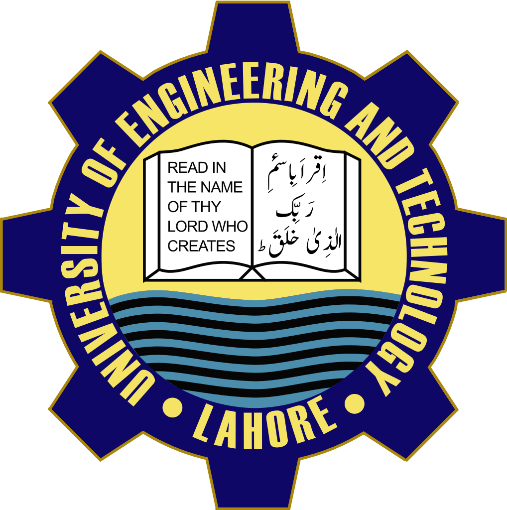
**SDA**

**Assignment #04**



**Instructor**

Zeeshan Ramzan

**Submitted by**

Abdul Haseeb Siddiqui

2021-SE-22

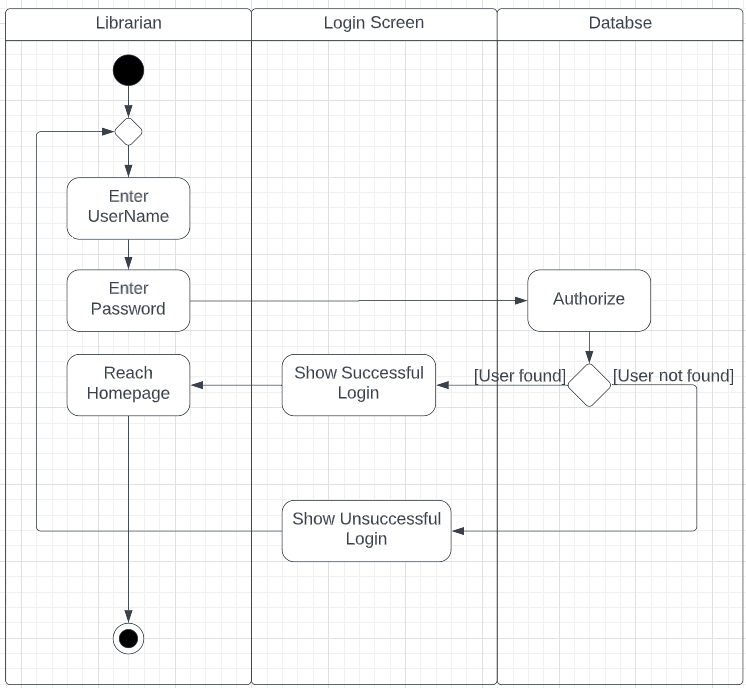
**Department of Computer Science,**

University of Engineering and Technology, Lahore, New-Campus.

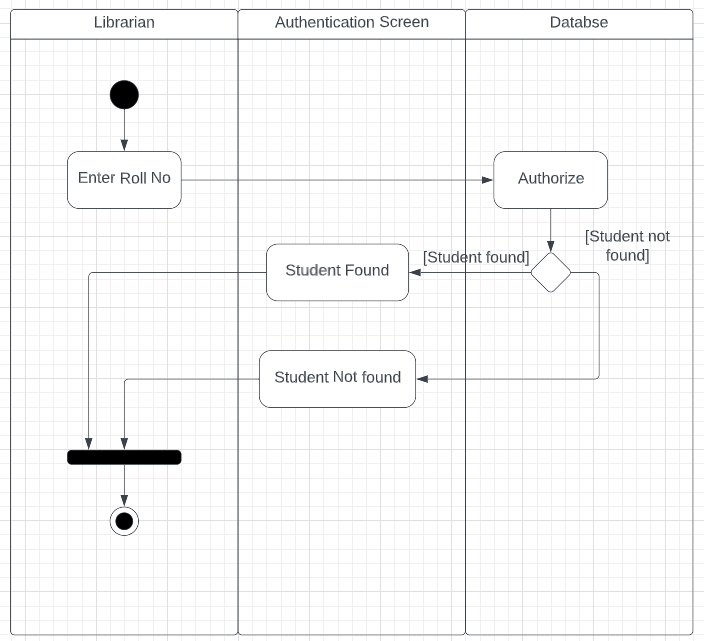
28th February 2023

**Activity Diagrams**

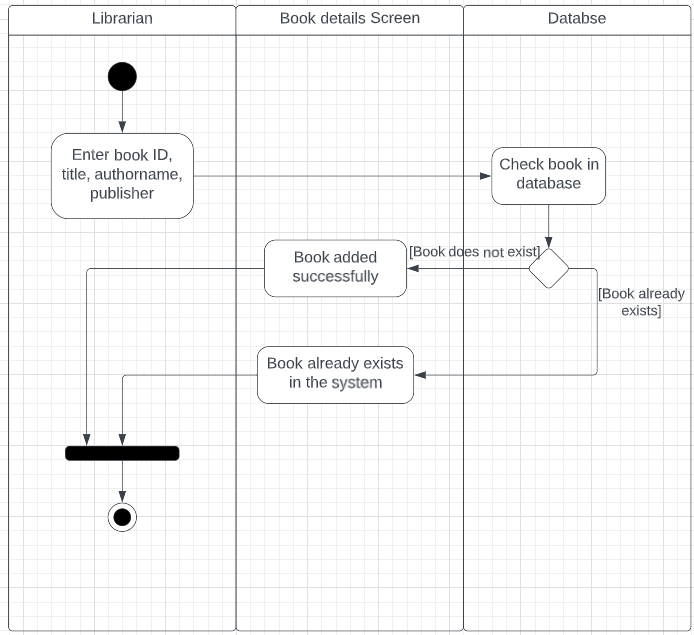
1) Login



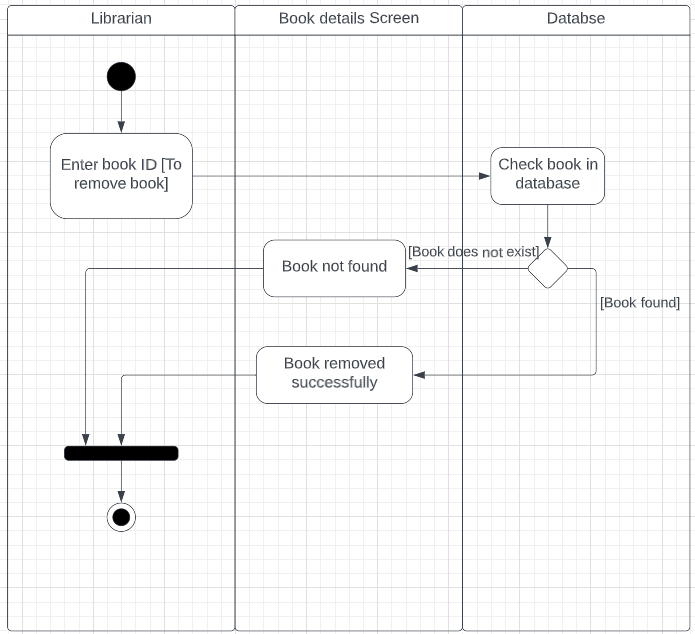
2) Authentication()



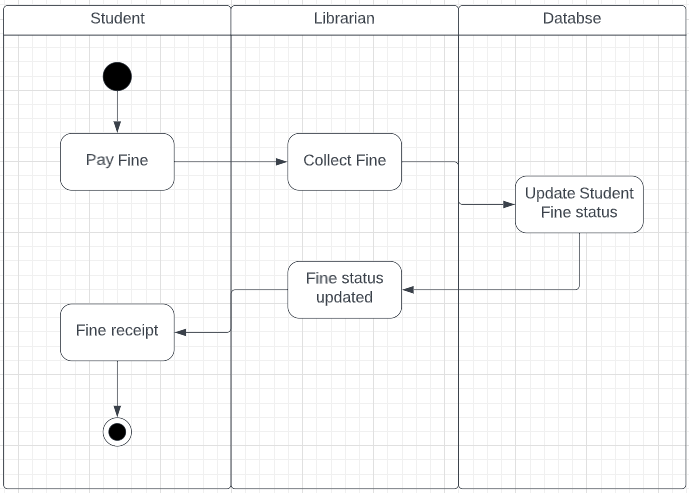
3) AddBook()



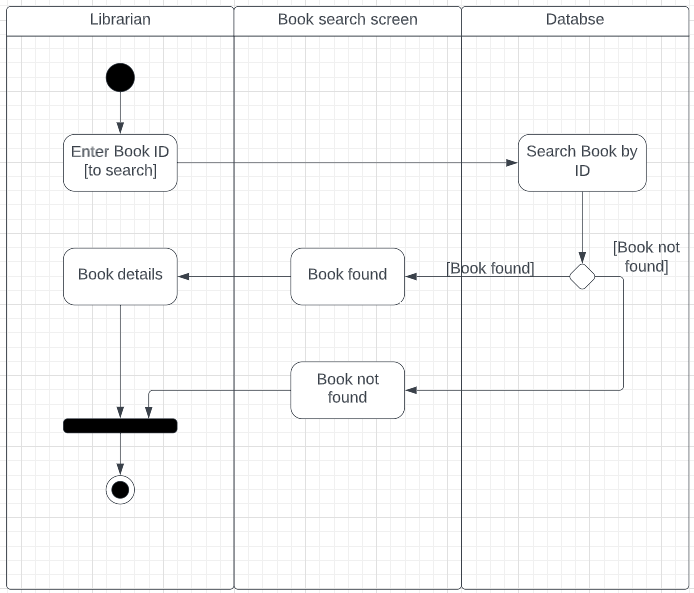
4)RemoveBook()



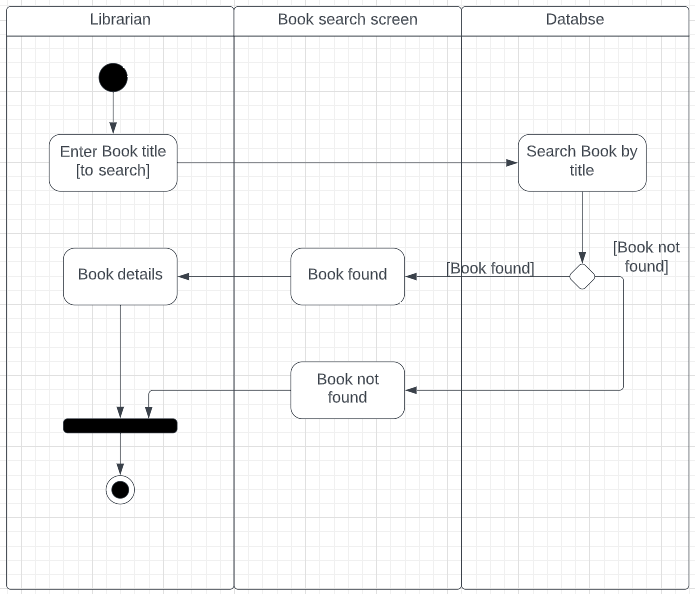
5)PayFine(), CollectFine()



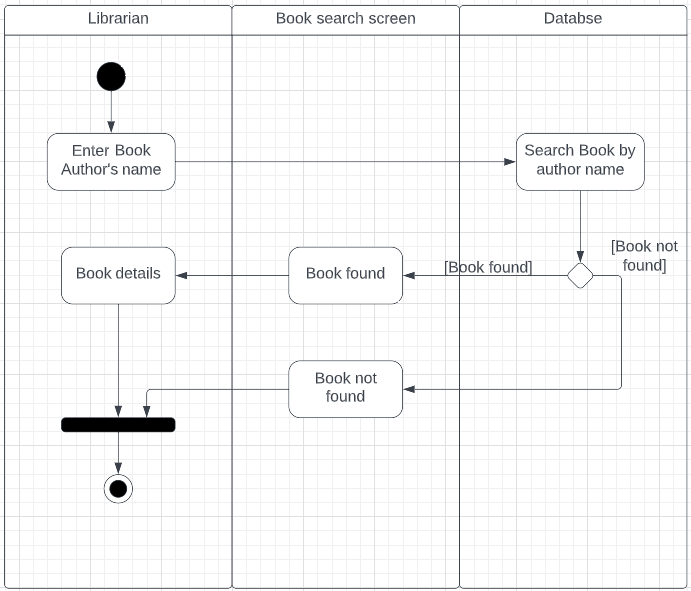
6)SearchBook(ID)



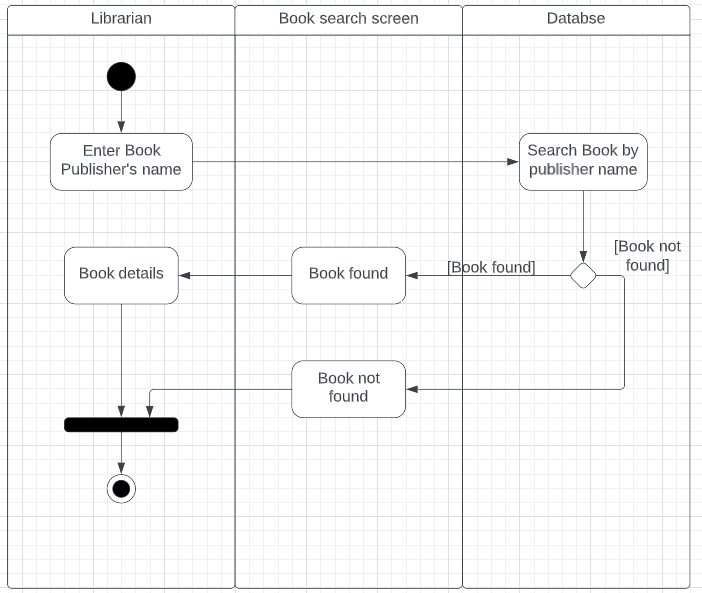
7) SearchBook(title)



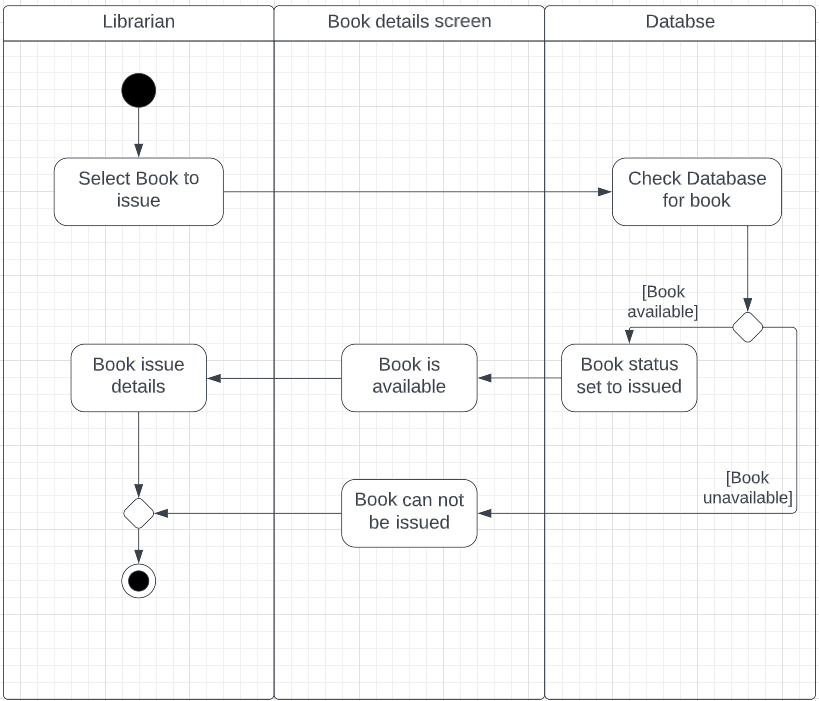
8) SearchBook(authorName)



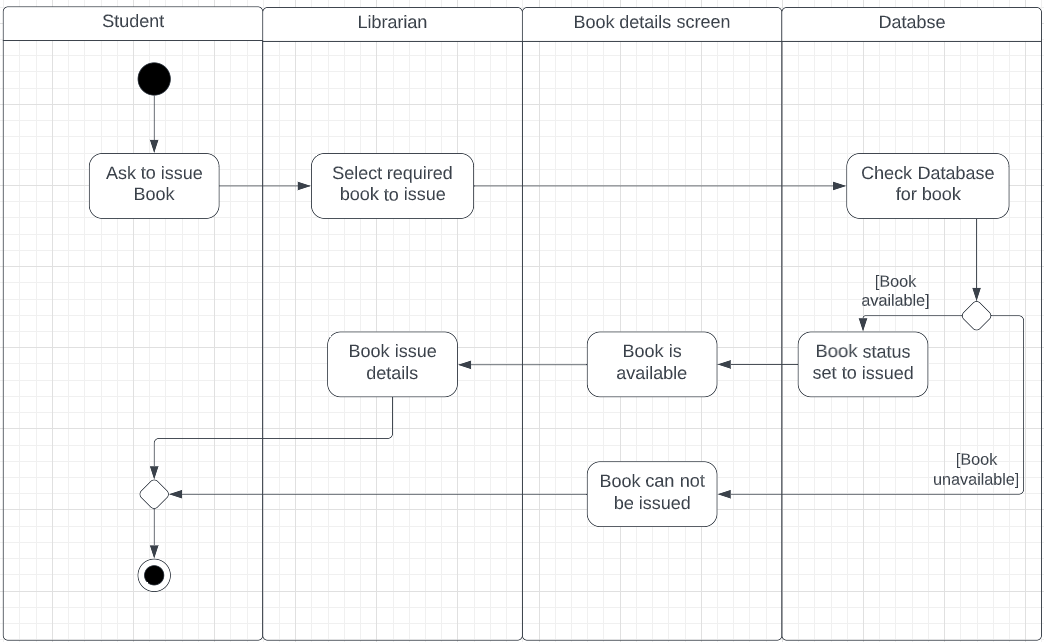
9) SearchBook(publisher)

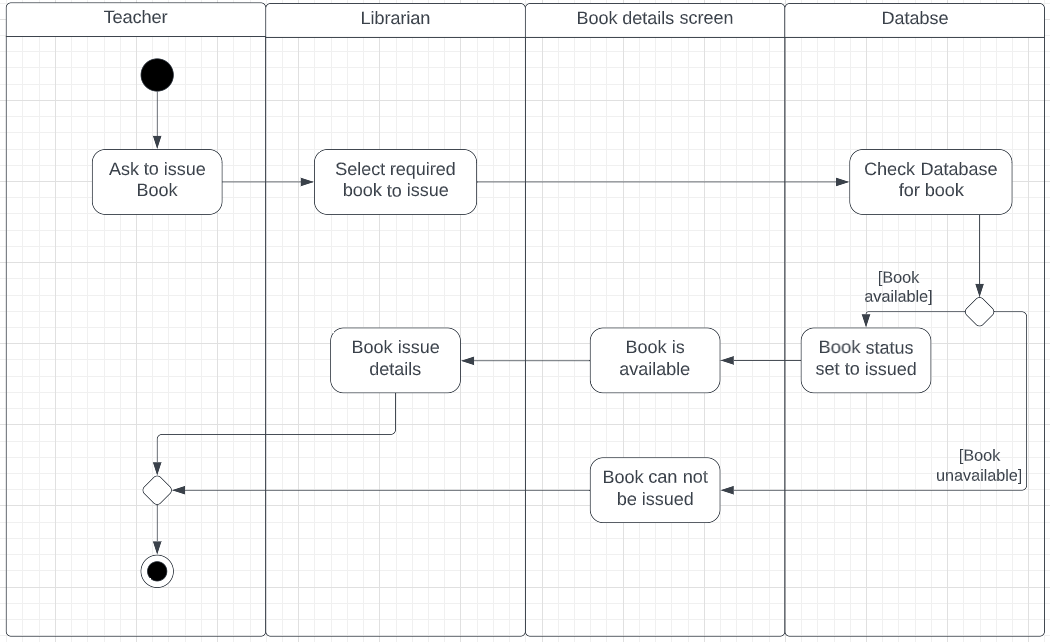


10) IssueBook() [Librarian]

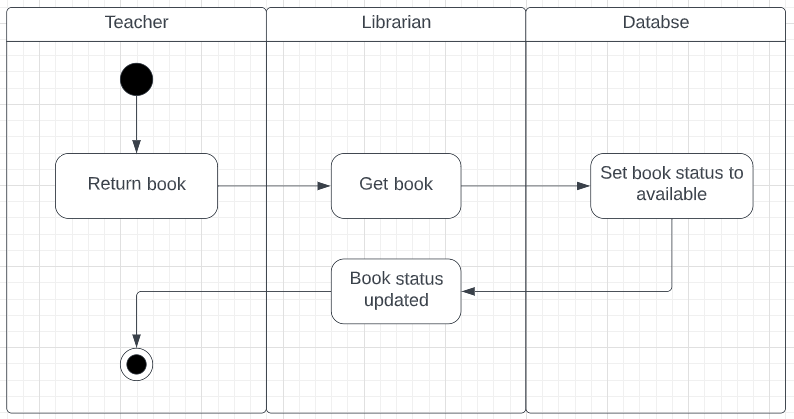


11)IssueBook() [Student, Teacher]

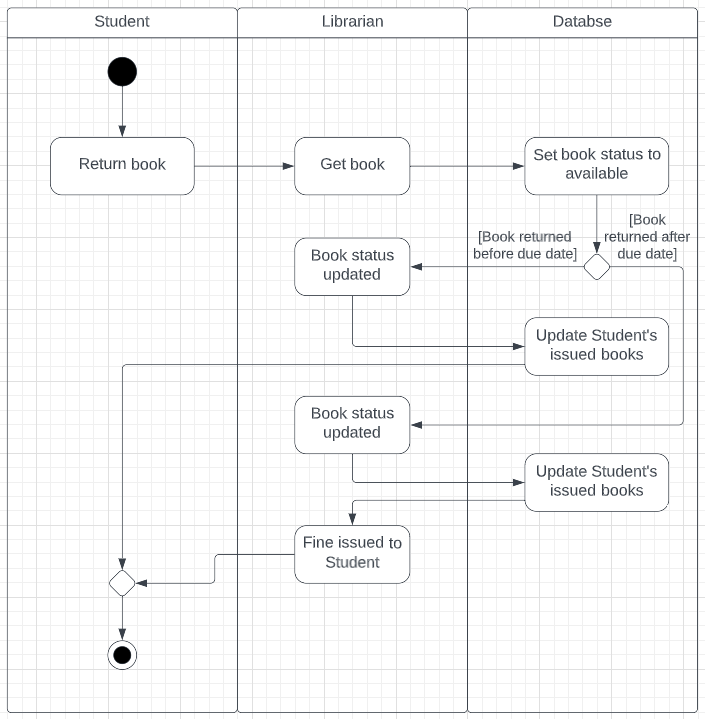




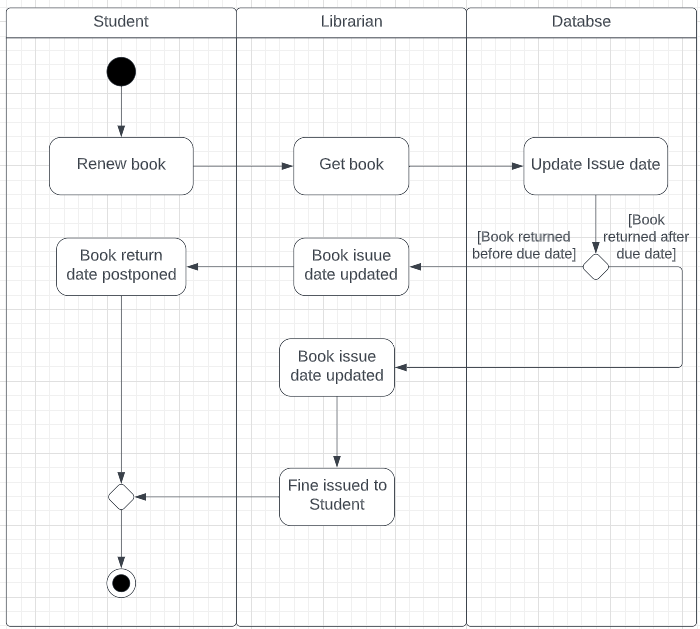
12) ReturnBook() [Teacher]



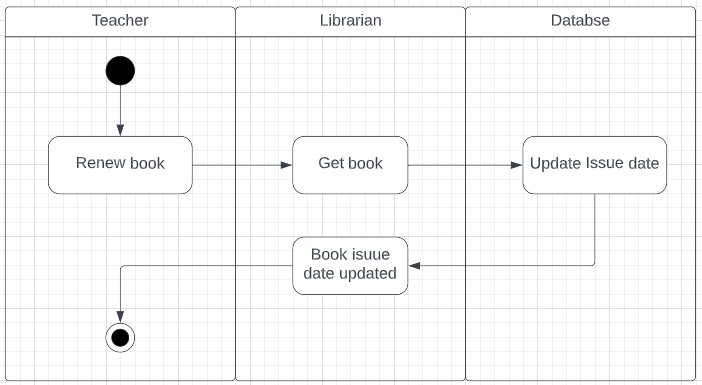
13) ReturnBook() [Student]



14) RenewBook() [Student]

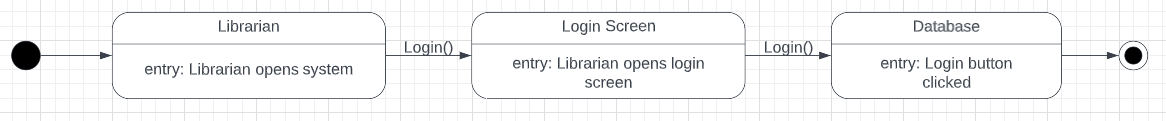


15) RenewBook() [Teacher]

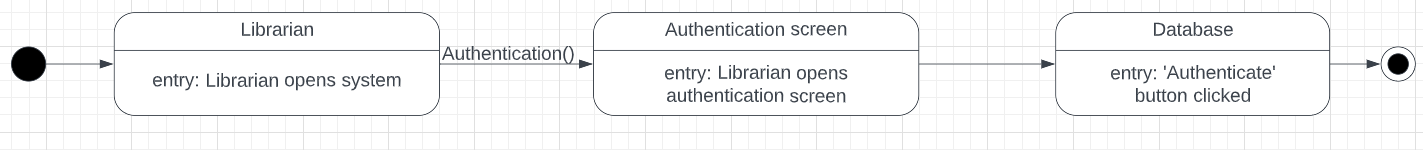


**State Machine Diagrams**

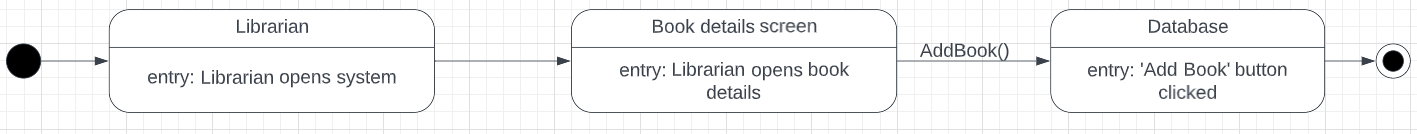
1)Login



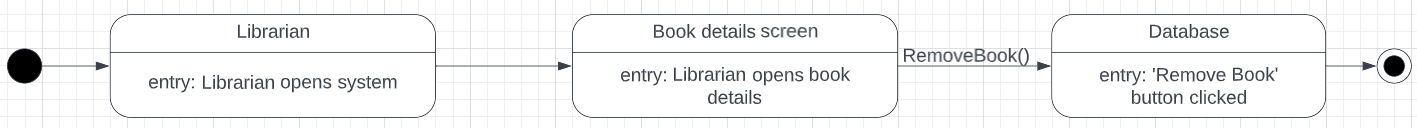
2)Authentication()



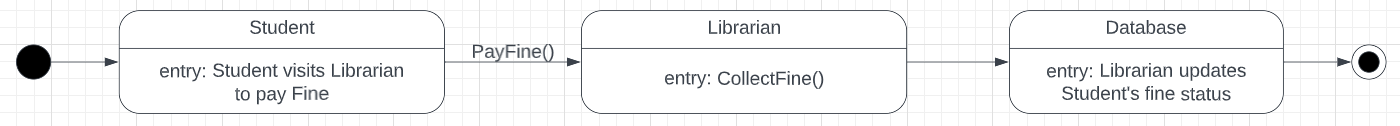
3) AddBook()



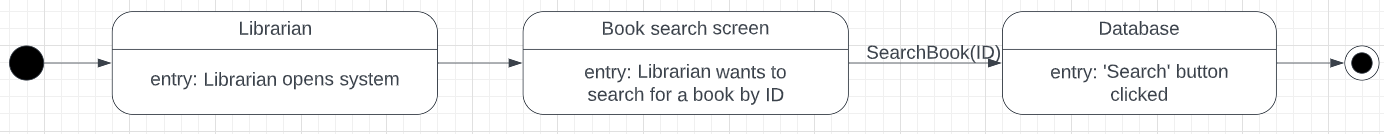
4) RemoveBook()



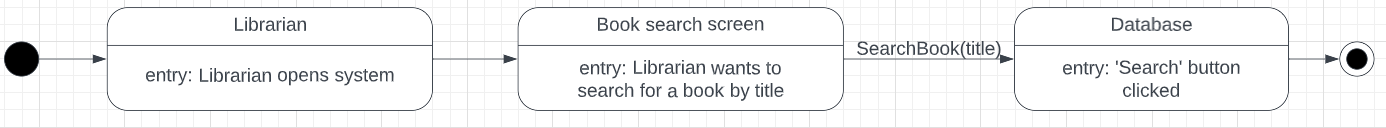
5) PayFine(), CollectFine()



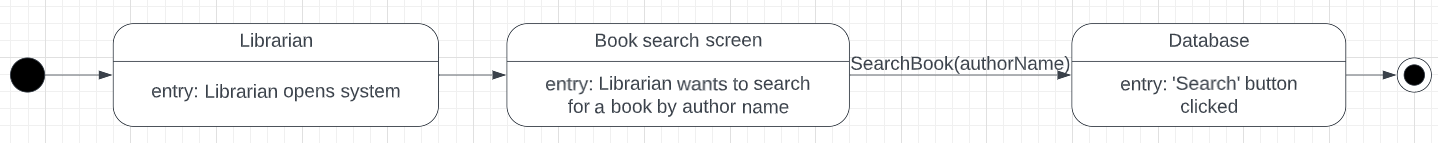
6)SearchBook(ID)



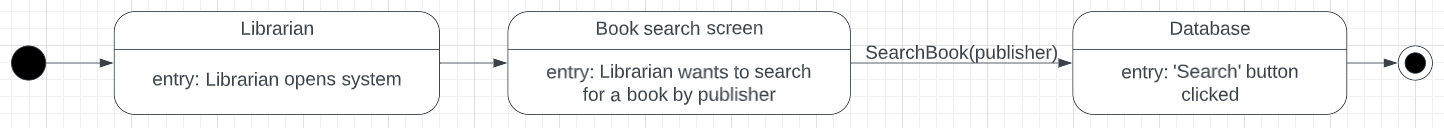
7) SearchBook(title)



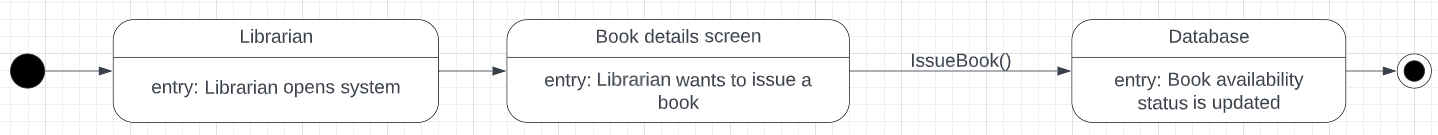
8) SearchBook(authorName)



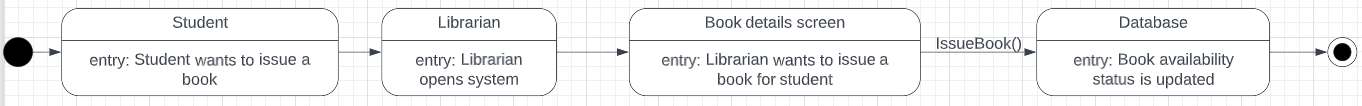
9) SearchBook(publisher)

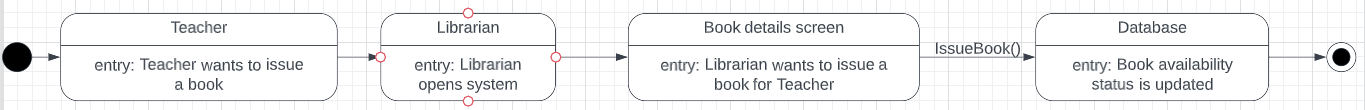


10) IssueBook() [Librarian]

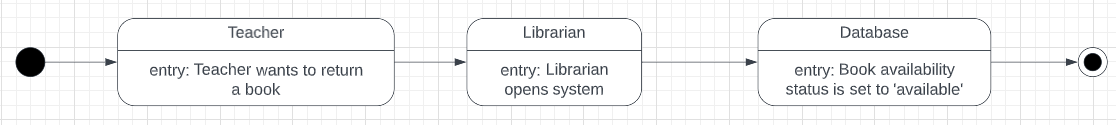


11)IssueBook() [Student, Teacher]

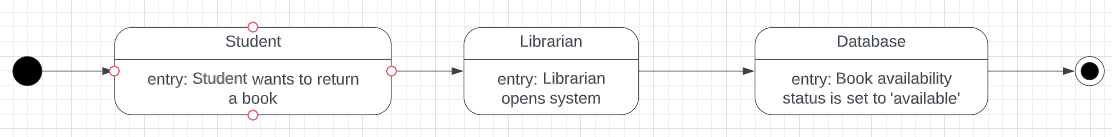




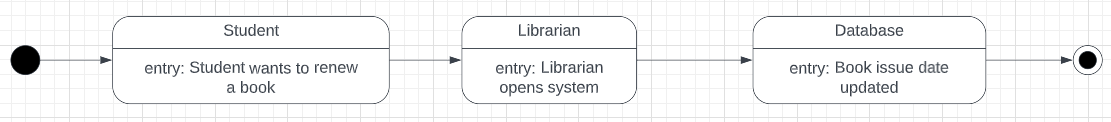
12) ReturnBook() [Teacher]



13) ReturnBook() [Student]



14) RenewBook() [Student]



15) RenewBook() [Teacher]

