

Exercises on UML and GIT

1. Let us assume that you have to develop a library management system. In such a system, the user can either search for a book, issue a book, or return a book. The librarian is responsible for handling issues and returns of books. Moreover, the librarian is responsible for registering new members or verifying members when they are trying to issue a book, calculating fines if a book was returned late, and maintaining books. Write down the requirements for this part of the library management system, identify the use cases, and draw the related use case diagram.

Requirements:

Search for a book, (The user have the ability to search for a book as well as the librarian.)

Issue a book, (When the librarian issues a book then she will have to verify the user and maybe add a new member.)

Return a book, (both actors can return a book, but only the librarian can calculate the fine.)

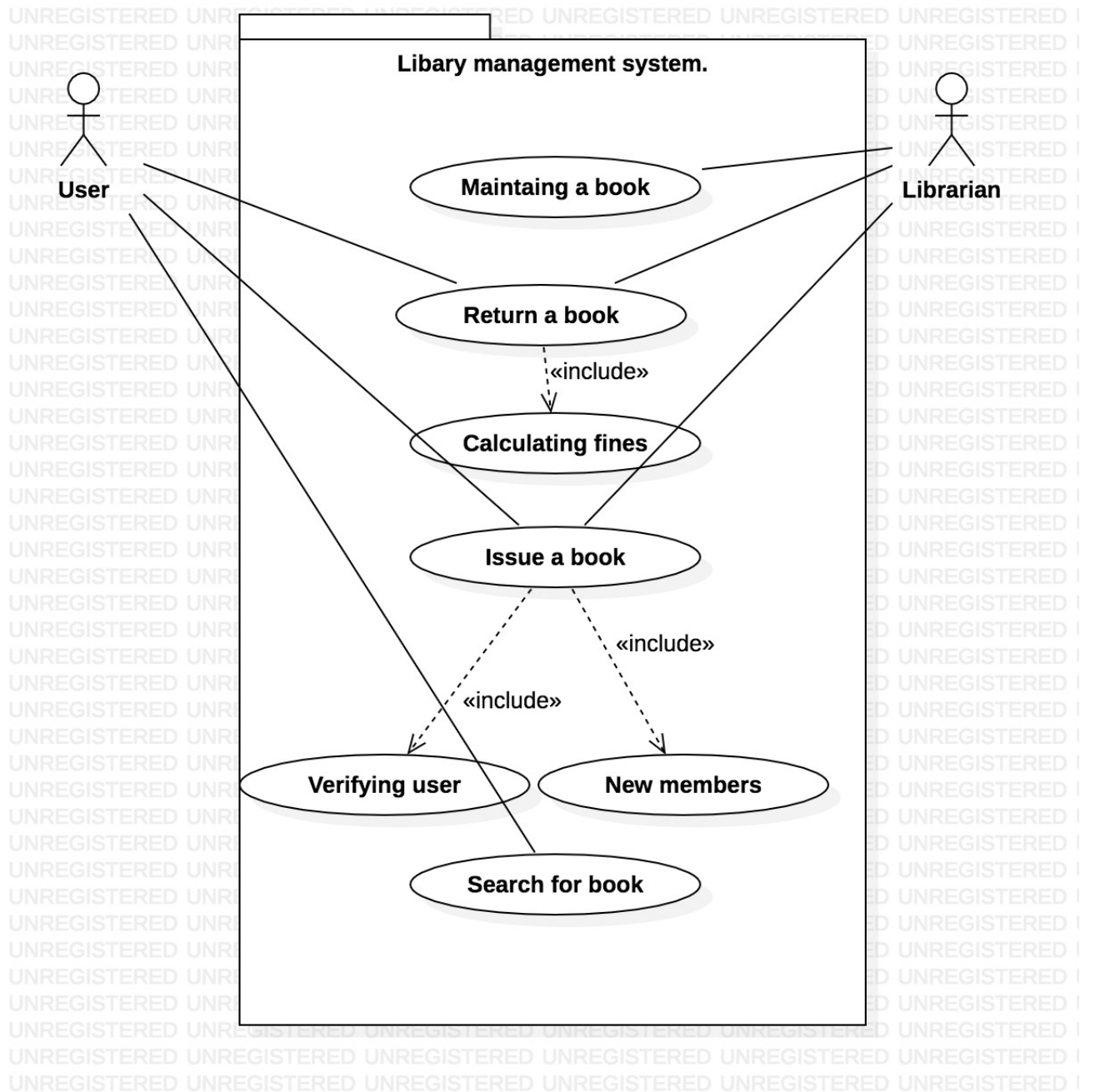
Registering new members,

Verifying members,

Calculating fines,

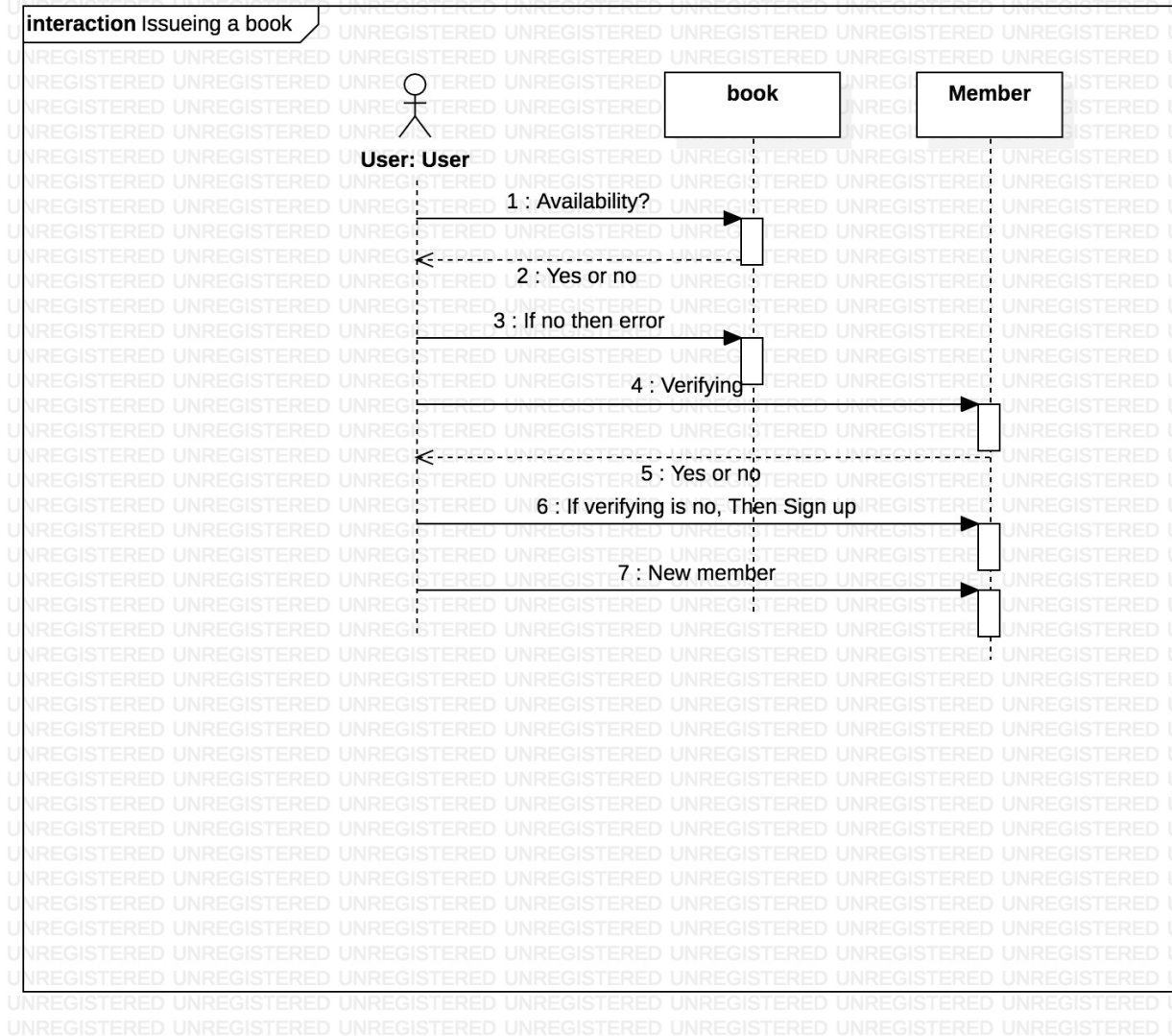
Maintaining a book,

Actors(Librarian, and the user.)

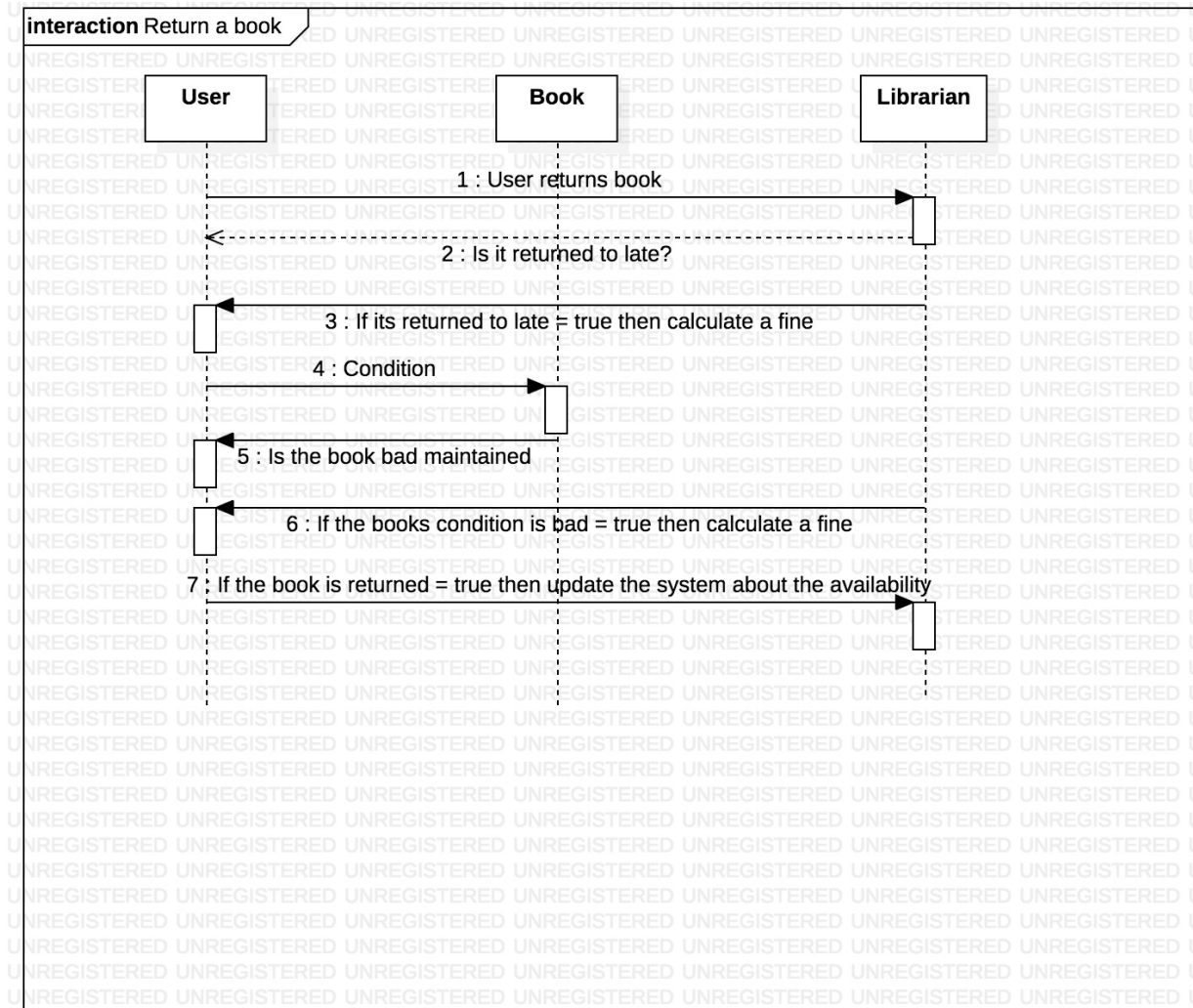


2. From the use case diagram you drew, derive the sequence diagram for the following scenarios:

1. Issuing a book



2. Returning a book



3. Set up a project in GitHub

-Register on github.com -Download the git and github apps:

- <http://git-scm.com/>

- <https://windows.github.com/> or <https://mac.github.com/> -Fork the project at <https://github.com/evatria/pfi>

-Rename the project (e.g. PFI2019) -Register the group members to the project -Clone in Desktop