### LIBRARY MANAGEMENT SYSTEM

PROBLEM STATEMENT - Libraries are vital educational institutions that provide access to a wealth of knowledge and resources for individuals and communities. However, many libraries struggle to keep up with the changing needs of users, including the growing demand for online and digital resources. A modern Library Management System is necessary to provide a seamless and engaging user experience, promote resource discovery, and support research and learning. The system must be capable of handling multiple formats, including physical and digital resources, and should integrate with existing library technologies such as discovery services, electronic resource management systems, and authentication services. Additionally, the system should be designed with accessibility and inclusivity in mind, catering to users with different abilities and needs.

# **Software Requirement Specification(SRS)**

### 1 Itroduction:

- **1.1 Purpose of this Document:** The purpose of this document is to provide a comprehensive Software Requirement Specification (SRS) for a modern Library Management System that caters to the changing needs of library users and promotes resource discovery, research, and learning. This document outlines the scope, objectives, and functional requirements of the system and serves as a guide for the development team
- **1.2 Scope of this document –** This document outlines the requirements for a modern Library Management System that can handle multiple formats, including physical and digital resources, and can integrate with existing library technologies such as discovery services, electronic resource management systems, and authentication services. The system should also be designed with accessibility and inclusivity in mind, catering to users with different abilities and needs.
- **1.3 Overview –** The Library Management System is an integrated platform that provides users with a seamless and engaging experience, promotes resource discovery, and supports research and learning. The system should be capable of handling multiple formats, including physical and digital resources, and should integrate with existing library technologies such as discovery services, electronic resource management systems, and authentication services. Additionally, the system should be designed with accessibility and inclusivity in mind, catering to users with different abilities and needs.
- **2 General description:** The Library Management System will be an integrated platform that provides users with access to physical and digital resources. The system will integrate with existing library technologies such as discovery services, electronic resource management systems, and authentication services. It should following features like A user-friendly interface that provides a seamless and engaging user experience. The Library Management System will cater to the needs of library users, including students, faculty, researchers, and members of the general public.

- **3 Functional Requirements**: The Library Management System must have the following functional requirements:
  - User authentication and authorization
  - Resource discovery tools
  - Research tools
  - Learning tools
  - Resource management tools
  - Reporting and analytics tools
  - Integration with existing library technologies such as discovery services, electronic resource management systems, and authentication services.
- **4 Interface Requirements:** The Library Management System must have the following interface requirements:
  - A user-friendly interface that provides a seamless and engaging user experience
  - Support for multiple languages
  - Integration with existing library technologies such as discovery services, electronic resource management systems, and authentication services.
- **5 Performance Requirements:** The Library Management System must have the following performance requirements:
  - Fast and responsive user interface
  - Support for high volumes of users and data
  - High availability and uptime
  - Secure and reliable data storage and retrieval.
- **6 Design Constraints:** The Library Management System must be designed with accessibility and inclusivity in mind, catering to users with different abilities and needs. The system must also be able to handle multiple formats, including physical and digital resources, and integrate with existing library technologies

### 7 Non-Functional Attributes:

### Performance

The library management System should be capable of handling a large volume of data and processing orders in real-time. The system should also be scalable and able to handle a growing number of users.

## **Security**

The library management system should be designed with security in mind. It should implement industry-standard security measures to protect against unauthorized access, data breaches, and other security threats.

**Reliability** The System should be reliable and available at all times. The system should be designed to minimize downtime and should include backup and recovery procedures.

8 Preliminary Schedule and Budget: In this, initial version and budget of project plan are explained which include overall time duration required and overall cost required