



Assignment #1

“Consider a central university library website; both doctors and students act as borrower, where they can online make two transactions: either loan or return a book copy. Doctors should register their data: name, scientific degree, and faculty name. Students should also register their data: ID no., name, and faculty name. Based on the borrower type, the loan period is determined. When some borrower wants to loan a book copy, both loan date and loan period should be filled in the system, and the book copy status should be converted to “Not Available”. Also, when the borrower wants to return a book copy, both return date and the actual loan period should be filled in the system, and the book copy status should be converted to “Available”. Each book has a title, ISBN, and publishing year. The book can be authored by many authors, while each author has a name, and an email. There are a number of copies for each book, where each copy has a copy no, and location symbol.”

Based on the above description, answer the following questions.

- a) Design the use case diagram?
- b) For the Return Book Copy transaction, describe its corresponding use case in fully dressed format?

Primary actor:

Stakeholders and interests:

Precondition: Borrower

Post-conditions:

Main Success Scenario:

Extensions:

- c) For the happy case scenario of the Return Book Copy use case, design the activity diagram?