

Topic : Online Shopping Mall

Group no : MLB\_02.02\_10

Campus : Malabe

Submission Date: 14/10/2021

We declare that this is our own work and this Assignment does not incorporate without acknowledgment any material previously submitted by anyone else in SLIIT or any other university/Institute. And we declare that each one of us equally contributed to the completion of this Assignment.

Registration No	Name	Contact Number	
IT21008696	Leo M.P.C	0769839398	
IT21105302	Fernando U.S.L	0779389014	
IT21101274	Dolawatta T.Y.R	0770438773	
IT21126956	Wijethunge W.D.S.H	0787706921	
IT21111488	Dilara V.G.N	0710192886	

#### Exercise 1

eZBuy is a Online Shopping Mall which can be accessed through a web browser. When user visits a store they can browse items as a visitor and they can become a registered customer by filling a simple online form to expand their privileges such as purchasing items, adding items to the personal cart, rating the items.

A user can also register as a seller in order to sell items through eZBuy by requesting permission from the system admin through a seller form. System admin can approve the seller requests. A seller can publish their products and sell them under the supervision of system manager.

Technical support person can view the customer and seller complaints, manage them and also manage the FAQs.

Web developer maintain the website, fix any bugs and manage protocols. System manager controls the database and promotion requests.

System Administrator can examine the generated reports, recruit employees and define access levels in the website. System Database, stores all data such as customer details, store details, item details and seller details. Online payment system validate the payment details which are entered to the system by customers and sellers .

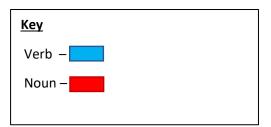
# **Requirements**

#### 1)

- 1. A visitor can create an account as a customer or seller. To register both types of users should provide necessary information for the system such as name, date of birth, NIC, address, email address and the most importantly type of role.
- 2. Registered users can login to the system using their credentials.
- 3. Visitors, sellers and customers can browse and discover items in the system.
- 4. Registered customers and sellers can update user details and view the current details.
- 5. A registered customer can add items to their personal Cart and also manage their personal cart by removing or updating information.
- 6. Most importantly a registered customer can place order using their credit/debit card through this system as a payment method.
- 7. A registered customer can rate and review the items that they bought through the system.
- 8. A seller can publish items via the system.
- 9. Seller can read and reply the reviews given by the registered customers.
- 10. A seller can create promotion codes which can be applicable to buy their items. And the promotion codes are sent to the regular customers via emails.
- 11. A seller can request from the system manager to advertise their items in the system.

- 12. Sellers can view the seller dashboard to examine their progress in the system.
- 13. Seller and registered customer, both can provide feedback about the system.
- 14. Technical support employee can view the feedbacks given by the registered users and reply to them accordingly.
- 15. System manager can create desired reports based through the system.
- 16. System admin can view the reports.

2)



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# 3)

#### **Nouns**

Visitor Account

Customer

Seller

User

Information

System

**Payment** 

Name

Date Of Birth

NIC

Address

**Email Address** 

Role

**Registered Users** 

Credentials

**Items** 

**Registered Customer** 

**Orders** 

User details

**Current Details** 

**Personal Cart** 

Credit/Debit Card

**Reviews** 

**Promotion Codes** 

**Regular Customers** 

**Emails** 

**System Manager** 

Seller Dashboard

Feedback

**Technical Support** 

**Employee** 

Report

#### **Rejecting Unwanted Nouns.**

#### 1.Redundant

**Registered Users** 

**Registered Customer** 

Visitor

Information

Credentials

User details

**Current Details** 

**Regular Customers** 

#### 2. Event or operation

**Emails** 

Seller Dashboard

# 3.Outside scope of system

System

System manager

Account

#### **4.Attributes**

Name

Date Of Birth

NIC

Address

**Email Address** 

Role

Credit/Debit Card

# **Classes**

#### Classes

- 1.Customer
- 2.Seller
- 3.User
- 4.Payment
- 5.Items
- 6.Orders
- 7. Personal Cart
- 8.Reviews
- 9.Promotion Codes
- 10.Feedback
- 11.Technical Support
- 12.Report
- 13.Employee

# **Verbs**

# 1. User

Create Register Provide Login

# 2. Customer

Update Buy Remove Add Place Order

Rate

# 3.**Seller**

Update
Buy
Remove
Add
Publish
Request
View
Reply

# 4. Technical Support

Reply View

# **CRC Cards**

Class name: User		
Responsibilities:	Collaborations:	
Store User Details		
Display User Details		
Update User Details		
	•	

Class name: Customer		
Responsibilities:	Collaborations:	
Store Customer ID		
Store Login Credentials		
Validate Customer Credentials		

Class name: Seller		
Responsibilities:	Collaborations:	
Store Seller ID		
Store Login Credentials		
Validate Seller Credentials		

Class name: Payment		
Responsibilities:	Collaborations:	
Store Card Details	Order	
Store Payment Type	Order	
Display Payment Details		

Class name: Item		
Responsibilities:	Collaborations:	
Store Item Details		
Display Item Details		
Update Item Details		

Class name: Order		
Responsibilities:	Collaborations:	
Place Order	Items, Promotion Codes	
Calculate Subtotal		
Get subtotal		
Display Order Details		

Class name: Cart		
Responsibilities:	Collaborations:	
Store Wish-list Details	Item	
Display Wish-list Details	Item	
Update Wish-list Details	Item	

Class name: Review		
Responsibilities:	Collaborations:	
Add Reviews about Items	Customer, Item	
View Reviews	Seller, Item	

Class name: PromotionCode	
Responsibilities:	Collaborations:
Create Promotion Codes	Item

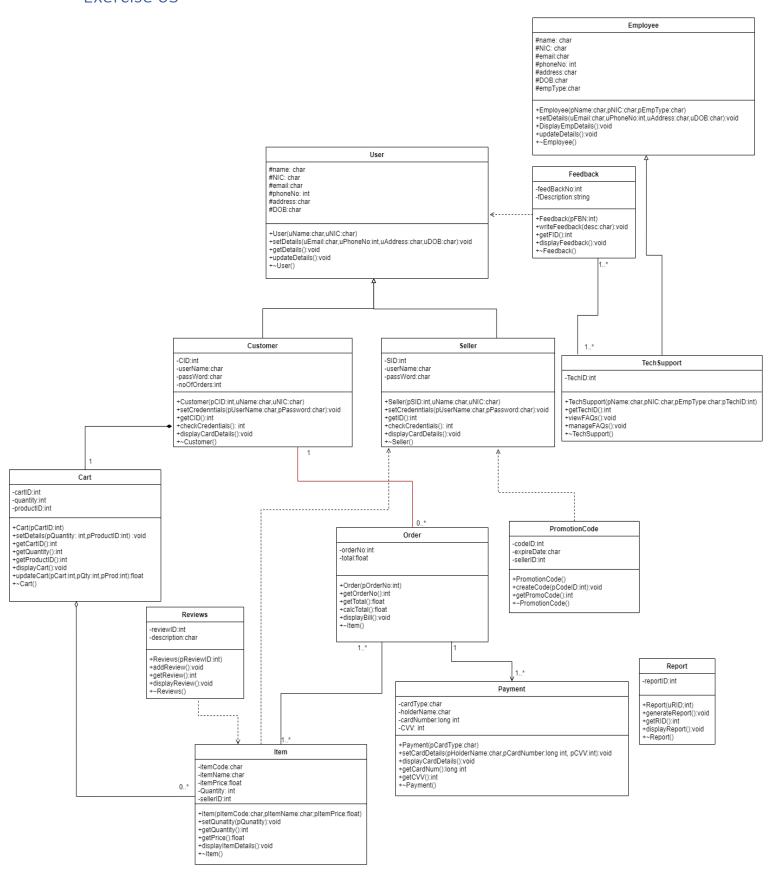
Class name: Feedback		
Responsibilities:	Collaborations:	
Add Feedback	User	
View Feedback	Technical Support	

Class name: Employee		
Responsibilities:	Collaborations:	
Store Employee Details		
Display Employee Details		
Update Employee Details		

Class name: TechSupport				
Responsibilities:	Collaborations:			
Store Tech ID				
Manage FAQs	Feedback			

Class name: Report				
Responsibilities:	Collaborations:			
Generate Report				
Display Report				

# Exercise 03



# **Contributions**

	Student ID	Student Name	Individual Contribution	
1	IT21008696	Leo M.P.C	CRC:  1. User 2. Customer 3. Seller  Code:  1. Main.cpp 2. User.h 3. User.cpp 4. Seller.h 5. Seller.cpp 6. Customer.h 7. Customer.cpp	
2	IT21105302	Fernando U.S.L	CRC:  1. Item 2. Cart 3. Order  Code:  1. Main.cpp 2. Item.h 3. Item.cpp 4. Cart.h 5. Cart.cpp 6. Order.h 7. Order.cpp	
3	IT21101274	Dolawatta T.Y.R	CRC:  1. Employee 2. TechSupport 3. Feedback  Code:  1. Main.cpp 2. Employee.h 3. Employee.cpp 4. TechSupport.h 5. TechSupport.cpp 6. Feedback.h 7. Feedback.cpp	

4	IT21126956	Wijethunge W.D.S.H	CRC:	
			1.	Review
			2.	Report
			Code:	
			1.	Main.cpp
			2.	Review.h
			3.	Review.cpp
			4.	Report.h
			5.	Report.cpp
5	IT21111488	Dilara V.G.N	CRC:	
			1.	Payment
			2.	PromotionCode
			Code:	
			1.	Main.cpp
			2.	Payment.h
			3.	Payment.cpp
			4.	PromotionCode.h
			5.	PromotionCode.cpp

#### Exercise 4

# **Sample Code**

#### Main.cpp

```
#include <iostream>
//#include "User.h"
//#include"Customer.h"
//#include"Seller.h"
//#include "Payment.h"
                          These are not needed as they are included in below header files
//#include"Employee.h"
//#include"Item.h"
//#include"Order.h"
//#include"TechSupport.h"
#include "Feedback.h"
#include "PromotionCode.h"
#include "Cart.h"
#include "Review.h"
#include "Report.h"
using namespace std;
int main() {
  //IT21008696
  cout<<"----\n"<<endl;</pre>
  Customer*C1=new Customer("Bruce Wayne","9223456789V",888);
  C1->setDetails("brucewayne@wayne.lk",778899551,"Rosmead Place,Colombo 7","Feb 31");
  C1->DisplayDetails();
  cout<<"Customer ID: "<<C1->getCID();
  cout<<"\n-----\n"<<endl;</pre>
  Seller*S1=new Seller("Ryan Reynolds","8523456888V",511);
  S1->setDetails("rreynolds@gmail.com",765511888,"Senevirathne Road,Negombo","March 31");
  S1->DisplayDetails();
  cout<<"Seller ID: "<<S1->getID();
```

```
//IT21105302
cout<<"\n-----\n"<<endl;</pre>
Item *i1 = new Item("IT01", "Pen Holder", 225.25);
i1->setQuantity(15);
i1->addItem(S1);
Item *i2 = new Item("IT02", "Eraser", 5.25);
i2->setQuantity(25);
i2->addItem(S1);
Item *i3 = new Item("IT03", "Pen", 20);
i3->setQuantity(35);
i3->addItem(S1);
i1->displayItemDetails();
i2->displayItemDetails();
i3->displayItemDetails();
cout<<"\n-----\n"<<endl;</pre>
Cart *cart[1];
cart[0] = new Cart(1);
cart[0]->addItem(i1, i3);
cart[0]->displayCart();
cout<<"\n-----\n"<<endl;
Order *01 = new Order(001,C1);
Order *02 = new Order(002,C1);
O1->displayBill();
O2->displayBill();
//IT21111488
cout <<"\n-----\n";</pre>
Payment *p1 = new Payment("Visa");
p1-> setCardDetails("776388421",371564844421685, 164);
p1->displayCardDetails();
cout <<"Card number: "<< p1->getCardNum() <<endl;</pre>
cout <<"CVV: "<< p1->getCVV() <<endl;</pre>
cout <<"\n-----\n"<<endl;</pre>
PromotionCode *pc1 = new PromotionCode();
pc1->createCode(46575,S1);
cout <<"Promotion Code: " <<pc1->getPromoCode();
```

```
//IT21101274
 cout<<"\n-----\n"<<endl;</pre>
 TechSupport*TS1 = new TechSupport("Floki LeBateau", "9527451789V", "Technical Sup-
port",151);
 TS1->setDetails("flokilb@ezbuy.lk",715864255,"Temple Road,Wattala","June 10");
 TS1->DisplayEmpDetails();
 cout<<"Employee ID: "<<TS1->getTechID()<<endl;</pre>
 //IT21126956
 cout << "\n-----\n" <<endl;</pre>
 Review *r1 = new Review(46571);
 r1->addReview("This is a good item.", i1);
 cout << "Review ID: " <<r1->getReviewID() <<endl;</pre>
 r1-> displayReview();
 cout << "\n-----\n" <<endl;</pre>
 Report *RE1 = new Report(9463);
 cout<< "Report ID: " <<RE1->getRID() <<endl;</pre>
 RE1->generateReport();
 RE1->displayReport();
 cout<<"\n-----\n"<<endl;
 delete C1;
 delete S1;
 delete i1;
 delete i2;
 delete i3;
 delete cart[0];
 delete 01;
 delete 02;
 delete p1;
 delete TS1;
 delete pc1;
 delete RE1;
 return 0;
}
```

# <u>User.h</u>

```
//IT21008696
#pragma once
class User{
  protected :
    char name[20];
    char NIC[15];
    char email[30];
    int phoneNo;
    char address[50];
    char DOB[10];
  public :
      User(const char uName[],const char uNIC[]);
      void setDetails(const char uEmail[],int uPhoneNo,const char uAddress[],const char
uDOB[]);
      void DisplayDetails();
      void updateDetails();
      ~User();
};
User.cpp
//IT21008696
#include "User.h"
#include <iostream>
#include <cstring>
using namespace std;
User::User(const char uName[],const char uNIC[]){
  strcpy(name, uName);
  strcpy(NIC, uNIC);
}
void User::setDetails(const char uEmail[],int uPhoneNo,const char uAddress[],const char
uDOB[]){
  strcpy(email,uEmail);
  phoneNo = uPhoneNo;
  strcpy(address,uAddress);
  strcpy(DOB,uDOB);
}
void User::DisplayDetails(){
  cout << "Name : " << name<<endl;</pre>
  cout << "NIC : " << NIC <<endl;</pre>
  cout << "Email : " <<email << endl;</pre>
  cout << "Phone Number : " <<phoneNo <<endl;</pre>
  cout << "Address : " <<address <<endl;</pre>
  cout << "DOB : " <<DOB <<endl;</pre>
```

```
}
void User::updateDetails(){

}
User::~User(){
   cout << "Deleting user name " <<name <<endl;
}</pre>
```

# Customer.h

```
//IT21008696
#pragma once
#include "User.h"
#include "Cart.h"
#include "Order.h"
#define SIZE5 5
class Cart;
class Order;
class Customer:public User{
  private:
    Cart *cart[1];
    int CID;
    char userName[30];
    char passWord[15];
    Order*ORD[SIZE5];
    int noOfOrders;
  public:
    Customer();
    Customer(const char uName[],const char uNIC[],int pCID);
    void setCredentials(char pUserName[], char pPassword[]);
    int getCID();
    int checkCredentials();
    void addOrder(Order *0);
    void displayCartDetails();
    ~Customer();
};
```

# Customer.cpp

```
//IT21008696
#include<iostream>
#include<cstring>
#include"Customer.h"
using namespace std;
Customer::Customer(const char uName[],const char uNIC[],int pCID):User(uName,uNIC){
  CID=pCID;
  Cart *cart[1];
  cart[0] = new Cart(1);
void Customer::setCredentials(char pUserName[], char pPassword[]){
int Customer::getCID(){
  return CID;
int Customer::checkCredentials(){
  return 1;
}
void Customer::addOrder(Order *0)
{
        if (noOfOrders < SIZE5)</pre>
           ORD[noOfOrders] = 0;
        noOfOrders++;
}
void Customer::displayCartDetails(){
  }
Customer::~Customer(){
  cout << "Deleting Customer "<< CID << endl;</pre>
  delete cart[0];
  cout << "The end"<< endl ;</pre>
}
```

# Seller.h

```
//IT21008696
#pragma once
#include "User.h"
class Seller:public User{
  private:
    int SID;
    char userName[30];
    char passWord[15];
  public:
    Seller(const char uName[],const char uNIC[],int pSID);
    void setCredentials(const char pUserName[],const char pPassword[]);
    int getID();
    int checkCredentials();
    void displayCarDetails();
    ~Seller();
};
Seller.cpp
//IT21008696
#include<iostream>
#include<cstring>
#include"Seller.h"
using namespace std;
Seller::Seller(const char uName[],const char uNIC[],int pSID):User(uName,uNIC){
  SID=pSID;
}
void Seller::setCredentials(const char pUserName[],const char pPassword[]){
}
int Seller::getID(){
return SID;
}
int Seller::checkCredentials(){
  return 1;
}
void Seller::displayCarDetails(){
}
Seller::~Seller(){
  cout << "Deleting SID" <<SID <<endl;</pre>
}
```

# Item.h

```
//IT21105302
#pragma once
#include "Order.h"
#include "Seller.h"
#define SIZE3 5
class Order;
class Seller;
class Item{
  private:
    int sellerID;
    char itemCode[6];
    char itemName[20];
    float itemPrice;
    int Quantity;
    Order*ORD[SIZE3];
  public:
    Item(const char pItemCode[],const char pItemName[],float pItemPrice);
    void addItem(Seller*Sell);
    void setQuantity(int pQuantity);
    int getQuantity();
    float getPrice();
    void displayItemDetails();
    ~Item();
};
```

# Item.cpp

```
//IT21105302
#include<iostream>
#include<cstring>
#include"Item.h"
using namespace std;
Item::Item(const char pItemCode[],const char pItemName[],float pItemPrice){
  strcpy(itemCode, pItemCode);
  strcpy(itemName, pItemName);
  itemPrice = pItemPrice;
void Item::addItem(Seller*Sell){
  sellerID= Sell->getID();
void Item::setQuantity(int pQuantity){
  Quantity=pQuantity;
}
int Item::getQuantity(){
return Quantity;
float Item::getPrice(){
     return itemPrice;
void Item::displayItemDetails(){
 cout<< "Description of Item " << itemCode << endl<<endl;</pre>
cout << "Item Name : "<< itemName << endl;</pre>
 cout << "Price : Rs."<< itemPrice << endl;</pre>
cout << "Available quantity : "<< Quantity << endl;</pre>
cout << "SellerID : "<< sellerID << endl<< endl<;</pre>
}
Item::~Item(){
  cout <<"Item ID Deleted" << itemCode <<endl;</pre>
}
```

# Cart.h

```
//IT21105302
#pragma once
#include "Item.h"
class Item;
class Cart{
private:
  int cartID;
  int quantity;
  int productID;
  Item *item[2];
 public:
  Cart(int pCartID);
  void setDetails(int pQuantity, int pProductID);
  void addItem(Item *item1,Item *item2);
  int getCartID();
  int getQuantity();
  int getProductID();
  void displayCart();
  float updateCart(int pCart, int pQty, int pProd);
  ~Cart();
};
Cart.cpp
//IT21105302
#include <iostream>
#include "Cart.h"
using namespace std;
  Cart::Cart(int pCartID){
    cartID = pCartID;
    cout << "Cart constructor called" << endl;</pre>
  }
  void Cart::setDetails(int pQuantity, int pProductID){
    quantity = pQuantity;
    productID = pProductID;
  }
  void Cart::addItem(Item *item1,Item *item2){
    item[0]= item1;
    item[1]= item2;
  }
```

```
int Cart::getCartID(){
    return cartID;
  }
  int Cart::getQuantity(){
    return quantity;
  }
  int Cart::getProductID(){
    return productID;
  }
  void Cart::displayCart(){
    cout << "Cart id :" << cartID<<endl;</pre>
    cout <<" Items "<<endl;</pre>
    for(int i=0;i<2;i++){</pre>
     item[i]->displayItemDetails();
    }
  }
  float Cart::updateCart(int pCart, int pQty, int pProd){
    //code
    return 1;
  }
  Cart::~Cart(){
    cout << "Cart destructor called" << endl;</pre>
  }
Order.h
//IT21105302
#pragma once
#include "Customer.h"
#include "Item.h"
#include "Payment.h"
#define SIZE2 10
class Customer;
class Item;
class Payment;
```

class Order{
 public:

int orderNo;
float total;
Customer\*Cus;
Item\*ITM[SIZE2];
Payment\*PAID[SIZE2];

```
public:
    Order(int pOrderNo,Customer *pCus);
    int getOrderNo();
    float getTotal();
    float calcTotal();
    void displayBill();
    ~Order();
};

Order.cpp

//IT21105302
#include<iostream>
#include<cstring>
#include"Order.h"
```

```
#include<iostream>
#include<cstring>
#include"Order.h"
using namespace std;
Order::Order(int pOrderNo,Customer *pCus){
  orderNo = pOrderNo;
  Cus = pCus;
  Cus -> addOrder(this);
}
int Order::getOrderNo(){
  return orderNo;
float Order::getTotal(){
  return 1;
}
float Order::calcTotal(){
  return 1;
}
void Order::displayBill(){
 cout << "Order ID :"<< orderNo <<endl;</pre>
 cout << "Customer ID "<< Cus->getCID()<<endl<<endl;</pre>
Order::~Order(){
}
```

# Employee.h

}

```
//IT21101274
#pragma once
class Employee{
  protected:
    char name[30];
    char NIC[15];
    char email[30];
    int phoneNo;
    char address[50];
    char DOB[10];
    char empType[20];
    public:
      Employee(const char pName[], const char pNIC[],const char pEmpType[]);
      void setDetails(const char uEmail[], int uPhoneNo,const char uAddress[],const char
uDOB[]);
      void DisplayEmpDetails();
      void updateDetails();
      ~Employee();
};
Emloyee.cpp
//IT21101274
#include<iostream>
#include<cstring>
#include"Employee.h"
using namespace std;
Employee::Employee(const char pName[], const char pNIC[],const char pEmpType[]){
  strcpy(name,pName);
  strcpy(NIC,pNIC);
  strcpy(empType,pEmpType);
void Employee::setDetails(const char uEmail[], int uPhoneNo,const char uAddress[], const
char uDOB[]){
  strcpy(email,uEmail);
  phoneNo=uPhoneNo;
  strcpy(address,uAddress);
  strcpy(DOB,uDOB);
```

```
void Employee::DisplayEmpDetails(){
  cout << "Employee Name : " << name<<endl;
  cout << "Employee NIC : " << NIC <<endl;
  cout << "Employee Type: "<<empType<<endl;
  cout << "Employee Email : " <<email << endl;
  cout << "Employee Phone Number : " <<phoneNo <<endl;
  cout << "Employee Address : " <<address <<endl;
  cout << "Employee DOB : " <<DOB <<endl;
}

void Employee::updateDetails(){

}

Employee::~Employee(){
  cout << "Employee name deleted" <<name <<endl;
}</pre>
```

#### TechSupport.h

```
//IT21101274
#pragma once
#include "Employee.h"
#include "Feedback.h"
#define SIZE1 2
class Employee;
class Feedback;
class TechSupport:public Employee{
  private:
    int techID;
    Feedback*FB[SIZE1];
  public:
    TechSupport(const char pName[], const char pNIC[],const char pEmpType[],int pTechID);
    int getTechID();
    void viewFAQs();
    void manageFAQs();
    ~TechSupport();
};
```

# TechSupport.cpp

```
//IT21101274
#include<iostream>
#include<cstring>
#include"TechSupport.h"
using namespace std;
TechSupport::TechSupport(const char pName[], const char pNIC[],const char pEmpType[],int
pTechID):Employee(pName,pNIC,pEmpType){
  techID = pTechID;
int TechSupport::getTechID(){
  return techID;
}
void TechSupport::viewFAQs(){
}
void TechSupport::manageFAQs(){
}
TechSupport::~TechSupport(){
  cout << "Deleting techID" <<techID <<endl;</pre>
}
Feedback.h
//IT21101274
#pragma once
#include "TechSupport.h"
#include "User.h"
#define SIZE4 5
class TechSupport;
class Feedback{
  private:
    int feedBackNo;
    char fDescription[200];
    TechSupport *tech[SIZE4];
  public:
    Feedback(int pFBN);
    void writeFeedback(const char description[],User *user);
    int getFID();
    void displayFeedback();
    ~Feedback();
};
```

# Feedback.cpp

```
//IT21101274
#include "Feedback.h"
#include <cstring>
#include <iostream>
using namespace std;
Feedback::Feedback(int pFBN){
feedBackNo=pFBN;
void Feedback::writeFeedback(const char description[],User *user){
  user->DisplayDetails();
  strcpy(fDescription,description);
}
int Feedback::getFID(){
   return feedBackNo;
}
void Feedback::displayFeedback(){
}
Feedback::~Feedback(){
  cout << "Deleted feedback number " <<feedBackNo <<endl;</pre>
}
Payment.h
//IT21111488
#pragma once
class Payment{
  private:
    char cardType[30];
    char holderName[30];
    long int cardNumber;
    int CVV;
  public:
    Payment(const char pCardType[]);
    void setCardDetails(const char pHolderName[],long int pCardNumber, int pCVV);
    void displayCardDetails();
    long int getCardNum();
    int getCVV();
    ~Payment();
};
```

#### Payment.cpp

```
//IT21111488
#include "Payment.h"
#include <cstring>
#include <iostream>
using namespace std;
Payment::Payment(const char pCardType[]){
  strcpy(cardType, pCardType);
void Payment::setCardDetails(const char pHolderName[],long int pCardNumber, int pCVV){
  strcpy(holderName,pHolderName);
  cardNumber = pCardNumber;
  CVV = pCVV;
}
void Payment::displayCardDetails(){
  cout << "Card Type : " <<cardType <<endl;</pre>
  cout << "Holder Name : " << holderName << endl;</pre>
}
long int Payment::getCardNum(){
  return cardNumber;
int Payment::getCVV(){
  return CVV;
Payment::~Payment(){
  cout << "Deleting payment " <<endl;</pre>
}
```

# PromotionCode.h

```
//IT21111488
#pragma once
#include "Seller.h"

class PromotionCode{
  private:
    int sellerID;
    int codeID;
    char expireDate[10];
```

```
public:
    PromotionCode();
    void createCode(int pCodeID,Seller*sell);
    int getPromoCode();
    ~PromotionCode();
};
```

# PromotionCode.cpp

```
//IT21111488
#include <iostream>
#include <cstring>
#include "PromotionCode.h"
using namespace std;
PromotionCode::PromotionCode(){
    cout<< "";</pre>
}
void PromotionCode::createCode(int pCodeID,Seller*sell){
    codeID = pCodeID;
    sellerID = sell->getID();
}
int PromotionCode::getPromoCode(){
    return codeID;
}
PromotionCode::~PromotionCode(){
  cout << "PromotionCode deleted" <<endl;</pre>
}
```

# Review.h

```
//IT21126956
#pragma once
#include "Item.h"

class Review{
  private:
    int reviewID;
    char description[200];
```

```
public:
    Review(int pReviewID);
    void addReview(const char desc[],Item *item);
    int getReviewID();
    void displayReview();
    ~Review();
};
Review.cpp
//IT21126956
#include <iostream>
#include "Review.h"
#include <cstring>
using namespace std;
Review::Review(int pReviewID){
    reviewID = pReviewID;
}
void Review::addReview(const char desc[],Item *item){
  item->displayItemDetails();
  strcpy(description,desc);
}
int Review::getReviewID(){
  return reviewID;
}
void Review::displayReview(){
  cout << description <<endl;</pre>
}
Review::~Review(){
  cout <<"Deleting review ID" << reviewID <<endl;</pre>
}
Report.h
//IT21126956
#pragma once
class Report{
private:
  int reportID;
```

```
public:
  Report(int uRID);
  void generateReport();
  int getRID();
  void displayReport();
  ~Report();
};
Report.cpp
//IT21126956
#include <iostream>
#include "Report.h"
using namespace std;
  Report::Report(int uRID){
    reportID = uRID;
  }
  int Report::getRID(){
    return reportID;
  }
  void Report::generateReport(){
  }
  void Report::displayReport(){
    //code
  }
  Report::~Report(){
    cout <<"Deleting report ID"<< reportID <<endl;</pre>
  }
```