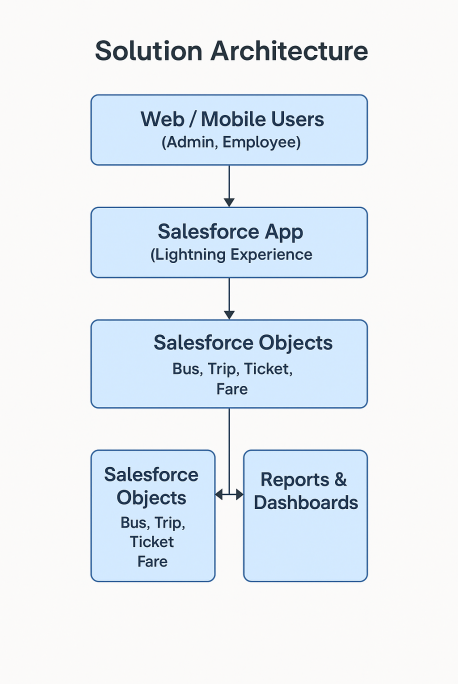
Solution Architecture



1. Core Components

Layer	Description
Presentation Layer	Web and Mobile Interfaces (for Admin, Employees, Passengers)
Application Layer	Salesforce Cloud Services (Salesforce Platform, Flows, Apex, LWC, Validation Rules)
Data Layer	Salesforce Objects: Bus, Trip, Ticket, Employee, Station, Fare, Reports

2. Component Flow

1. **User Interface (UI)**
    - Admin Dashboard (Web)
    - Employee View (Web/Mobile)
    - Passenger Access (Limited info via community portal/mobile app)
2. **Salesforce CRM Core**
    - **Custom Objects**:
        - `Bus`, `Trip`, `Ticket`, `Station`, `Employee`, `Fare`
    - **Automation**:
        - *Flows* for schedule updates & notifications
        - *Apex Triggers* for complex logic
        - *Validation Rules* to ensure data integrity
3. **Data Storage**
    - Salesforce Cloud Database (relational model using custom objects and lookups)
4. **Reports & Dashboards**
    - Real-time KPIs: Route efficiency, Ticket sales, Staff performance, Trip occupancy
5. **External Integration (Optional/Future)**
    - API integrations with Google Maps, payment gateways, or GPS tracking tools