  
 **(KARACHI CAMPUS)**

**FAST School of Computing**

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**Proposal Project:** **[Automated Library Book Reservation System]**

**Introduction:**

[ There Will Be Three Portals **1. Admin, 2. Librarian, 3. User, and a main system Portal.**

* **System Portal:**

This Portal initially tends to create an admin account, after then avails the options of login for admin, librarian, create new user, and login user.

* **Admin:**

Admin enables librarian to create account and login into it.

* **Librarian**:

He can manage the library catalog by adding, removing, editing books, display all books and search a specific book with availability status.

* **User:**

He can access book information such as Name, Author, ISBN Number. He can also schedule book reservations. He has search and Browse functionality. He also search lost and borrowed books, search a specific book with availability, return a book and report a lost book.

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**Project Scope:**

The library management system aims to provide a comprehensive platform for efficient management of library resources and enhanced user experience. It enables access to detailed books information, reservation system, Search and browse functionality, report and fine functionality, and user-friendly interface.

It also enables to add, edit, remove books, management of user accounts, and viewing reservation list.

**Potential Users:**

Librarians, students, library staff, administrators, book publishers and authors etc.

**Initial Requirements:**

* **Functional Requirements:**

1. Develop functionalities for adding, editing, and deleting books from the library catalog.
2. User Account Management.
3. Reservation System
4. Search and browse functionality
5. Fine on a lost book

* **Non-Functional Requirements:**

1. Design intuitive and user-friendly interfaces for both admin and user portals.
2. Ensure the system can handle number of user requests and provide real-time updates on reservation status.
3. Implement security measures to prevent unauthorized access to the system.

**Description Of Requirement Engineering Tools:**

1. Prototypes: Develop prototypes for user feedback and validation of key feature
2. Visualization and Communication: Designers can create visual representation of requirements, making them easier to understand and communicate.

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**Remarks:**

   Approved Not Approved