Introduction

Project Overview

The purpose of this database project is to develop an SQL-based Library Management System (LMS) for managing books, magazines, borrowers, transactions, and overdue tracking. The LMS will streamline library operations by replacing paper-based systems with a modular, user-friendly database that enhances efficiency and generates insightful reports.

Scope

The LMS will manage different types of library materials, including books (physical and digital) and magazines. It will support client management, borrowing rules, and overdue tracking. The system will enforce borrowing restrictions based on membership types, allow reservations, and generate reports. However, it will not include physical checkout systems (e.g., barcode scanners or RFID tags) or integration with third-party digital content services.

Glossary

- **Library Management System (LMS):** An architecture created to manage library assets, member enrollments, and transaction operations.
- **Overdue Monitoring:** A device that tracks and records overdue books and calculates corresponding fees.
- **Membership Type:** A classification of customers that identifies the borrower ability and charge terms for these customers (for example, normal, student, old person).
- **Reservation:** A feature allowing clients to place holds on borrowed items.
- **Notifications:** Automated alerts for due dates, overdue items, and reserved book availability.