**Online Grocery Store Application**

Create an online application for online grocery store.

That shows the following main menu.

1. **Customer Registration**
2. **Customer Login**
3. **Exit**
4. Customer Registration:
   1. Collect all property details of customer details class and register him and show his ID like: **“Your Customer ID:CID1001”**
5. Customer Login
   1. Get customer id from customer and check whether his CustomerID exists. If not means show “Invalid user ID”. If exists means Show following sub menu.
      1. **Show Customer Details**
      2. **Show Product Details**
      3. **Wallet Recharge**
      4. **Take Order**
      5. **Modify Order Quantity**
      6. **Cancel Order**
      7. **Show Balance**
      8. **Exit**
6. **Show Customer Details:**
   1. Show the details of current logged in customer using Show Customer Details method.
7. **Show Product Details:**
   1. Show the current product list of stock available.
8. **Wallet Recharge**
   1. Ask the customer to enter amount to be recharged. And update Wallet balance amount.
9. **Take Order**
   1. Ask customer that whether he want to purchase / not. If “Yes” means Create booking details object with Customer id, Total price =0, Booking status = Initiated.
   2. Create a local order list named tempOrderList.
   3. Show product details of available stock.
   4. Ask the user to select a product by using ProductID validate it, if it is ok then ask Purchase quantity else show “Invalid Product ID”.
   5. Check whether the selected Purchase quantity is available in stock.
   6. If it is available means create order object with created BookingID, productID, quantity and price of order and store in tempOrder details list. Deduct the purchase count from product details. Calculate totalPurchaseAmount. And show Product successfully added to cart.
   7. Ask the customer whether he want to book another product. If “yes” means again show Product details and **repeat step “C” t**o “f” create new order object. Repeat this process until he press “No”.
   8. After the above loop ask user Do you want to confirm the order.
   9. If he selects “yes” then check the user has enough balance. If he has it means deduct the totalPurchaseAmount from wallet. Update the booking status to Booked, update total price, and add the object to list. Add the tempOrderList to orderList. Show “Booking successful”.
   10. If he don’t have it means show **“Insufficient account balance recharge with”+totalPurchaseAmount** and proceed with recharge option. Repeat j step until he had enough balance.
   11. If user select “No” then traverse tempOrderList update product count to product detail list. And show cart removed successfully.
10. **Modify Order Quantity:**
    1. Show the booking details of current logged in user to pick a booking detail by using BookingID and whose status is **“Booked”.** Check whether the booking details is present. If yes then,
    2. Show list of order details and ask the user to pick an order id.
    3. Ensure the order ID is available and ask the user to enter the new quantity of the product. Calculate the order price and update in the order price.
    4. Calculate the total price of order and update in booking details entry.
    5. Show order modified successfully.
11. **Cancel Order**
    1. Show the list of Bookings placed by current logged in user whose status is **“Booked”**.
    2. Ask the user to pick a booking id. If booking id is present, then change the booking status to **“Cancelled”**.
    3. Refund the total price amount to current user.
    4. Return the product purchase count to product details.
    5. Show booking cancelled successfully.
12. **Show Balance**

Display the customers balance details in console.

1. **Exit**

Exit from submenu and show main menu.

**Personal Details Class:**

**Properties**: Name, FatherName, Gender, Mobile, DOB, MailID

**Interface IBalance:**

Properties: WalletBalance

Method: WalletRecharge

**Customer registration class: Inherits Personal Details, IBalance**

**Properties**: CustomerID {Auto Increment – CID1000}, WalletBalance

**Methods**: WalletRecharge

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **WalletBalance** | **Name** | **FatherName** | **Gender** | **Mobile** | **DOB** | **MailID** |
| CID1001 | 10000 | Ravi | Ettapparajan | Male | 974774646 | 11/11/1999 | ravi@gmail.com |
| CID1002 | 15000 | Baskaran | Sethurajan | Male | 847575775 | 11/11/1999 | baskaran@gmail.com |

**Values of CustomerDetails Object:**

**ProductDetails Class:**

**Properties**: ProductID {Auto Increment – PID2000}, ProductName, QuantityAvailable, PricePerQuantity

**Method**: ShowProductDetails

**Values of ProductDetails Object**

|  |  |  |  |
| --- | --- | --- | --- |
| **ProductID** | **ProductName** | **QuantityAvailable** | **PricePerQuantity** |
| PID2001 | Sugar | 20 | 40 |
| PID2002 | Rice | 100 | 50 |
| PID2003 | Milk | 10 | 40 |
| PID2004 | Coffee | 10 | 10 |
| PID2005 | Tea | 10 | 10 |
| PID2006 | Masala Powder | 10 | 20 |
| PID2007 | Salt | 10 | 10 |
| PID2008 | Turmeric Powder | 10 | 25 |
| PID2009 | Chilli Powder | 10 | 20 |
| PID2010 | Groundnut Oil | 10 | 140 |

**BookingDetails Class:**

**Properties**: BookingID {Auto Increment – BID3000}, CustomerID, TotalPrice, DateOfBooking, Booking Status – Default, Initiated, Booked, Cancelled.

**Method**: ShowBookingDetails

**Object Details of booking details class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BookingID** | **CustomerID** | **TotalPrice** | **DateOfBooking** | **BookingStatus** |
| BID3001 | CID1001 | 220 | 26/07/2022 | Booked |
| BID3002 | CID1002 | 400 | 26/07/2022 | Booked |
| BID3003 | CID1001 | 280 | 26/07/2022 | Cancelled |
| BID3004 | CID1002 | 0 | 26/07/2022 | Initiated |

**OrderDetails Class:**

**Properties**: OrderID {Auto Increment – OID4000}, BookingID, ProductID, PurchaseCount, PriceOfOrder

**Object Details of OrderDetails class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **OrderID** | **BookingID** | **ProductID** | **PurchaseCount** | **PriceOfOrder** |
| OID4001 | BID3001 | PID2001 | 2 | 80 |
| OID4002 | BID3001 | PID2002 | 2 | 100 |
| OID4003 | BID3001 | PID2003 | 1 | 40 |
| OID4004 | BID3002 | PID2001 | 1 | 40 |
| OID4005 | BID3002 | PID2002 | 4 | 200 |
| OID4006 | BID3002 | PID2010 | 1 | 140 |
| OID4007 | BID3002 | PID2009 | 1 | 20 |
| OID4008 | BID3003 | PID2002 | 2 | 100 |
| OID4009 | BID3003 | PID2008 | 4 | 100 |
| OID4010 | BID3003 | PID2001 | 2 | 80 |