

Practical No-04

Aim: Design Graphical user interface of selected problem statement.

Problem Statement: Library Management System

Date:

Name of Team Member:

Objective

- Provide an intuitive interface for library staff and members.
- Allow quick access to library resources and operations.
- Improve usability through a clean, organized layout.

Software Used

- **Figma / Draw.io** for GUI design
- **Color Scheme:** Blue and White for professionalism and readability
- **Icons:** Material Design icons for Books, Users, Reports

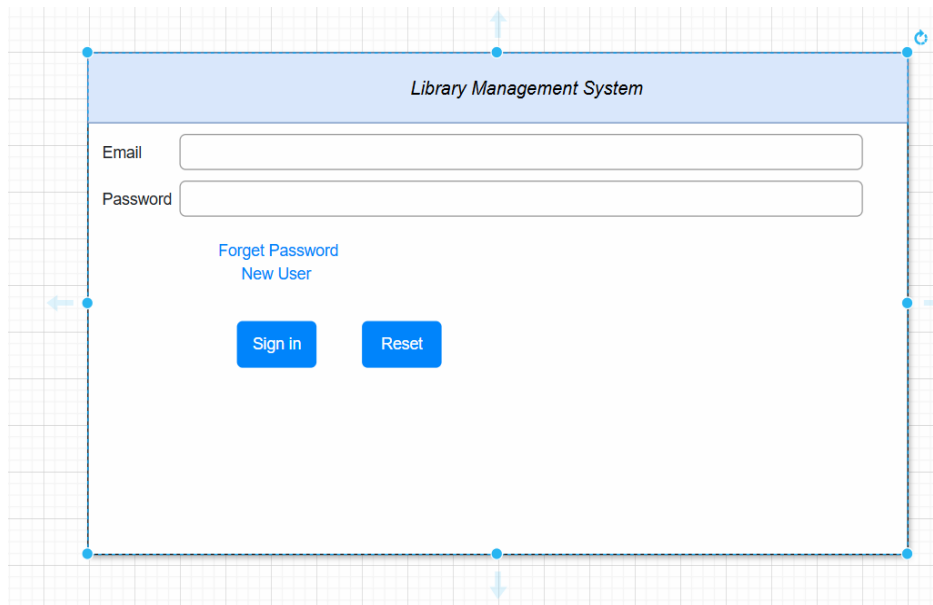
Description

- The Library Management System GUI is divided into **six main screens**. Each screen has a specific purpose and follows a consistent design theme for better user experience.

Screens Description

1. Login Screen

- **Purpose:** Authenticate users before giving access to the system.
- **Components:**
 - Username field
 - Password field
 - Login and Reset buttons
 - Forgot Password link
- **Function:** Redirects to Dashboard upon successful login.



2. Dashboard Screen

- **Purpose:** Provide an overview of the library system.
- **Components:**
 - Navigation menu (Home, Books, Members, Issue/Return, Reports, Settings, Logout)
 - Quick Statistics:
 - Total Books
 - Books Issued
 - Total Members
 - Overdue Books
 - Recent Activity Table showing latest transactions.
- **Function:** Serves as a central control panel for all operations.

3. Book Management Screen

- **Purpose:** Manage book details in the library.
- **Components:**
 - Search bar (by Title, Author, ISBN)
 - Table of books with ID, Title, Author, Genre, Availability
 - Add, Edit, and Delete buttons

- **Function:** Allows adding new books, updating existing records, and deleting old books.

4. Member Management Screen

- **Purpose:** Maintain member records.
- **Components:**
 - Search bar (by Name or ID)
 - Table of members with ID, Name, Contact, Membership Date
 - Add, Edit, Remove buttons
- **Function:** Handles member registration, updates, and removals.

5. Issue / Return Screen

- **Purpose:** Handle the issuing and returning of books.
- **Components:**
 - Tabs for "Issue Book" and "Return Book"
 - Member ID and Book ID fields
 - Date selection fields
 - Confirm Issue / Confirm Return buttons
- **Function:** Records book transactions in the database.

6. Reports Screen

- **Purpose:** Generate and download reports.
- **Components:**
 - Report list:
 - Overdue Books Report
 - Most Borrowed Books
 - Member Borrowing History
 - Download button (PDF, Excel)
- **Function:** Helps in analysis and record-keeping.

Conclusion

The designed GUI for the Library Management System is user-friendly, well-structured, and supports all core functionalities required for efficient library operations. By providing a consistent design and clear navigation, the system ensures that users can perform their tasks quickly and accurately.