patterns Used:

1. Controller pattern:
- TravelSystemController acts as the controller, handling all system interactions.

2. Information Expert:-
- Each class (e.g TripPlanner, Booking Service) encapsulates responsibilities tied to its domain knowledge.

3. Single Responsibility Principle (SRP)
- Each class has clearly defined purpose: managing trips, booking alerts etc.

Open-closed principle:-

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Use Case diagram

SMART TRAVEL MANAGEMENT system

- Plan personalized Trip
- <includes> <includes>
- Search destination
- View optimized itinerary
- Manage Booking
- <includes>
- Admin Panel Access
- Modify Ticket
- <includes>
- Manage User profile
- <includes>
- update travel data
- Get Realtime Travel Assistance
- <includes>
- Recieve Travel Alerts

Traveler

admin