جامعة أم القرى
UMM AL-QURA UNIVERSITY

Book catalog

Stage 1: Feasibility Study.

A. Problem description that your project solves.

In our system, "Book Catalog" we aim to solve various problems related to finding suitable books and exchanging reading experiences. In the world, there is difficulty in discovering the right books for each reader due to the vast number of books available in the market. Readers can face challenges in finding books that align with their personal interests. In our system, we provide a comprehensive database that includes descriptive information about different books, helping readers identify books that match their interests and preferences.

B. Project objectives in points.

1- The Book Catalog aims to be a comprehensive source of information about diverse books, allowing readers to discover their interests and preferences for reading.

2- The system makes it easy for readers from around the world to browse and get an overview of the book, read its description, and facilitate them in choosing the appropriate book and purchasing it from the store.

3- The system aims to provide references for readers, allowing them to also rate the books they have read, leave comments, and recommendations for other users.

4- Facilitating communication and sharing, the application provides a book-sharing feature, enabling users to share the books they love with their friends and family. Users can also interact with other users' ratings, share their opinions and experiences about books.

Stage 1: Feasibility Study.

C. A survey on similar mobile apps or web apps to your project (only 4 examples, one for each student

• Bookshelf (shahad)

• -A collection of books is available and can be purchased
• I-can see how many pages Ihave read and how many books he wrote per year • According to his note on the books

story graph (Bashayir)

You can write reviews on
and a graph or write a simple questionnaire. Simple tracking and insightful stats: Easily track and learn about your
reading habits with our wide range of charts and graphs. See how your reading develops over time and use that to help you pick better books.

Bookly helps (Reham)

you track your reading in real - time, manage your books, make a habit out of reading and see your progress over
time. Add books, e- books or audiobooks to your collections, use the timer to track your reading and get access to awesome stats that will help you improve and read even more. Set goals and reminders to stay motivated get weekly
and monthly or yearly infographic reports on your progress
.

Goodreads(shomokh)

If you are looking for an app that gives you a way to organise your book collection in conjunction with social n etworking elements, then Goodreads might be the right choice for you. Goodreads allows you to track the books in your
study and share your reading journey with other users while joining relevant groups. And it's free!

Stage 2: Requirements Engineering.

A. Identify and describe the actors of your project (no more than 4 Actors).

We have two main actors in our system

Librarian: Mainly responsible for adding and modifying books and book items.

Reader: All readers can search the catalog, as well as create an account, checkout and add a comment.

B. Identify and describe the functional requirements of your project (no more than 4 FRs).

- The system allows the user (reader) to create an account.

- The system allows the user to browse a collection of books.

- The system allows the user to read an overview and description of the book

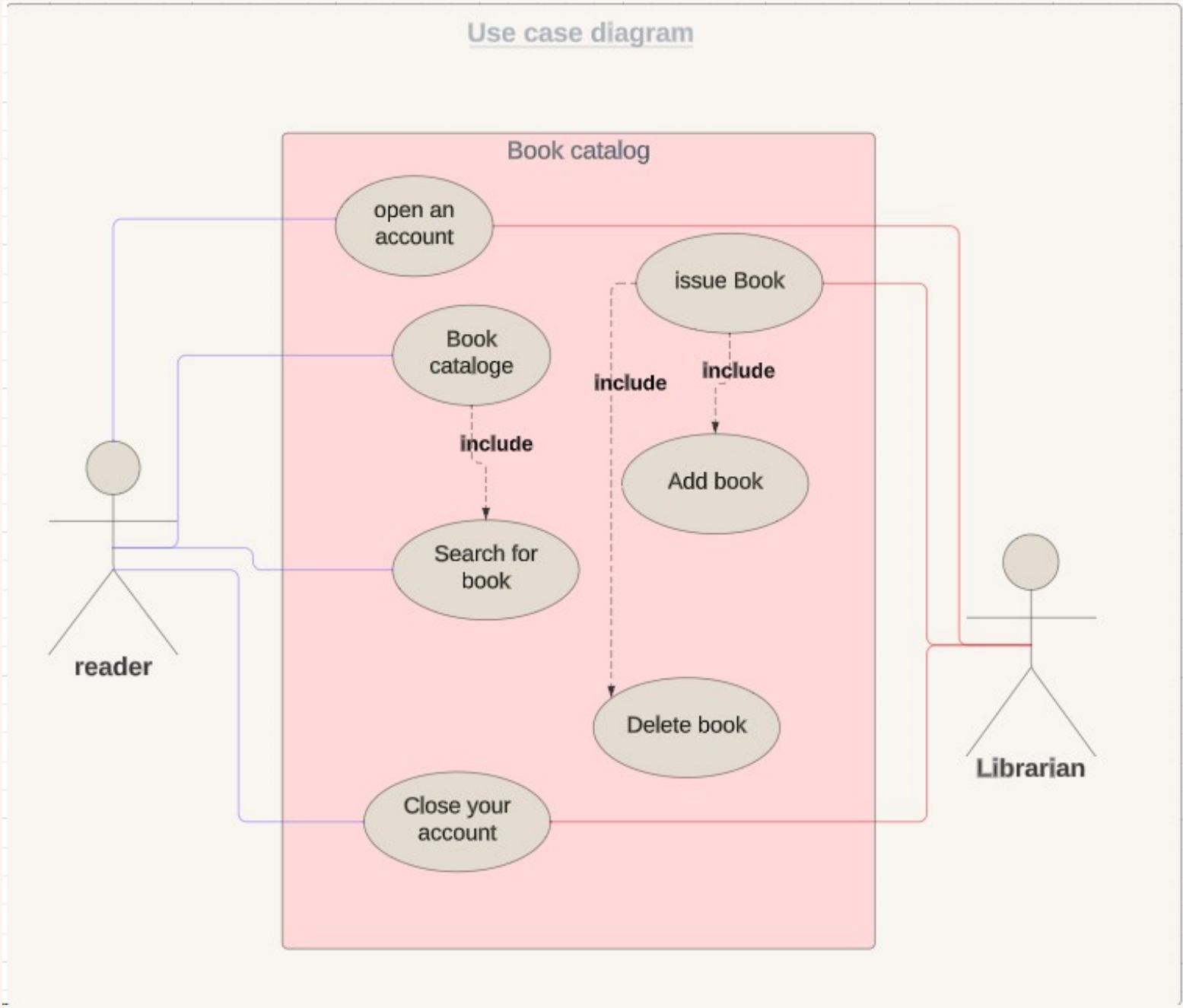
- The system allows the librarian to add and delete books

-It allows the user to search for a book by book name or author name

-Allows the user to close the account

Stage 2: Requirements Engineering.

C. Draw the use case diagram of your project (no more than 4 use cases).



Stage 2: Requirements Engineering.

D. Write a use case description for your identified use cases.

Use Case:	Create Account
Purpose:	Allow the reader to create an account in the application.
Require:	The reader will enter the application. Book catalog
Event Flow:	1. The reader will enter the application. 2. The reader will create an account by clicking on Create Account. 3. The reader will enter an email and password. End use case.
Success:	The reader can log in and browse the books.

Use Case:	Close Account
Purpose:	Allow the reader to close his account in the application Book catalog.
Require:	The reader will enter the account to close.
Event Flow:	1. Enter the home page. 2. Select Settings & Privacy from the menu. 3. The reader will click Close Account.End use case.
Success:	The reader succeeds in logging out of the account.

Stage 2: Requirements Engineering.

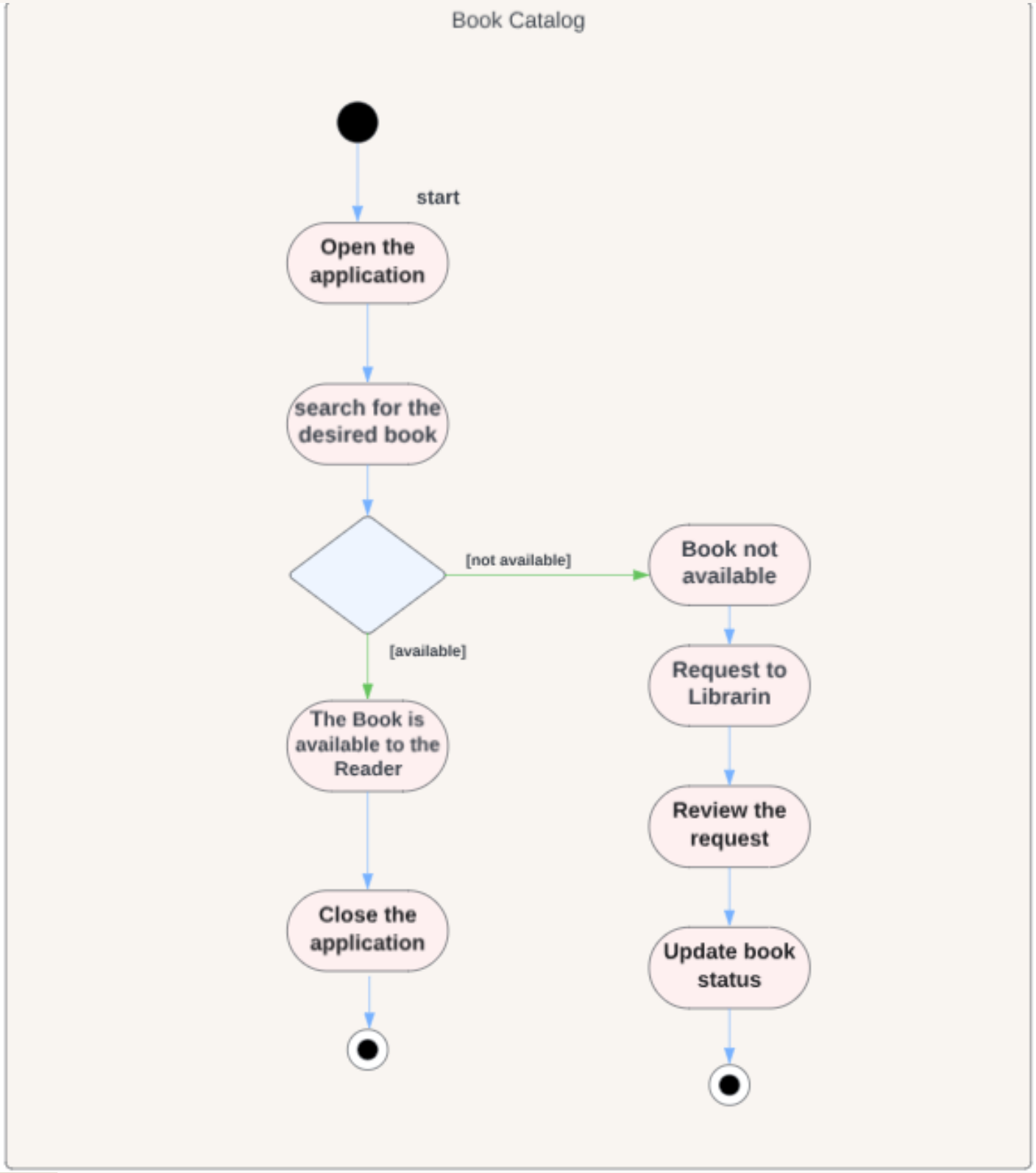
D. Write a use case description for your identified use cases.

Use Case:	Search books
Purpose:	allow to reader to search books in the application
Require:	the redear enters the application and chooses to search for a book
Event Flow:	• The application displays a screen that contains the following fields: 1 - Title 2 - Author 3 - Empty research space • The reader enters the required words. • The system accepts words and displays search results
Success:	The reader gets the book he wants

Use Case:	Issue book
Purpose:	The librarian can search for books available in the library and can delete and add Answer inquiries
Require:	Librarian logs in
Event Flow:	1. Librarian logs in 2. reader searches for a book 3. The librarian receives a request to add a book or delete member The 4. update is done either by modifying, deleting, or adding
Success:	The librarian succeeded in adding a book

Stage 3: Control Flow Modelling.

A. Draw UML activity diagrams based on your use case descriptions (no more than 4 diagrams):



Stage 4: Information Modelling. :

A. Identify and describe the entities of your project (no more than 8 entities).

Books :

An entity representing a single physical book, with attributes such as title, author, ISBN number, and publication date.

Reader :

Logs in with an id and password and can read and add comment to books.

Librarian :

The librarian entity can create an account, log in to the system, receive requests to add books, delete books, and can log out of the account.

Author:

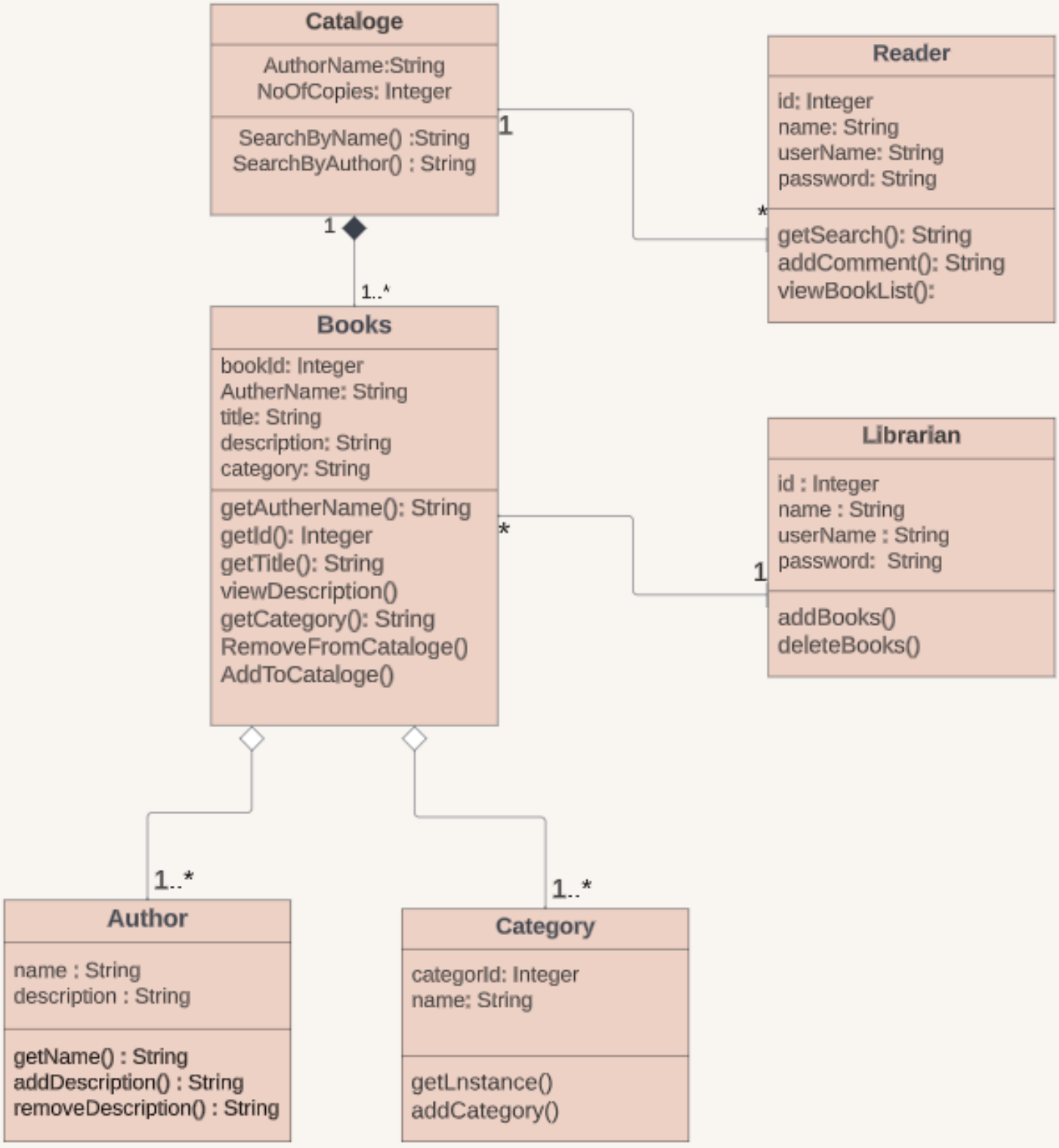
The author enters the system with personal information such as the writer's name and description. The author is used to designate the author of the book and provide additional information about the writer to readers. For example: he adds a description to each book to facilitate the selection of books by readers.

Category :

It is a system that distributes books according to categories and they are. About behavior and health, about history, literature, fiction, language and education, and the classification is according to the classification of the and author and the date of publication.

Stage 4: Information Modelling. :

B. Draw a detailed UML class diagram to represent the entities of your project.



Stage 5: GUI design & Behavioral modelling:

A. Design a simple GUI for screens of your project (no more than 4).

Figure 1:Home page

Figure 2: Login page

Figure 3: Select your destination

Figure 4: Categorie 3

Figure 5: the Librarian administration page

Stage 5: GUI design & Behavioral modelling:

B. Draw a state machine diagram of your project.