INTERNSHIP ASSIGNMENT

PIXZARLOOP LIBRARY MANAGEMENT SYSTEM

By: Chanditha Mahanama   **14th of December 2024**

Introduction

This document will detail the design and implementation of a Library Management System built with Laravel for the internship assignment provided by Pixzarloop. The librarians can check what books are in the system, add books, update the details of the existing books and manage the members that have borrowed books from the library.

Functional Requirements

These are the distinct capabilities of the system.

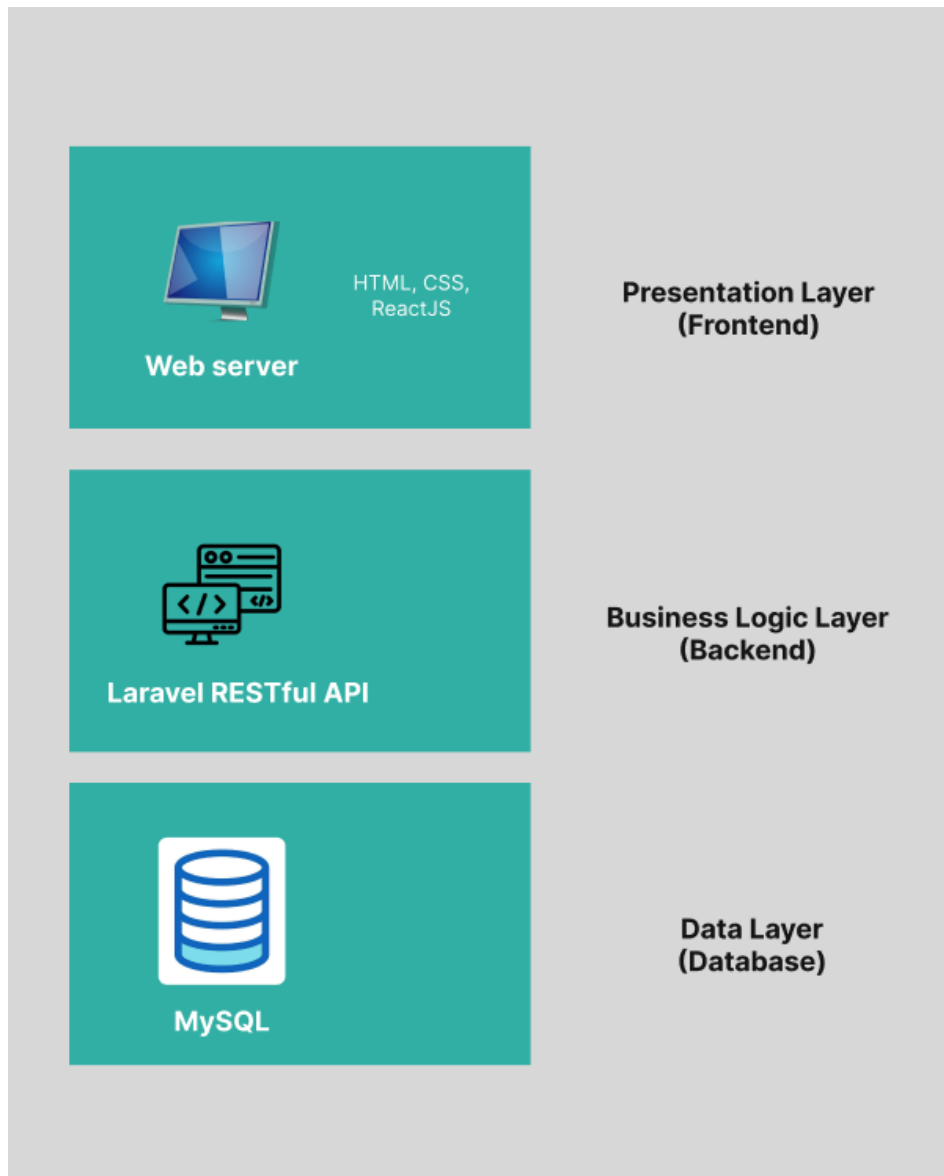| Requirement	Description
Book Management	- Create new books - Update existing books - Search books - Delete books
User Management	- Create, update, search and delete members - Create, update, search and delete the librarians
Search Management	- Allow searching for books across various conditions such as Genre or Author
Borrow Management	- Keep track of the members who have borrowed books - Manage the due dates for the borrowed books - Mark the overdue borrowed books

Non-Functional Requirements

These are the measures for the operability of the system.

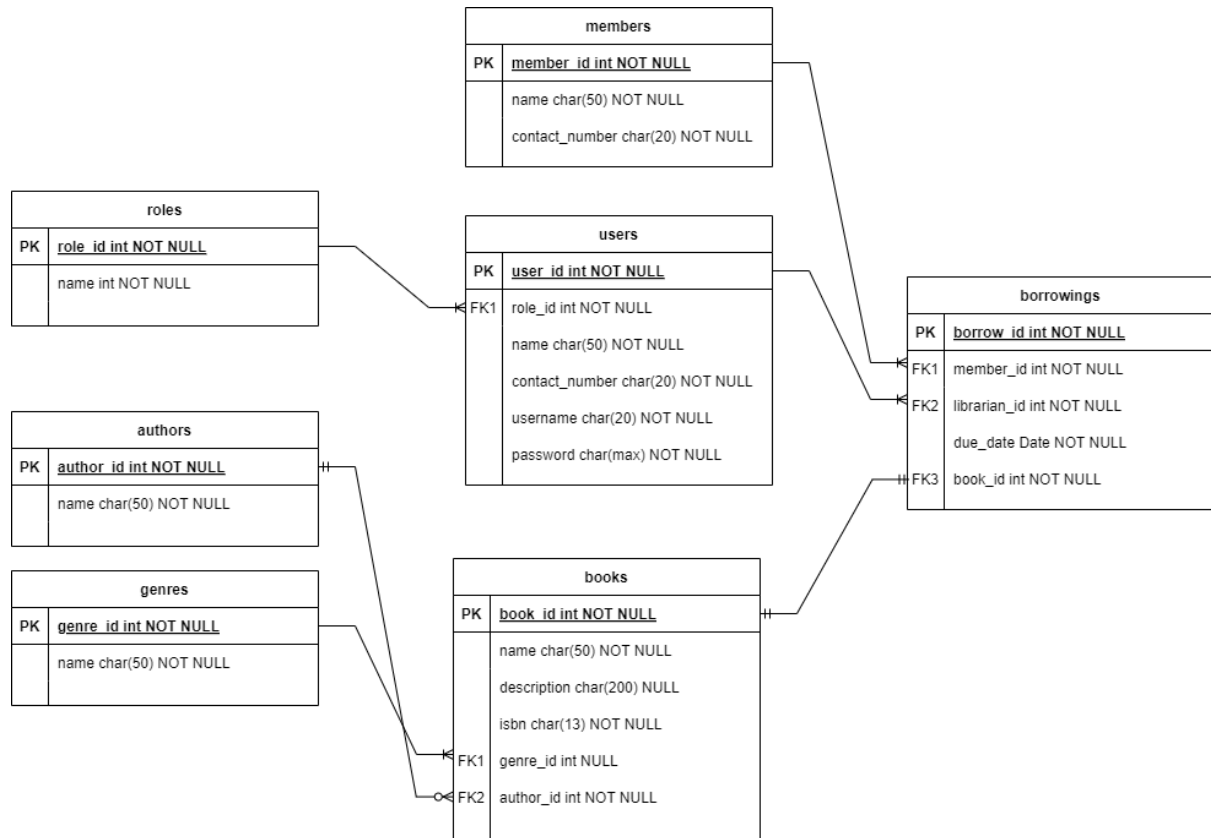| Requirement	Description
Performance	- How the system performs under pressure. For example, if a large number of users are registered or a large number of books are entered into the system.
Compatibility	- How the system looks and functions across various systems such as different web browsers, computer screens and mobile phones.
Usability	- How user friendly and intuitive the system is.

Three Tier Architecture Diagram

A high level view of how this application is layered.

Entity Relationship Diagram

An entity relationship diagram for a software shows how the various major entities within the application are connected to each other.

Use Case Diagram

This diagram represents the possible interactions the users have with the system.