STesting Plan for Library Management System

Group 14

Overview

Context

The Library Management System is a software application that is designed to manage the operations of a library.

The system will:

- Provide a user-friendly interface for the library staff to manage the library resources, such as books, journals, and other e-resources.
- Provide a user interface for the library members to search for and borrow library resources.
- Automate the process of managing the library resources, including the cataloging, circulation, and inventory management.
- Provide reports and analytics to help the library staff to make informed decisions about the library operations.

Purpose

The purpose of this document is to outline the test plan for the Library Management System.

The test plan will include the following:

- Unit tests for the modules
- Integrating testing and the order in which the modules will be integrated
- Test cases for the integrated modules
- System testing for the entire system
- Performance testing for the backend services, APIs, and database

Test Details

Currently, the system is divided into the following modules:

- Render
- Authentication
- Admin
- Member
- Librarian

Render Module

Render module is responsible for rendering the UI components. Since it is a frontend module, a lot of its functionality will be tested manually.

Test Analysis

We will use the following methods for generating the test cases:

- Special cases
- Error guessing
- State based testing

The test cases will be generated based on the requirements and specifications of the system.

The following table summarizes the functional test cases for the modules:

Performance Test Plan

References

- Pankaj Jalote's book on Software Engineering