

# Library Management System

## Project Contributions Document

Date: 6/4/2025

Bara Al Omari - 60300383

Abdulrhman Ibrahim - 60101806

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## Project Logbook

*Date: 28/2/2025 - Requirements*

Student	Task
Bara Al Omari & Abdulrhman Ibrahim	Brainstorming session and gathering requirements
Bara Al Omari	Created Use case Diagram

*Date: 1/3/2025 - Requirements*

Student	Task
Abdulrhman Ibrahim	Github set up and initial commit

*Date: 7/3/2025 - Requirements*

Student	Task
Bara Al Omari	Created Initial README.md
Bara Al Omari	Finished SRS Document

*Date: 8/3/2025 - Design*

Student	Task
Bara Al Omari	Initial model classes set up
Bara Al Omari	Created Class diagram

*Date: 9/3/2025 - Design*

Student	Task
Abdulrhman Ibrahim	Updated README.md
Abdulrhman Ibrahim	Added .gitignore

*Date: 10/3/2025 - Design*

Student	Task
Abdulrhman Ibrahim	Updated README.md
Abdulrhman Ibrahim	Added SDD and Threat Modeling

*Date: 10/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Added DBUtils class
Abdulrhman Ibrahim	Implemented Login View
Abdulrhman Ibrahim	Implemented Login Controller
Abdulrhman Ibrahim	Added app.java as an entry point
Abdulrhman Ibrahim	Updated .gitignore
Abdulrhman Ibrahim	Added user/password icon

*Date: 11/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Added admin controller, ability to create new user, and view all users
Abdulrhman Ibrahim	Update: redirecting user if role is admin to admin view
Abdulrhman Ibrahim	Added admin interface
Abdulrhman Ibrahim	Fixed welcome message
Abdulrhman Ibrahim	Changed label to text tag for welcome message

*Date: 12/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Updated README.md
Abdulrhman Ibrahim	Updated .gitignore
Abdulrhman Ibrahim	Restructured files
Abdulrhman Ibrahim	Added users table to db

*Date: 13/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Updated README.md

*Date: 14/3/2025 - Coding*

Student	Task
Bara Al Omari	Created Catalog Staff View
Bara Al Omari	Updated .gitignore

*Date: 15/3/2025 - Coding*

Student	Task
Bara Al Omari	Created Catalog Staff Controller
Bara Al Omari	Implemented Log Out Functionality & Published Year Field for Catalog Staff
Bara Al Omari	Added books table to db

*Date: 22/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Created db-table folder on github

*Date: 24/3/2025 – Coding*

Student	Task
Bara Al Omari	Updated README.md

*Date: 25/3/2025 – Coding*

Student	Task
Abdulrhman Ibrahim	Added Librarian staff View
Abdulrhman Ibrahim	Implemented Librarian staff Controller
Abdulrhman Ibrahim	Updated login to redirect user to librarianView if role is librarian
Abdulrhman Ibrahim	Added loans table to db
Abdulrhman Ibrahim	Updated users table
Abdulrhman Ibrahim	Implemented password hashing and salting on user creation and login

*Date: 26/3/2025 - Coding*

Student	Task
Bara Al Omari	Implemented Book Checkout logic & Member Registration
Bara Al Omari	Updated loans table
Bara Al Omari	Updated books table
Bara Al Omari	Added member table to db

*Date: 27/3/2025 - Coding*

Student	Task
Bara Al Omari	Updated Librarian view
Bara Al Omari	Implemented Book returns logic and fine calculation
Bara Al Omari	Updated DBUtils to handle null statements
Bara Al Omari	Updated loan logic to use memberID by default instead of phone number
Bara Al Omari	Updated loans table
Bara Al Omari	Updated users table
Bara Al Omari	Updated members table
Bara Al Omari	Updated books table

*Date: 30/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Updated books class
Abdulrhman Ibrahim	Updated catalogStaff controller to load data into table, enhanced searching, add year validation
Abdulrhman Ibrahim	Updated librarian controller to load data into table, enhanced searching
Abdulrhman Ibrahim	Updated dialog returns Book object with the updated values
Abdulrhman Ibrahim	Refactored from list view to table view with clearer search placeholder

*Date: 31/3/2025 - Coding*

Student	Task
Abdulrhman Ibrahim	Updated README.md

*Date: 1/4/2025 – Coding & Testing*

Student	Task
Abdulrhman Ibrahim	Added regex validation for cataloging staff when adding new book

*Date: 2/4/2025 - Coding & Testing*

Student	Task
Bara Al Omari	Added stronger validation regex, included isbn regex & validation when updating books
Bara Al Omari	Added Confirmation message before and after deleting books
Bara Al Omari	Modified books table published_year to be varchar(4) instead of YEAR

*Date: 4/4/2025 - Coding & Testing*

Student	Task
Bara Al Omari	Added class diagram to github
Abdulrhman Ibrahim	Updated cataloger view by adding example with placeholders
Abdulrhman Ibrahim	Updated regex validation to be simpler with clearer error messages
Bara Al Omari	Updated Member & Loan classes
Abdulrhman Ibrahim	Updated author validation to accept more than one author by adding first name optional last name then ,<space> for more authors
Abdulrhman Ibrahim	Update author placeholder
Bara Al Omari	Removed a duplicate placeholder in Librarian view search bar
Bara Al Omari & Abdulrhman Ibrahim	Performed SAST using VCG

*Date: 5/4/2025 - Testing*

Student	Task
Bara Al Omari	Performed SAST using VCG
Bara Al Omari	Fixed False Positive sql injection flag when performing SAST

*Date: 6/4/2025 – Testing*

Student	Task
Abdulrhman Ibrahim	Performed SAST using VCG
Bara Al Omari & Abdulrhman Ibrahim	Created Test Cases & Performed DAST
Abdulrhman Ibrahim	Created Testing Document
Bara Al Omari	Created list of contributions (logbook document)
Abdulrhman Ibrahim	Updated README.md

*Date: 7/4/2025 – Finalizing*

Student	Task
Bara Al Omari	Changed method name addItem to addBook for consistency
Bara Al Omari	Added clearer comments for methods
Abdulrhman Ibrahim	Added input validation for admin page
Abdulrhman Ibrahim	Added delete user button
Abdulrhman Ibrahim	Added delete user method to delete only users created by admin
Bara Al Omari	Updated list of contributions



# Summary of Contributions

## Abdulrhman Ibrahim

- **Requirements Phase:**
  - Participated in brainstorming and gathering requirements.
  - Set up GitHub repository and made the initial commit.
- **Design Phase:**
  - Updated README.md and added .gitignore.
  - Performed Threat Modeling.
  - Created to the SDD.
- **Coding Phase:**
  - Implemented the Login View, Login Functionalities.
  - Created Admin View and Admin functionalities.
  - Added DBUtils class and app.java as the entry point.
  - Restructured files on GitHub and updated database tables (users, loans).
  - Developed the Initial Librarian View and Librarian Controller.
  - Implemented password hashing and salting.
  - Enhanced search functionality and refactored views to table format.
  - Added regex validation for cataloging staff and improved author input handling.
  - Updated README.md multiple times throughout the project.
- **Testing Phase:**
  - Performed SAST using VCG.
  - Created test cases and performed DAST.
  - Prepared the Testing Document.
- **Finalizing:**
  - Added input validation for admin page.

- Added delete user method to delete only users created by admin.

## Bara Al Omari

- **Requirements Phase:**

- Participated in brainstorming and gathering requirements.
- Created the Use Case Diagram.
- Completed the SRS Document and initial README.md.

- **Design Phase:**

- Set up initial model classes.
- Created the Class Diagram.

- **Coding Phase:**

- Developed the Catalog Staff View and Catalog Staff Controller, with ability to ADD/REMOVE/EDIT Books.
- Added the books table to the database.
- Implemented book checkout logic with member registration.
- Updated Librarian View, Developed book loan & return logic, and fine calculation.
- Added validation with regex for Librarian Staff.
- Enhanced validation with regex for ISBN and book updates for Catalog Staff.
- Added confirmation messages for book deletion.
- Updated multiple database tables (loans, members, users, books).

- **Testing Phase:**

- Performed SAST using VCG and fixed false positives.
- Created test cases and performed DAST.

- **Finalizing:**

- Added clearer comments for methods
- Compiled the list of contributions (logbook document).