Summary

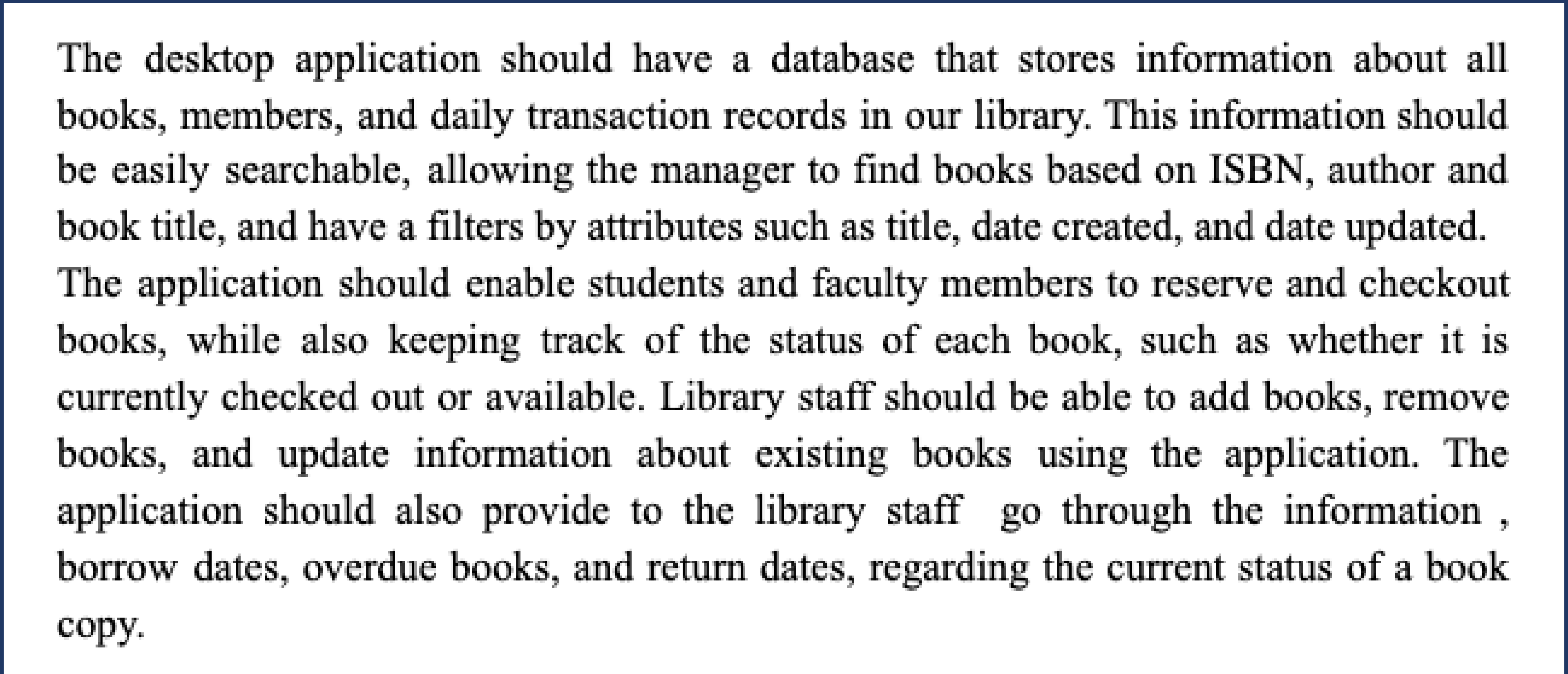
- Introduction & Problem
- Design
- Architectures
- Graphical Interface

Project proposal

Libraries continue to be invaluable resources with thousands of books that require daily handling, on a typical day, librarians must:

- *helping students finding books*
- *checking availability of books*
- *registering new library members,*
- *updating inventory by adding new titles*.

Problem Description for LS



The desktop application should have a database that stores information about all books, members, and daily transaction records in our library. This information should be easily searchable, allowing the manager to find books based on ISBN, author and book title, and have a filters by attributes such as title, date created, and date updated. The application should enable students and faculty members to reserve and checkout books, while also keeping track of the status of each book, such as whether it is currently checked out or available. Library staff should be able to add books, remove books, and update information about existing books using the application. The application should also provide to the library staff go through the information , borrow dates, overdue books, and return dates, regarding the current status of a book copy.

Use Cases

- Add Book
- Search Book
- Filter Books
- Edit a Book
- Watch book detail

- Add Member:
- Watch Member detail
- Add checkout book record
- Checklist of checkout book record by ID Library Member
- Checklist of checkout book record by ISBN

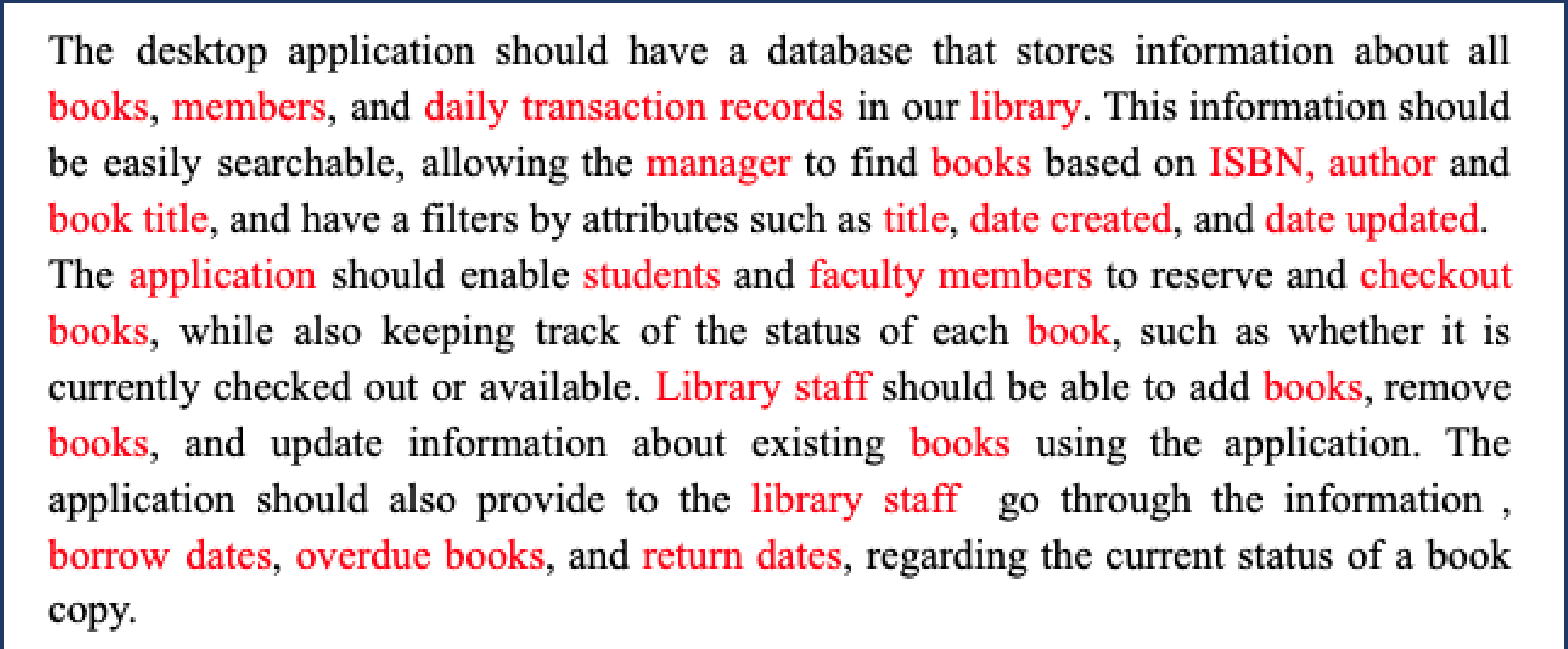
Search a Book - Use case

USER ACTION	SYSTEM RESPONSE
1. User types the title of the book in textbox of Search, and then press the button search	1. The system look in the database , and then show in the listview all posible books that match the title of the user
2. User selects the book he is looking for and make double click.	2. The system open a new window and show full details of the book

Add New Member - Use case

USER ACTION	SYSTEM RESPONSE
1. User make click in member button	1. The system change the view to members view.
2. User make click in add member button	2. The system open a new window with a form.
3. User fill the whole form with the data of the new member and click in the button save.	2. The system save the information in the database and return to the members view.

Problem Description for LS



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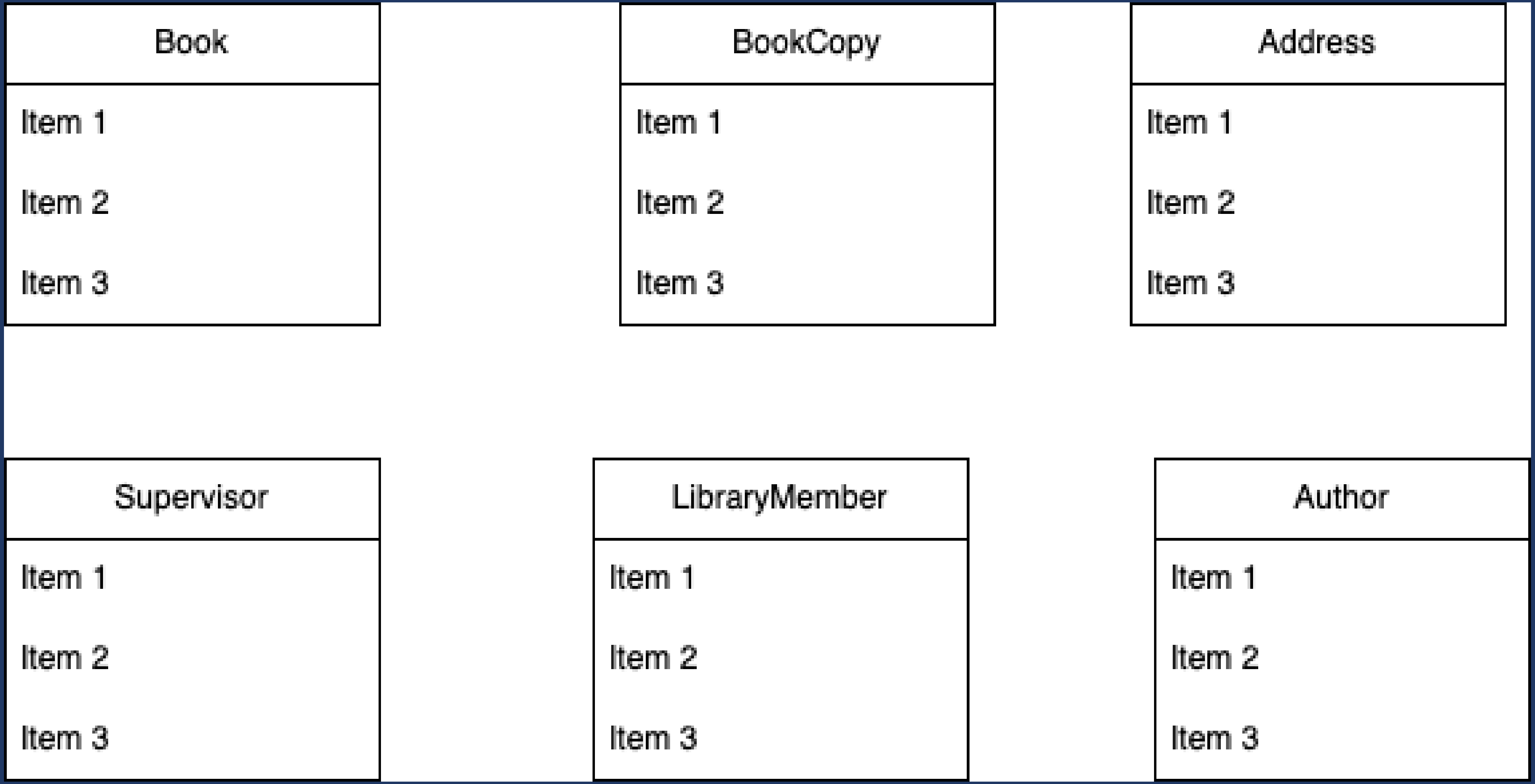
Domain Classes



Book
Item 1
Item 2
Item 3

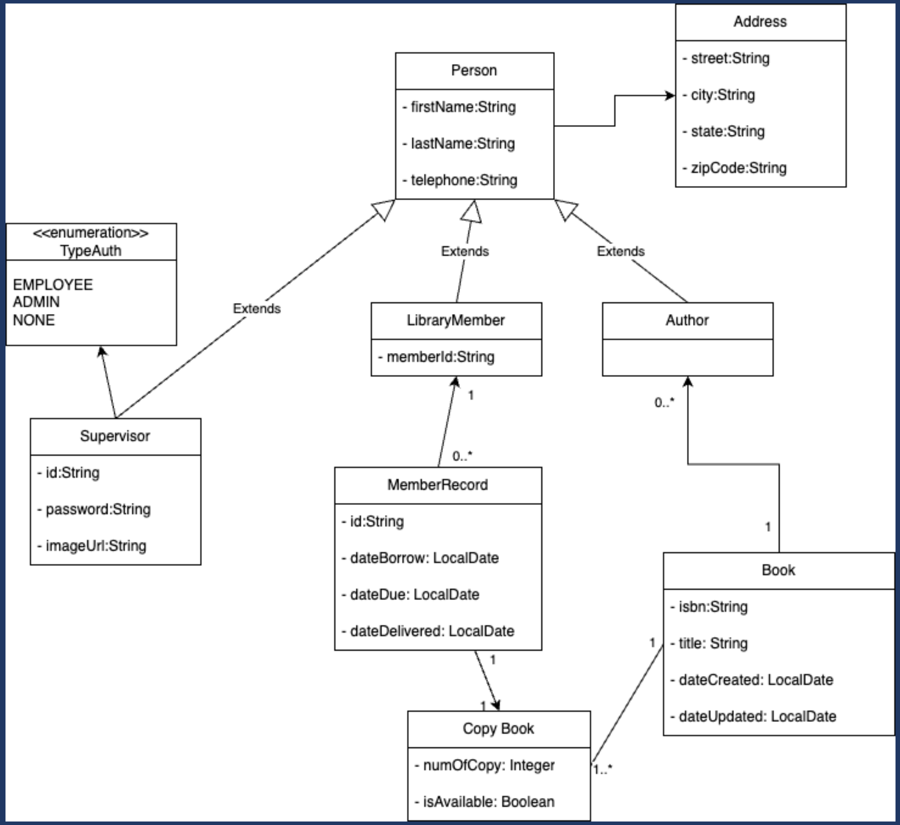
BookCopy
Item 1
Item 2
Item 3

Address
Item 1
Item 2
Item 3

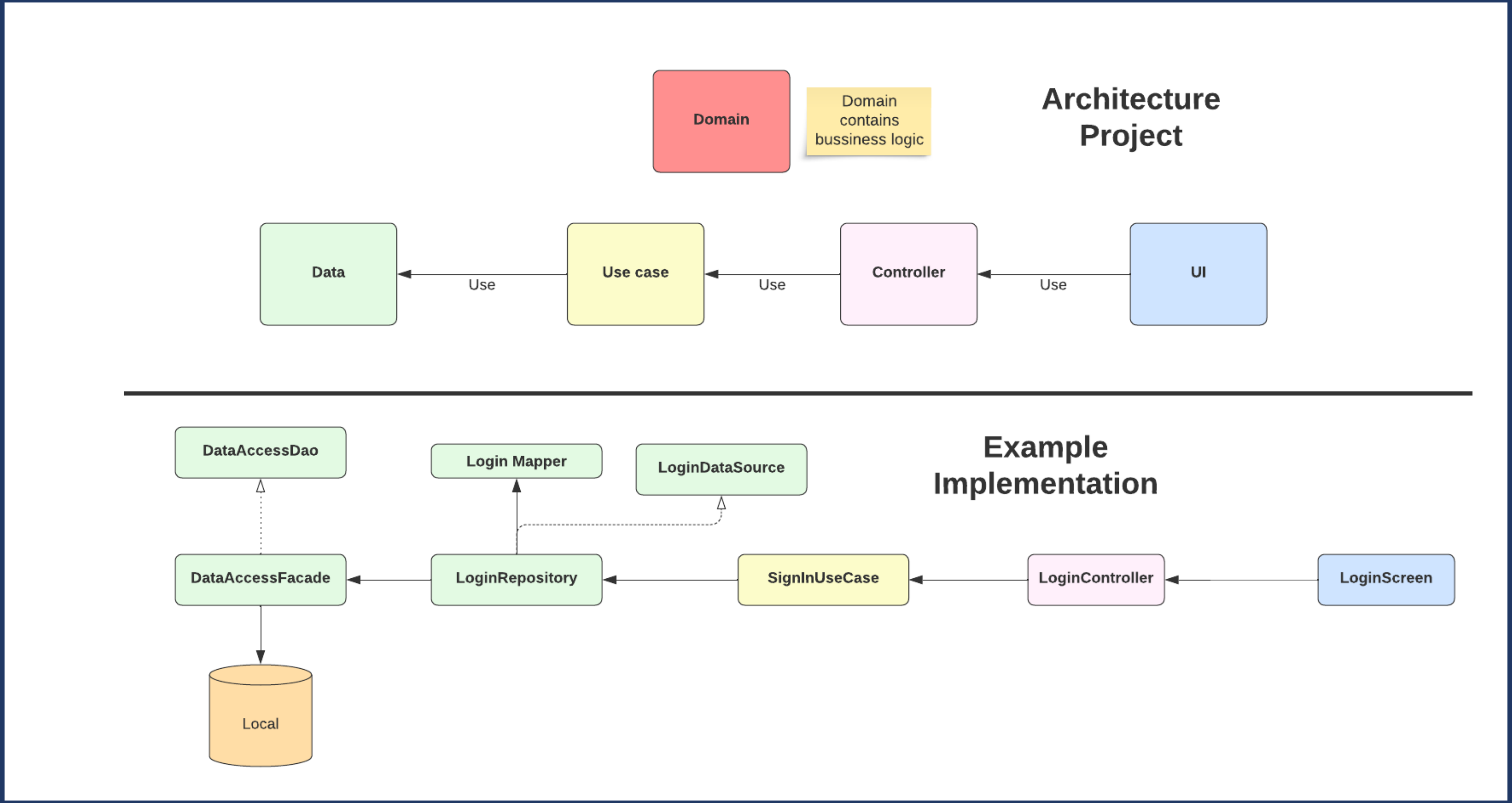
Supervisor
Item 1
Item 2
Item 3

LibraryMember
Item 1
Item 2
Item 3

Author
Item 1
Item 2
Item 3



STATIC MODEL



Architecture Project

Domain

Domain contains bussiness logic

Data ← Use — Use case ← Use — Controller ← Use — UI

Example Implementation

DataAccessDao

Login Mapper

LoginDataSource

DataAccessFacade

LoginRepository

SignInUseCase

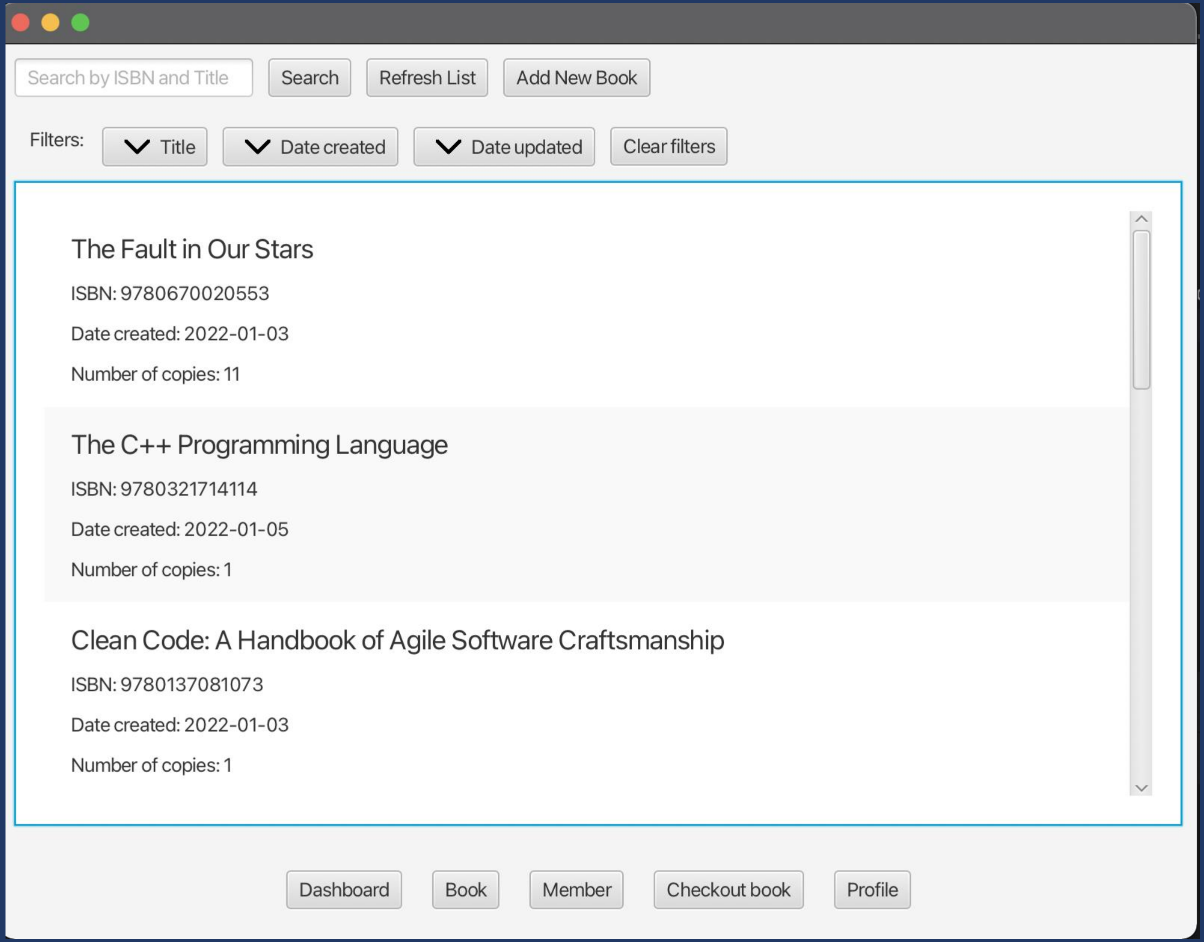
LoginController

LoginScreen

Local

- Architecture and structure of the projet

- Graphical Interface - DEMO



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