Library – Book Rental Tracker

Problem Statement

Libraries and educational institutions struggle to keep track of book inventories, student borrowing history, and timely returns. Manual tracking leads to misplaced books, overdue fines not being collected, and poor visibility into which student borrowed which book. This project solves these issues by implementing a Book Rental Tracker on Salesforce.

Industry

Education / Library Management / Public Services

Project Overview

The Library – Book Rental Tracker project is built on Salesforce to manage book inventories, student memberships, and rentals. The system automatically updates book availability, sends reminders for due dates, and produces insightful reports and dashboards for librarians and managers.

Business Requirements

- Maintain a digital catalog of all books.
- Register students as library members.
- Record each book rental and due dates.
- Automatically update book availability after rental and return.
- Send email reminders before due dates.
- Generate reports on active rentals and overdue books.

Use Cases

- A librarian adds a new book to the inventory.
- A student enrolls as a member of the library.
- A librarian rents out a book to a student and records it in Salesforce.
- The system sends automatic email reminders to students about upcoming due dates.
- A librarian marks a book as returned and Salesforce updates the availability status.
- Management reviews dashboards showing book usage trends.

Innovative Use of Salesforce

- Custom Objects for Books, Students, and Rentals.
- Lightning Web Component for easy rental entry.
- Flows to send reminders and automate tasks.

- Apex Triggers to ensure data consistency and prevent double booking.
- Reports and Dashboards to visualize book availability and rental history.

Objectives

- Provide a single platform to manage all library rentals.
- Eliminate manual tracking and errors.
- Ensure timely returns of books.
- Provide real-time dashboards for management.
- Build a scalable solution that can be extended to multiple libraries.