

Overview

The Transport Management System project aims to simplify and streamline the operations of service like bus and taxi transportation services through the integration of a robust Database Management System (DBMS). This system will leverage *SQL* for database management, *XAMPP* as the web server solution, and *Python* for scripting and backend logic. The proposed system will enhance efficiency, transparency, and user experience in managing transportation services.

Goals

1. **Automation of Operations:** Develop a comprehensive TMS Transport Management System to automate various aspects of transportation management, including route planning, scheduling, ticketing, and reporting.
2. **Database Management:** Implement a reliable and scalable database using SQL to store and manage data related to vehicles, routes, schedules, passengers, and transactions.
3. **User-Friendly Interface:** Create an intuitive and user-friendly interface for both administrators and end-users to facilitate easy interaction with the system.

Specifications

The proposed system will utilize a three-tier architecture:

1. **Presentation Layer:** Developed using Python-based frameworks (e.g., Flask) for a dynamic and responsive user interface.
2. **Application Layer:** Python scripts for backend logic, business rules, and integration with the database.
3. **Data Layer:** A MySQL database managed using SQL to store and retrieve information related to routes, schedules, vehicles, passengers, and transactions.

Technologies Used

I. Database Management System

MySQL for robust and efficient data management.

II. Server

XAMPP for a cross-platform web server solution, ensuring compatibility and ease of deployment.

III. High Level Language:

Python for scripting, logic implementation, and seamless integration with the database.