LIBRARY MANAGEMENT SYSTEM

GROUP 5
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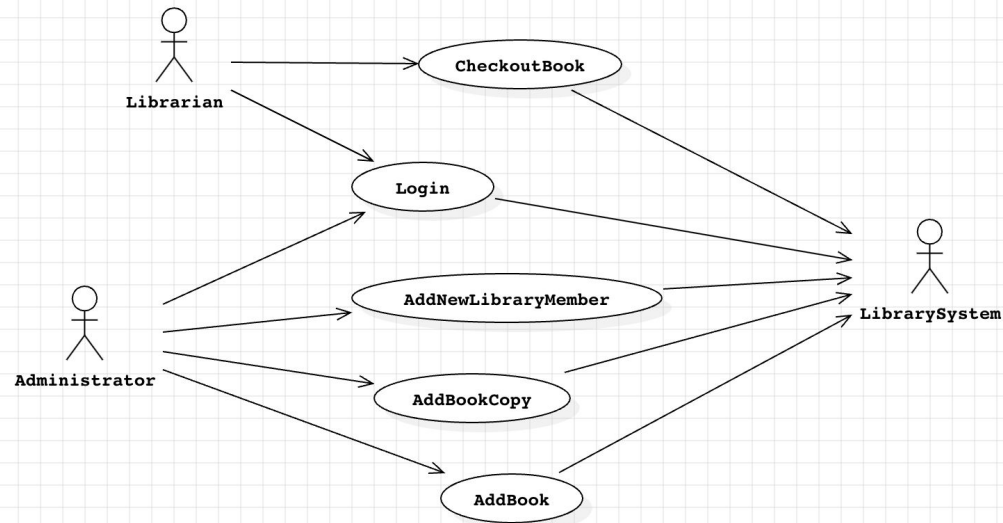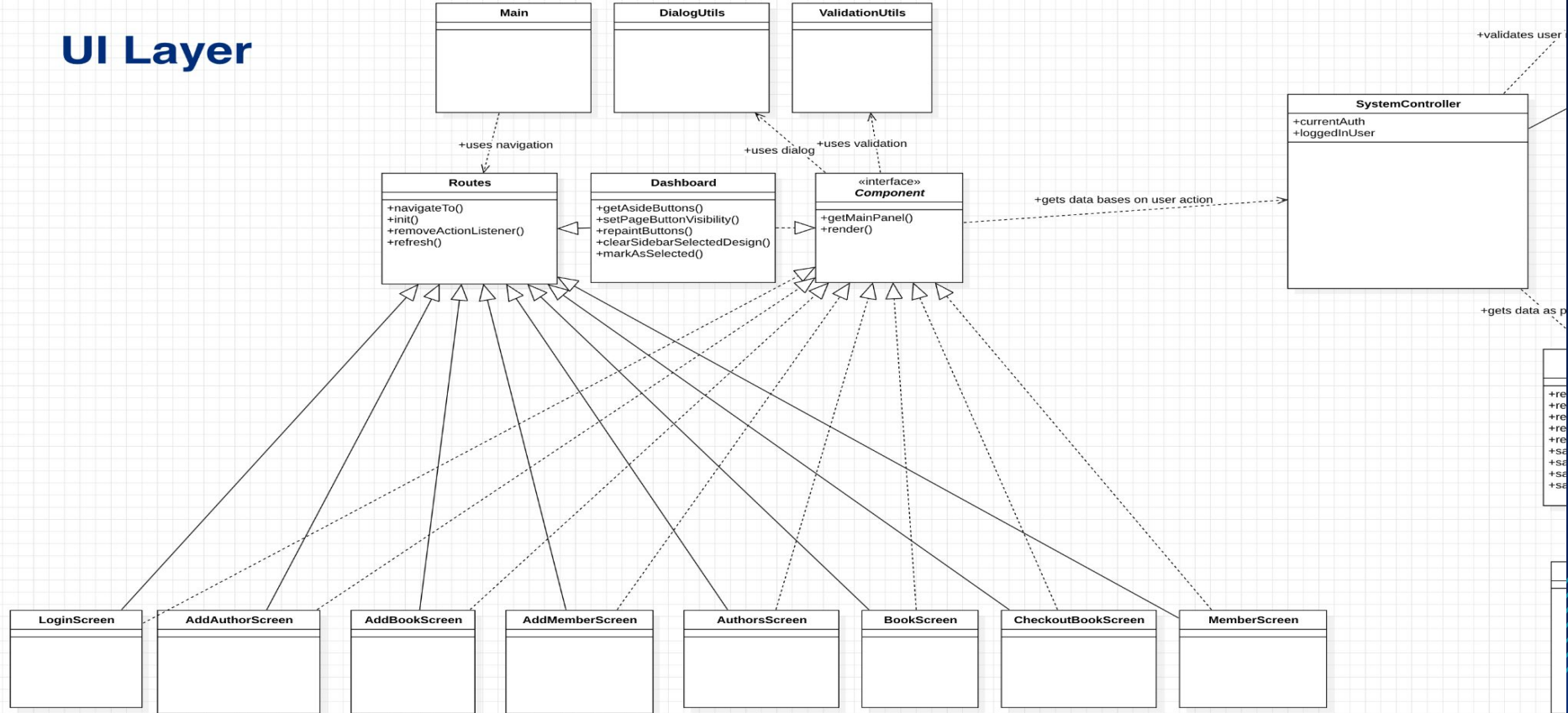# Use Case Diagram

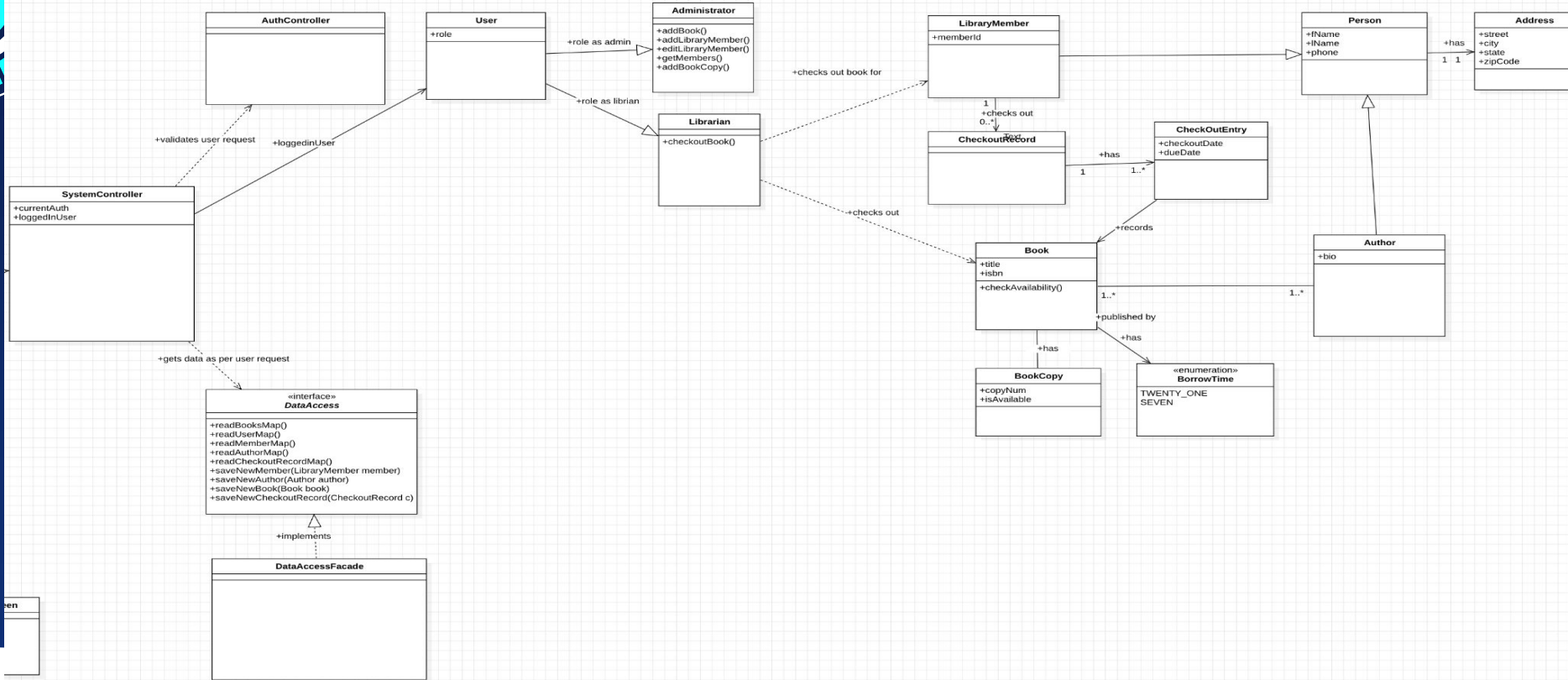Fig: Use Case Diagram

Class Diagram - UI Layer

UI Layer

Main

DialogUtils

ValidationUtils

SystemController
+currentAuth
+loggedInUser

+uses navigation

+uses dialog

+uses validation

+validates user

Routes
+navigateTo()
+init()
+removeActionListener()
+refresh()

Dashboard
+getAsideButtons()
+setPageButtonVisibility()
+repaintButtons()
+clearSidebarSelectedDesign()
+markAsSelected()

«interface»
Component
+getMainPanel()
+render()

+gets data bases on user action

+gets data as p

+re
+re
+re
+re
+re
+sa
+sa
+sa
+sa

LoginScreen

AddAuthorScreen

AddBookScreen

AddMemberScreen

AuthorsScreen

BookScreen

CheckoutBookScreen

MemberScreen

Class Diagram - Business Layer

Business Layer

Demo Time

Demo Users:
User ID: 101, Password: xyz, Role: LIBRARIAN
User ID: 102, Password: abc, Role: ADMIN
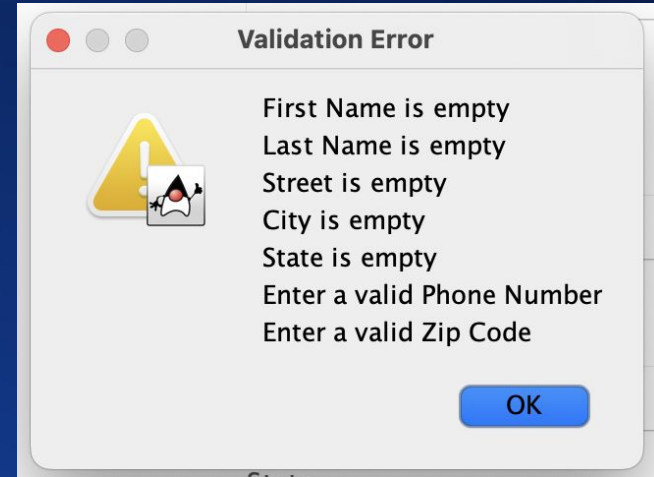User ID: 103, Password: 111, Role: BOTH

Validation Rules of UI Windows

Add Member
- All Fields are required
- Phone Number should contain 10 digits
- Zip Code Should be 5 numbers (Eg: 12345)

Add Book
- Select at least one author
- ISBN Number Should have 7 digits (The hyphen is optional)
- Eg: 12-34567, 1234567

Validation Error

First Name is empty
Last Name is empty
Street is empty
City is empty
State is empty
Enter a valid Phone Number
Enter a valid Zip Code

OK

SCI Knowledge

- Just like validating inputs before adding new data to storage, we need to validate meditation using group checks and perform meditation in group once in a while.

- UI may look beautiful but the functionality is the main part of a project. Similarly, consciousness is the basis of regular life. Being in a transcendental state of meditation brings purpose to life.