

# Online Medical Store

Need to prepare a console application for online medical store management.

- The application should allow to do below process.
- The main menu contains the following options.
  1. **User Registration**
  2. **User Login**
  3. **Exit**

## User Registration:

1. Get the below details from the user to create a new user account.
  - a. Username
  - b. Age
  - c. City
  - d. Phone Number
  - e. Balance
2. Once the new user account is created and show the user ID **"Your ID is UID1001"**.

## User Login:

On selection of the "User Login" option from the main menu,

1. Ask for the "User ID" of the user. Check the "User ID" in the user list.
  2. If the user ID does not exist means, show "Invalid User ID. Please enter a valid one".
  3. If "User ID" exists, then show the below sub menu
    - a. **Show medicine list.**
    - b. **Purchase medicine.**
    - c. **Modify purchase.**
    - d. **Cancel purchase.**
    - e. **Show purchase history.**
    - f. **Recharge Wallet.**
    - g. **Show Wallet Balance**
    - h. **Exit**
- a. Show Medicine List:**  
Show the list of available medicine details in the store by traversing the medicine details list.
- b. Purchase Medicine:**
  1. Show the List of medicine details by traversing the medicine details list.
  2. Ask the user to select the medicine using MedicineID.
  3. Ask the number of counts of that medicine he wants to buy.
  4. Check the Medicine list whether the **MedicineID** was available. If it is available, then

- a. check the asked count is available. If it is available, then
- b. Check the medicine was not expired. If it is expired or not available, then show the user “Medicine is not available”.
- c. If the medicine is not expired, then check User has enough balance to purchase that medicine.
5. Reduce the number of **AvailableCount** of that medicine in **MedicineDetails**.
6. Deduct the total amount from user’s balance amount.
7. If all the conditions specified in step 4 are true then calculate the total amount of purchased medicines, **OrderDate** is Now, Put **OrderStatus** as “Purchased” and create object for **OrderDetails** class and add it to the list.
8. Finally show the message “**Medicine was purchased successfully**”.

**c. Modify Purchase**

1. Show the order details of current logged in user to pick a order detail by using OrderID and whose status is “**Purchased**”. Check whether the purchase details is present. If yes then,
2. Ensure the order ID is available and ask the user to enter the new quantity of the medicine. Calculate the order price and update in the order price.
3. Calculate the total price of order and update in purchase details entry.
4. Show order modified successfully.

**d. Cancel Purchase**

1. Show the order details of the currently logged in user whose order status is “**Purchased**”.
2. Get the **OrderID** information from the user and check the **OrderID** present in the list and check its **OrderStatus** is Purchased.
3. If the **OrderID** matches increase the count of that Medicine in the medicine details, Return the amount to the user. Change the Status of the order to “Cancelled”.
4. Show the user that the “**OrderID XXX was cancelled successfully**”.

**e. Show Purchase History**

Show the purchased history of the current logged in user by traversing the **OrderDetails** list.

**f. Recharge Wallet**

Get the amount to be recharged from the current logged in user and update the balance information on his property.

**g. Show Wallet Balance**

Display the user balance amount.

**h. Exit**

Exit from the submenu and go to the main menu.

## Classes:

### **PersonalDetails class:**

Properties:

- Name
- Age
- City
- PhoneNumber

### **Interface IWallet:**

Properties:

- a) WalletBalance

Methods:

- a) Wallet Recharge
- b) Deduct Balance

### **UserDetails class: inherit PersonalDetails, IWallet**

Properties:

1. UserID (Auto Increment – UID1001)
2. WalletBalance

Methods:

1. Wallet Recharge
2. Deduct Balance

### **MedicineDetails class:**

Properties:

- a. MedicineID (MD100)
- b. MedicineName
- c. AvailableCount
- d. Price
- e. DateOfExpiry

### **OrderDetails class:**

Properties:

- a. OrderID (Auto increment - OID2001)

- b. UserID
- c. MedicineID
- d. MedicineCount
- e. TotalPrice
- f. OrderDate
- g. OrderStatus {Enum – Purchased, Cancelled}

### Default Details:

Create default details of **UserDetails** using the following information.

UserID	UserName	Age	City	Phone Number	Balance
UID1001	Ravi	33	Theni	9877774440	400
UID1002	Baskaran	33	Chennai	8847757470	500

Create default details of **MedicineDetails** using the following information.

MedicineID	MedicineName	Available Count	Price	DateOfExpiry
MD101	Paracetamol	40	5	30/06/2024
MD102	Calpol	10	5	30/05/2024
MD103	Gelucil	3	40	30/04/2023
MD104	Metrogel	5	50	30/12/2024
MD105	Povidin Iodin	10	50	30/10/2024

Create default details of **OrderDetails** using the following information.

OrderID	UserID	MedicineID	MedicineCount	TotalPrice	OrderDate	OrderStatus
OID2001	UID1001	MD101	3	15	13/11/2022	Purchased
OID2002	UID1001	MD102	2	10	13/11/2022	Cancelled
OID2003	UID1001	MD104	2	100	13/11/2022	Purchased
OID2004	UID1002	MD103	3	120	15/11/2022	Cancelled
OID2005	UID1002	MD105	5	250	15/11/2022	Purchased
OID2006	UID1002	MD102	3	15	15/11/2022	Purchased