A CRM APPLICATION FOR PUBLIC TRANSPORT SYSTEM

DATE	**20-06-2025**
TEAM ID	**LTVIP2025TMID29698**
PROJECT NAME	**A CRM Application for Public Transport Management System**
MAXIMUM MARKS	

CHAPTER 4:- Project Design

Project Design for your **CRM Application for Public Transport Management System**, covering architectural structure, module breakdown, user interface design, and data flow.

4.1:- Existing System (Problem solution Fit)

Problems in the Existing System

- **Disjointed Communication**: No centralized platform for updates or feedback.
- **Low Responsiveness**: Complaints are often unresolved or delayed.
- **No Personalization**: All commuters treated the same, regardless of needs.
- **Poor Data Visibility**: Authorities lack actionable insights.
- **Limited Accessibility**: Elderly and differently-abled users face barriers.

Proposed CRM Solution: Problem-Solution Fit

Solution Fit

- **User-Centric Design**: Built around commuter needs and behaviors.
- **Operational Efficiency**: Streamlines support and feedback workflows.
- **Scalability**: Supports growing urban populations and transport networks.
- **Integration-Ready**: Connects with existing systems (ticketing, GPS, messaging).
- **Policy Alignment**: Supports smart city initiatives and digital governance.

4.2:- Proposed System (Proposed solution)

Proposed System for your **CRM Application for Public Transport Management**, outlining the solution architecture, key features, and how it improves upon the existing system.

Proposed Solution

1. Centralized Complaint & Feedback Management

- **Solution**: A digital platform where commuters can submit complaints, suggestions, and feedback.
- **Benefits**:
    - Transparent tracking of issue resolution
    - Faster response times
    - Improved accountability

2. Real-Time Communication System

- **Solution**: Push notifications, SMS, and email alerts for service disruptions, delays, and route changes.
- **Benefits**:
    - Keeps commuters informed instantly
    - Reduces uncertainty and frustration
    - Enables proactive travel decisions

3. Commuter Profile & Personalization

- **Solution**: User accounts with travel history, preferences, and personalized updates.
- **Benefits**:
    - Tailored communication
    - Enhanced user experience
    - Targeted service improvements

4. Analytics & Reporting Dashboard

- **Solution**: Admin dashboard with visual insights into commuter behavior, complaint trends, and satisfaction metrics.
- **Benefits**:
    - Data-driven decision-making
    - Performance monitoring
    - Resource optimization

4.3:- Solutions Architecture

1. Data & Integration Layer

- **Salesforce Service Cloud**: Central system of record for passenger profiles, feedback cases, incident management, and sales.
- **MuleSoft Anypoint Platform**: Integrates with external systems—ticketing, telematics (vehicle GPS), traffic/weather feeds, payment gateways—and enables real-time orchestration across platforms.
- **Salesforce Data Cloud (CDP)**: Unified profiles store real-time and historical data—rider journeys, feedback trends, account balances—accessible enterprise-wide via federated views.

2. Customer Engagement & Communication

- **Experience Cloud**: Passenger-facing portal and mobile app UI for account management, feedback, loyalty tracking, and contact.
- **Marketing Cloud & Journey Builder**: Automates personalized campaigns, real-time notifications (SMS, email, push) based on Platform Events and rider behavior.
- **Platform Events & Event-Driven Architecture**: Provides streaming of telemetry data (e.g. bus delay) for real-time notifications and system triggers across services