Topic : Online Fashion store

Group no : Metro_WD_05

Campus : Metro

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We declare that this is our own work and this Assignment does not incorporate without acknowledgement 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.

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System Requirements

- User can log in to the system
- Customer register
- Customer search for items
- Customer Filter through items using category, size, and types
- Customer select the preferred size, colour and quantity
- Customer add items to the cart
- Customer checkout the cart
- Customer Choose payment method
- Customer Enter payment details
- Customer view order history reports
- Validate payment details via the portal
- Verify the order by system
- Admin assign a courier service
- Customer Enter reviews regarding the item
- Customer check order status
- Admin login
- Customer edit Customer profiles.
- Admin view Items report to restock
- Admin adds new items
- Admin deletes items that are no longer available
- Admin restock items
- Courier Service deliver item

Noun & Verb Analysis
(Nouns)

- User can log in to the system
- Customer register
- Customer search for items
- Customer Filter through items using category, size, and types
- Customer select the preferred size, colour and quantity
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- Customer checkout the cart
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- Customer Enter payment details
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- Admin deletes items that are no longer available
- Admin restock items
- Courier Service deliver item

Nouns

- User
- Customer
- Item
- Size
- Type
- Category
- User
- Order
- Payment
- Payment portal
- Colour
- Quantity
- Cart
- Payment details
- Order history
- Item
- Courier service
- Review
- Order status
- Customer profiles

Identified Classes

- User
- Customer
- Item
- Order
- Payment
- Cart
- Order
- Item
- Courier service
- Admin
- Review

CRC Cards

User	
Responsibilities	**Collaborators**
Login to the system	

Customer	
Responsibilities	**Collaborators**
Register to the system	
Edit user profile	
View customer details	

Item	
Responsibilities	**Collaborators**
Add items	
Restock items	
Delete items	
Add item to cart	cart

Order	
Responsibilities	**Collaborators**
Place order	
Display order status	
Checkout order	Payment
Calculate order amount	
Assign to courier	Courier services

Payment	
Responsibilities	**Collaborators**
Make payment	
Check payment details	Customer
Confirm payment details	

Cart	
Responsibilities	**Collaborators**
Delete item from cart	
Update item quantity	
Calculate item amount	Item

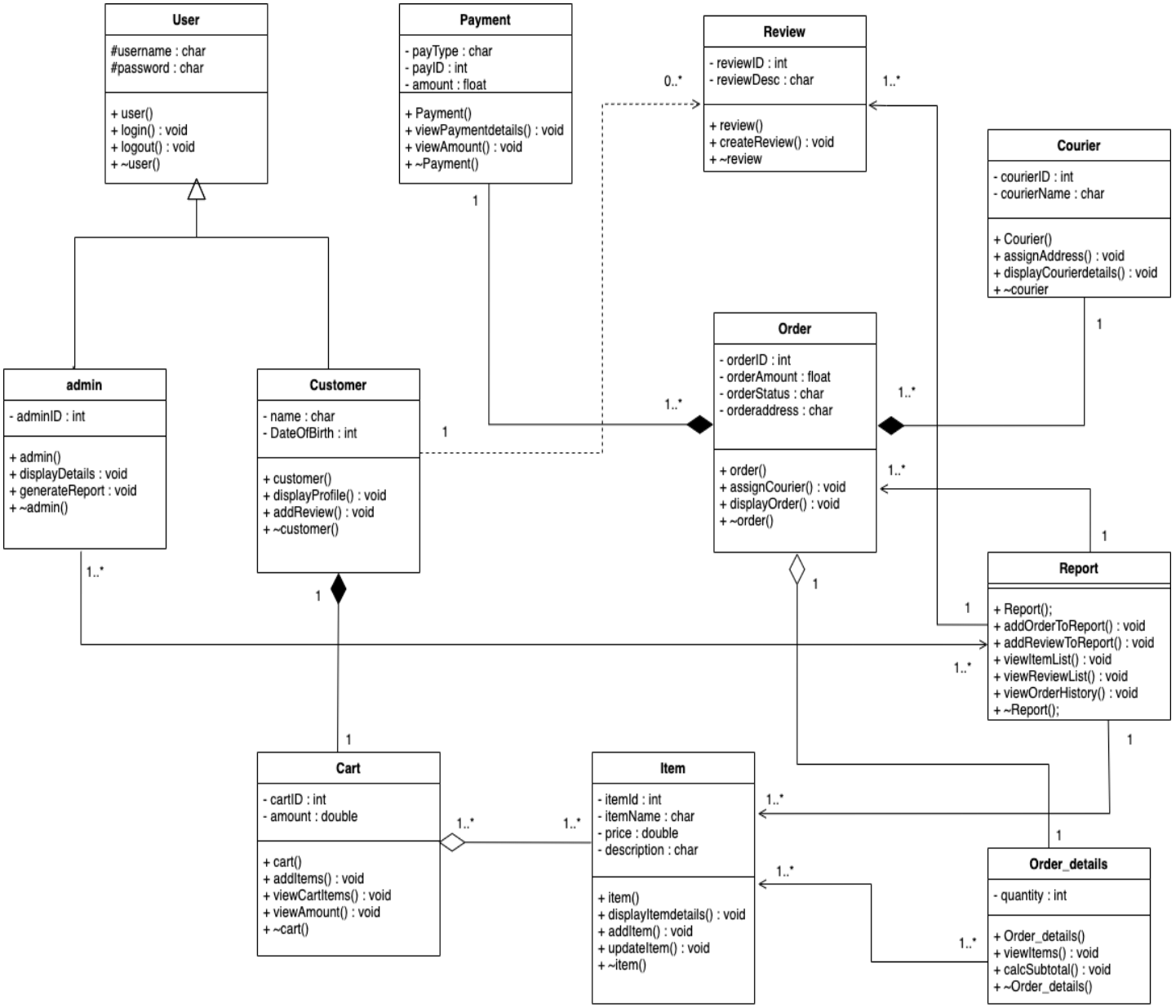
Report	
Responsibilities	**Collaborators**
List of previous orders	Order, Customer
List of items	Items

Courier services	
Responsibilities	**Collaborators**
Store courier details	

Admin	
Responsibilities	**Collaborators**
Store admin details	

Review	
Responsibilities	**Collaborators**
Make review	Item, Customer

Class Diagram(UML Diagram)



Class Header Files

user.h (IT21254598 - Thenuwara S.)

```
#pragma once
class user
{
	protected:
		char username[20];
		char password[20];

	public:
		user();
		user(char un[], char pw[]);
		void login();
		void logout();
		~user();

};
```

customer.h (IT21254598 - Thenuwara S.)

```
#pragma once
#include "Review.h"
#include "Cart.h"
#include "user.h"
#define SIZE 1

class customer : public user
{
	private:
		char name[50];
		int DateOfBirth;
		Cart *c[SIZE];

	public:
		customer();
		customer(char c_name[],int dob, int c_id, double amnt);
		void addReview(Review *r);
		void displayProfile();
		~customer();
};
```

admin.h (IT21254598 - Thenuwara S.)

```
#pragma once
#include "user.h"
#include "Report.h"

class admin : public user
{
	private:
		int adminID;
		Report *r1;

	public:
		admin();
		admin(int a_ID);
		void displayDetails();
		void generateReport();
		~admin();



};
```

Order.h (IT21203862 - Amarasiri W. B. R. M)

```
#pragma once
#include "Order_details.h"
#include "Payment.h"
#include "Courier.h"
#define SIZE 2

class Order
{
private:
  Courier *c[SIZE];
  Payment *pay[SIZE];
  Order_details *order[SIZE];
  int orderID;
  float orderAmount;
  char orderAddress[50];
  char orderStatus[20];

public:
  Order();
  Order(int oID, float amnt, Order_details *o1, Order_details *o2,
char address[], char status[], int cid1, int cid2, char cname1[],
char cname2[], char type1[], char type2[], int p1, int p2, float a1,
float a2);
  void assignCourier();
  void displayOrder();
  ~Order();
};
```

Order_details.h (IT21203862 - Amarasiri W. B. R. M)

```
#pragma once
#include "item.h"
class Order_details
{
private:
  int quantity;
  item *i1;
public:
  Order_details();
  Order_details(int q);
  void viewItems();
  void calcSubtotal();
  ~Order_details();
};
```

item.h (IT21243158 - Rajapathirane Y. I)

```
#pragma once

class item

{

	private:

		int itemId;

		char itemName[50];

		double price;

		char description[255];


	public:

		item(int id,char name[],double u_price,char desc[]);

		void displayItemdetails();

		void addItems(int item_id,char item_name[],double
unit_price,char item_desc[]);

		void updateItem();

		~item();

};
```

Cart.h (IT21243158 - Rajapathirane Y. I)

```
#pragma once
#include "item.h"

class Cart
{
	private:
		int cartId;
		double amount;
		item*it;

	public:
		Cart();
		Cart(int c_id,double amnt);
		void addItems(item*it);
		void viewCartItems();
		void viewAmount();
		~Cart();

};
```

Payment.h (IT21250538 - Fernando B. S. R.)

```
#pragma once
class Payment
{
private:
  char payType[20];
  int payID;
  float amount;

public:
  Payment();
  Payment(char paytype[],int payID,float amount);
  void viewPaymentdetails();
  void viewAmount();
  ~Payment();
};
```

Courier.h (IT21250538 - Fernando B. S. R.)

```
#pragma once
class Courier
{
  private:
    int courierId;
    char courierName[20];
  public:
    Courier();
    Courier(int cId,char cName[]);
    void assignAddress();
    void displayCourierDetails();
    ~Courier();
};
```

Review.h (IT21347726 - Niles A. P.)

```
#pragma once
class Review{
  private:
    int reviewId;
    char reviewDesc[200];
  public:
    Review();
    void createReview(int id, char desc[]);
    ~Review();
};
```

Report.h (IT21347726 - Niles A. P.)

```
#pragma once
#include "Review.h"
#include "Order.h"
#include "item.h"
#define SIZE 2

class Report{
  private:
    Review* review[SIZE];
    Order* order[SIZE];
    item* item[SIZE];
  public:
    Report();
   // void addItemToReport(item* Item[]);
    void addOrderToReport(Order* order[]);
    void addReviewToReport(Review* review[]);
    void viewItemList();
    void viewReviewList();
    void viewOrderHistory();
    ~Report();
};
```

Class CPP Files

user.cpp (IT21254598 - Thenuwara S.)

```
#include "user.h"
#include <cstring>
#include <iostream>
using namespace std;
user::user()
{
	strcpy(username,"");
	strcpy(password,"");
}

user::user(char un[], char pw[])
{
	strcpy(username,un);
	strcpy(password,pw);
}

void user::login()
{

}

void user::logout()
{
}
```

```
user::~user()
{
      cout<<"Destructor called"<<endl;
}
```

customer.cpp (IT21254598 - Thenuwara S.)

```
#include "customer.h"
#include "Cart.h"
#include <cstring>
#define SIZE 1
#include <iostream>
using namespace std;
customer::customer()
{
	strcpy(name,"");
	int DateOfBirth = 0;
}

customer::customer(char c_name[],int dob, int c_id, double amnt)
{
	strcpy(name,c_name);
	DateOfBirth = dob;
	c[0]= new Cart(c_id,amnt);
}

void customer::displayProfile()
{

}
void customer::addReview(Review *r)
{

}
```

```
customer::~customer()
{
	for(int i=0; i<SIZE; i++)
	{
		delete c[i];
	}
	cout<<"Customer deleted"<<endl;
}
```

admin.cpp (IT21254598 - Thenuwara S.)

```
#include "admin.h"
#include <cstring>
#include <iostream>
using namespace std;

admin::admin()
{
	adminID = 0;
}

admin::admin(int a_ID)
{
	adminID = a_ID;
}

void admin::generateReport()
{

}

admin::~admin()
{
	cout<<"Admin deleted"<<endl;
}
```

Order.cpp (IT21203862 - Amarasiri W. B. R. M)

```
#include "Order.h"
#include <iostream>
#include <cstring>
#define SIZE 2
using namespace std;


Order::Order()
{
  c[0] = new Courier(101,"");
  c[1] = new Courier(102,"");
  pay[0] = new Payment("",00,0.0);
  pay[1] = new Payment("",00,0.0);
}


Order::Order(int oID, float amnt, Order_details *o1, Order_details
*o2, char address[], char status[], int cid1, int cid2, char
cname1[], char cname2[], char type1[], char type2[], int p1, int p2,
float a1, float a2)
{
  order[0] = o1;
  order[1] = o2;
  c[0] = new Courier(cid1,cname1);
  c[1] = new Courier(cid2,cname2);
  pay[0] = new Payment(type1, p1, a1);
  pay[1] = new Payment(type2, p2, a2);
  strcpy(orderAddress,address);
  strcpy(orderStatus,status);
  orderID = oID;
```

```
  orderAmount = amnt;
}

void Order::assignCourier()
{

}

void Order::displayOrder()
{

}

Order::~Order()
{
  for (int i=0; i <SIZE; i++)
  {
    delete c[i];
    delete pay[i];
  }

}
```

Order_details.cpp (IT21203862 - Amarasiri W. B. R. M)

```
#include <iostream>
#include "Order_details.h"
using namespace std;

Order_details::Order_details()
{

}

Order_details::Order_details(int q)
{
  quantity = q;
}

void Order_details::viewItems()
{

}

void Order_details::calcSubtotal()
{

}

Order_details::~Order_details()
```

```
{
  cout<<"Deleting Order_details"<<endl;
}
```

Item.cpp (IT21243158 - Rajapathirane Y. I)

```
#include <iostream>
#include "item.h"
#include <cstring>
using namespace std;

item::item(int id,char name[],double u_price,char desc[])
{
            itemId=id;
            strcpy(itemName,name);
            price=u_price;
            strcpy(description,desc);
}

void item::displayItemdetails()
{

}

void addItems(int item_id,char item_name[],double unit_price,char
item_desc[])
{

}

void item::updateItem()
{
}
```

```
item::~item()
{
      cout<<"Item deleted"<<endl;
}
```

Cart.cpp (IT21243158 - Rajapathirane Y. I)

```
#include "Cart.h"
#include "item.h"
#define SIZE 3


Cart::Cart()
{
           cartId=001;
           amount=0;
}

Cart::Cart(int c_id,double amnt)
{
     cartId=c_id;
     amount=amnt;
}

void Cart::addItems(item*itm)
{
     it=itm;
}

void Cart::viewCartItems()
{
     it->displayItemdetails();
}
```

```
void Cart::viewAmount()
{

}

Cart::~Cart()
{

}
```

Payment.cpp (IT21250538 - Fernando B. S. R.)

```
#include "Payment.h"
#include<cstring>
#include <iostream>
using namespace std;

Payment::Payment()
{
  strcpy(payType,"");
  payID=0;
  amount=0.0;
}

Payment::Payment(char type[],int pId,float amount)
{
  strcpy(payType,type);
  payID=pId;
  amount=amount;
}

void Payment::viewPaymentdetails()
{

}

void Payment::viewAmount()
{
}
```

```
Payment::~Payment()
{

}
```

Courier.cpp (IT21250538 - Fernando B. S. R.)

```
#include "Courier.h"
#include <cstring>
#include <iostream>
using namespace std;

Courier::Courier()
{
  courierId=0;
  strcpy(courierName,"");
}

Courier::Courier(int cId,char cName[])
{
  courierId=cId;
  strcpy(courierName,cName);
}

void Courier::assignAddress()
{

}

void Courier::displayCourierDetails()
{

}
```

```
Courier::~Courier()
{


}
```

Review.cpp (IT21347726 - Niles A. P.)

```
#include "Review.h"
#include <cstring>
#include <iostream>

Review::Review()
{
  reviewId=0;
  strcpy(reviewDesc,"");
}

void Review::createReview(int id, char desc[])
{
  reviewId=id;
  strcpy(reviewDesc,desc);
}

Review::~Review()
{

}
```

Report.cpp (IT21347726 - Niles A. P.)

```
#include "Report.h"

Report::Report()
{

}

void Report::addReviewToReport(Review* review[])
{

}

void Report::addOrderToReport(Order* order[])
{

}

void Report::viewItemList()
{

}
```

```
void Report::viewReviewList()

{


}


void Report::viewOrderHistory()

{


}

Report::~Report()

{


}
```

Main Program

```
#include <iostream>
#include <cstring>
#include "user.h"
#include "admin.h"
#include "customer.h"
#include "Courier.h"
#include "Payment.h"
#include "Cart.h"
#include "item.h"
#include "Order.h"
#include "Order_details.h"
#include "Report.h"
#include "Review.h"
using namespace std;


int main()
{
      customer *cust = new customer();
      admin *adm = new admin();
      Order *ord = new Order();
      Order_details *ord_d = new Order_details();
      item*Item1;
      Item1 = new item(001,"Ladies Brown shawl",5000,"Wool shawl made
in china");
      Cart *Mycart = new Cart();


      ord->displayOrder();
```

```
    ord->assignCourier();
    ord_d->viewItems();
    ord_d->calcSubtotal();
    Mycart->addItems(Item1);

    delete Mycart;
    delete Item1;
    delete cust;
    delete adm;
    delete ord;
    delete ord_d;

    return 0;
}
```