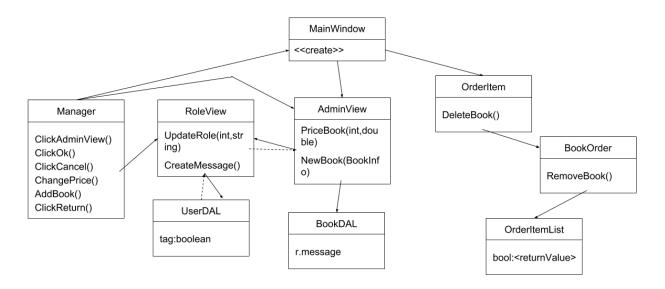
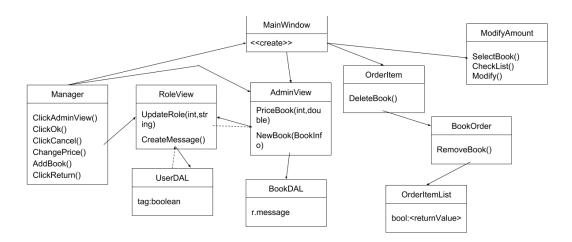
## Assignment Five Ryan Lebeau 104535367

1. When studying design patterns one learns about valuable process information for their project/class designs. Utilizing proper design patterns can eliminate useless information, identify serious problems or deadlocks in the project, and focus the overall idea using the proper pattern.

2.



3.



Brief Description - This option allows a user to modify the amount of a selected book as long as it does not exceed the amount in stock.

Actors - Customer

Preconditions - There is >=1 books in stock

Main Flow A1 - This use case begins when a customer adds a book to their booklist.

- **A2** Next, the customer must select to modify the amount of books they want in their booklist
- A3 The customer then confirms their change

Exception A4 - The user can only modify amount if the book is in their booklist PostConditions - The book amount is modified

4. A design pattern would greatly improve the maintainability of the entire system especially since there are so many different users. Ideally, the correct design pattern would showcase how each user interacts with the system specifically making any kind of updates or system changes extremely simple and intuitive because each interaction is outlined perfectly.