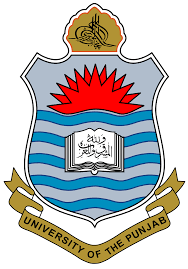
**Software Requirement Engineering**

**Project Proposal**

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Department of Software Engineering

**1-Project Overview statement:**

This section defines the goal of the project and the steps needed to reach the goal.

|  |  |
| --- | --- |
| **Project Details** | **Information** |
| **Project Name** | **Library Management System** |
| **Project Manager** | **Iraj Fatima** |
| **Project Members** | * **Muhammad Talha** * **Sajjal Fatima** |
| **Project Goal** | **The goal of this project is to develop an efficient and user-friendly Library Management System that simplifies the process of managing book inventories, tracking member activities, and organizing borrowing/returning procedures for a library.** |
| **Objectives** | * **To allow librarians to easily add, update, and remove books in the system.** * **To enable users to search for available books by title, author, or genre.** * **To track book lending and return activities, including due dates and overdue books.** * **To maintain a list of library members and track their borrowing history.** * **To automate notifications for overdue books and fines.** |
| **Project Success criteria** | * **Successful implementation of the system with at least 90% accuracy in managing book inventory and member activities.** * **User-friendly interface with at least 80% positive feedback from test users (librarians and library members).** * **The system should handle up to 1000 books and 500 members without performance issues.** |
| **Assumptions, Risks and Obstacles** | **Assumptions: The library has a stable internet connection for the online features. Librarians are familiar with basic computer operations. Risks: There may be delays in testing and implementation due to unfamiliarity with certain technologies. Data migration from old systems (if any) could be challenging. Obstacles: Ensuring all votes are counted without errors.** |
| **Organization Address (if any)** | **Nill** |
| **Type of project** | **Development** |
| **Approved By:** | **Miss. Amna Mustansir** |
| **Date:** | **17 -oct-2024** |

**2. High-Level System Components:**

**Main Functional Units:**

1. **User Management:**
   * Manages library members' data including registration, update, and deletion of member profiles.
2. **Book Inventory Management:**
   * Enables the addition, updating, and deletion of book records. Tracks the current status of each book (available, borrowed, etc.).
3. **Search and Filter:**
   * Allows users to search for books by title, author, or genre.
4. **Lending and Returning System:**
   * Facilitates book lending and returns. Tracks which member has borrowed a book and when it is due.
5. **Overdue and Fine Management:**
   * Tracks overdue books and calculates fines. Sends notifications to members when books are overdue.
6. **Report Generation:**
   * Provides reports on book inventory, borrowed books, overdue books, and fines collected.