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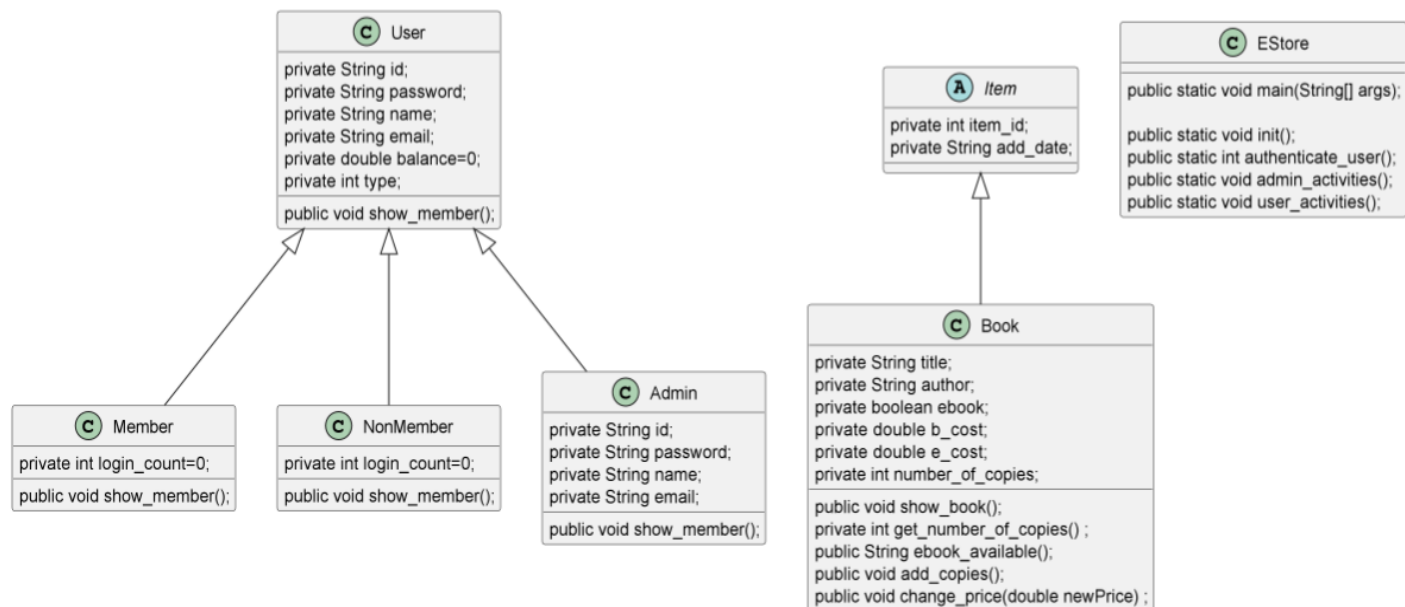
You are required to implement a Java application called **EStore** to practice your knowledge in OOP.

The application helps users to purchase books and Softwares in 2 formats.

- Book ⇒ can be purchased in the form of **physical** book and **e-book** format
- Software ⇒ can be purchased in the form of **CD** and the **download** format

Phase1:

Following the class diagram below, your task is to implement it as required.

EStore class: (Main application)

main (): used to call init(), authenticate_user(), admin_activities() and user_activities();

init() method: to initialize the application with

1. at least 5items (Books)
2. at least 6 users (Admin (you can add multiple admins), members and non members)

The system should include all items in one static list.

Hint: You can use ArrayList and HashMap collections.

This function generate the database

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authenticate_user(): check if the user is found in the database, the user is prompted to enter a username and password by using **Scanner** class. The function should return the user_index in the array list if found, and -1 if not found.

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admin_activities(): include

1. Show all items
2. Display all Users
3. Change price of item
4. Add new use
5. Add Copies to the item
6. Quit

user_activities: NEXT Homework

General implementation for all classes

1. Default constructor and user defined constructor.
2. setter and getter for all member fields.

class User, Member, Non_Member and Admin

show_member(): show information about members such as name, id and email.

Book class

void show_book(); Shows title, author, availability, price and number of copies.

 String ebook_available(): return true if available else false

 public void add_copies(): increment copies by one

public void get_number_of_copies(): return # of copies for a book

public void change_price(): change the price to a new price

```
Enter UserName:
Ahmad Ali
Enter PassWord
pass
Welcome::Ahmad Ali

                                          Welcome Admin to EStore
-------------------------------------------------------------------------------------------------
1. Show all items
2. Display all Users
3. Change price of item
4. Add new user
5.Add Copies to the items
6.Quit
1

1  Absolute Java by  Savitch | ebook available: Yes | number of copies available: 5| price: 75.0
2  JAVA: How to Program by  Deitel and Deitel | ebook available: Yes | number of copies available: 1| price: 65.0
3  Computing Concepts with JAVA 3 Essentials by  Hortsman | ebook available: No | number of copies available: 5| price: 114.72
4  Java Software Solutions by  Lewis and Loftus | ebook available: No | number of copies available: 5| price: 80.0
5  Java Program Design by  Cohoon and Davidson | ebook available: Yes | number of copies available: 1| price: 51.0
                                          Welcome Admin to EStore
-------------------------------------------------------------------------------------------------
1. Show all items
2. Display all Users
3. Change price of item
4. Add new user
5.Add Copies to the items
6.Quit
```

Next Homework

```
Enter UserName:
Haya Samaana
Enter PassWord
password
Welcome::Haya Samaana

                                          Welcome User to EStore
    --------------------------------------------------------------------------
Please select an option:
1. Add item to shopping cart
2. View shopping cart
3. Remove item from shopping cart
4. Checkout
5. List all items
6. Print previous purchases
7. Change User
8. Quit
```

Your task is to implement the class diagram and complete all admin activities as shown in the menu.

Good Luck