DATE: 31-05-21

# CS6106 DATABASE MANAGEMENT SYSTEM R BATCH

#### **REPORT ON**

# SHOP MANAGEMENT SYSTEM

 $\mathbf{BY}$ 

DHIVYASHRI .R - 2019103015

**ATHIRALS** - 2019103006

**NIRUTHIYA SHRI.P - 2019103549** 

#### **ABSTRACT:**

The main aim of this Shop Management system is to automate the existing manual system by the help of computerized equipments and full fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulations.

"Shop With Us" keeps track of sales, purchases, customer details, Products availability and profits. The admin has a separate sign in where he can update the products, check the orders placed and the total profit.

So this includes SQL queries like creating tables, inserting records in it, delete and update functions, triggers and views etc.. Triggers are used to show the currrent availability of the stock once an order is placed.

#### **SOFTWARES USED:**

Front end - HTML,CSS,javasript

Back end - FLASK, MYSQLshell

Database server- MYSQL

Database tool-PHPmyadmin

#### **FUNCTIONAL SPECIFICATION:**

- Signup for Admins(Vendors) and Customers.
- Admins can enter the product information they are about to sale.
- Customers can see the products available and it's information.
- Customers can order products and view the total expense simultaneously.
- Admins can edit the product data/information.

## i)ADMIN

#### Attributes:

- **Vendor\_ID** ->Primary key of this table.
- Other keys=V\_Username,V\_Password,V\_Address,V\_Password,V\_City,V\_Email,V\_Phone,Product\_ID,
   Transaction ID.
- Product ID ->Foreign Key connected with the Product ID in products table.

## ii)SIGNUP

#### Attributes:

- **Customer\_ID** -> Primary key of this table.
- Other keys = Username, Password, Address, City, Email, Phone. [No foreign keys]

## iii)PRODUCTS:

#### Attributes:

- **Product\_ID** -> Primary key of this table.
- Other keys = Product name, quantity, weight, Arrival and expiry date, Cost price and Selling price.

## iv)ORDERS

#### Attributes:

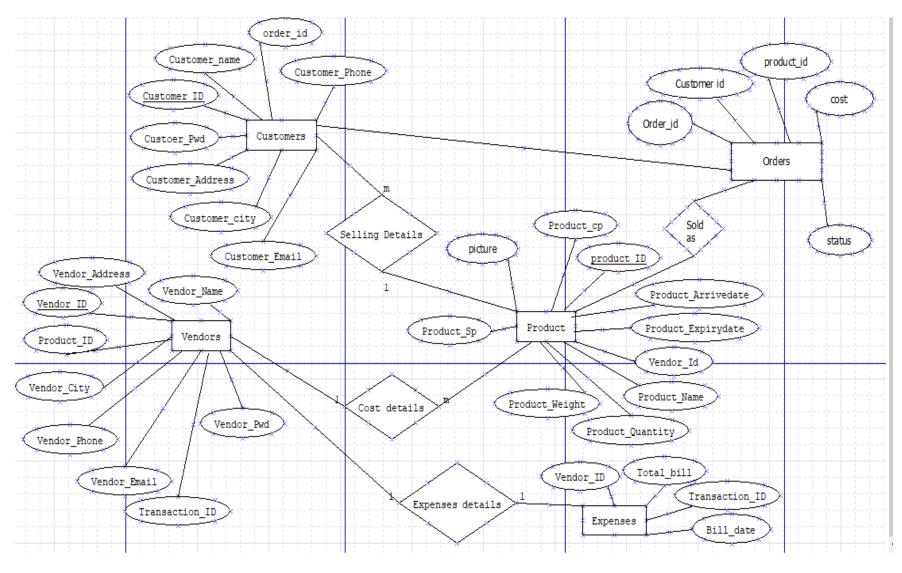
- Order\_ID ->Primary key of this table.
- Other keys = Product\_ID,Customer\_ID,Order\_Amount,Order\_Status.
- Product\_ID is the foreign key linked with product\_ID of products table.
- Customer\_ID is the foreign key linked with Custoemer\_ID of signup table.

## v) EXPENSES

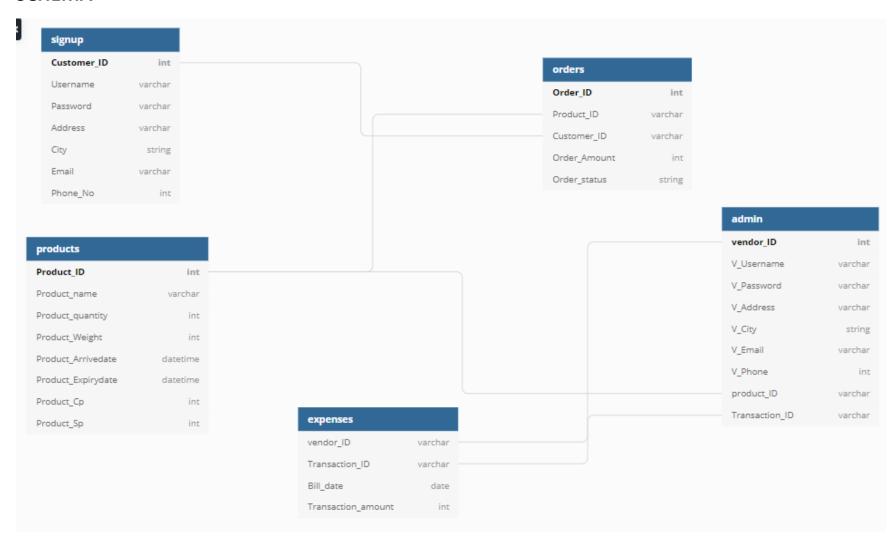
#### Attributes:

- No primary key in the table.
- Other keys = Vendor\_ID,Transaction\_ID,Bill\_date and Transaction\_Amount.
- Vendor\_ID is the Foreign key linked with Vendor\_ID of admin table.
- Transaction\_ID is the Foreign key linked with transaction\_ID of admin table.

## **ER DIAGRAM:**



## **SCHEMA**



#### **TABLES AND THEIR ATTRIBUTES:**

## A)Admin table

```
MySQL localhost:3306 shop SQL > CREATE TABLE Vendors_detail(V_Username varchar(20) Not Null Unique, Vendor_ID varchar(5), V_Password varchar(10) Not Null Unique, Vendor_ID varchar(5), V_Password varchar(10) Not Null Unique, V_Phone int Not Null Unique, Product_ID varchar(5) Not Null Unique, Transaction_ID varchar(5) Not Null Unique, Vendor_ID), foreign key(Product_ID) references Products_detail(Product_ID));
Query OK, 0 rows affected (0.1377 sec)
```

```
MySQL localhost:3306 shop SQL > ALTER TABLE Vendors_detail RENAME TO admin;
Query OK, 0 rows affected (0.0406 sec)
```

MySQL localhost				in;	
Field				Default	
V_Username	varchar(20)	NO	UNI	NULL	
Vendor_ID   V_Password	varchar(5)   varchar(10)	NO NO	PRI UNI	NULL NULL	
V_Address   V_City	varchar(50)   varchar(10)	NO NO		NULL NULL	
V_Email   V Phone	varchar(20)   int(11)	NO NO	UNI	NULL NULL	
Product_ID Transaction ID	varchar(5)	NO NO	UNI	NULL NULL	
	+				  +

## **B)Customers table**

MySQL localhost:3306 shop SQL > CREATE TABLE Customers\_detail(Username varchar(20) Not Null Unique,Password varchar(9) Not Null Unique,Customer\_ID varchar(5), Address varchar(50) Not Null Unique,City varchar(10) Not Null Unique,Email varchar(20) Not null Unique,Phone int Not Null Unique,primary key(Customer\_ID)); Query OK, 0 rows affected (0.0676 sec)

```
localhost:3306 shop SQL > desc signup;
Field
                            Null | Key | Default | Extra
              Type
              varchar(20)
Username
                            NO
                                    UNI
                                         NULL
              varchar(9)
Password
                            NO
                                         NULL
                                    UNI
Customer ID
              varchar(5)
                            NO
                                    PRI
                                         NULL
Address
              varchar(50)
                            NO
                                   UNI
                                         NULL
Email
              varchar(50)
                            NO
                                   UNI
                                         NULL
City
              varchar(10)
                            NO
                                          NULL
              int(11)
Phone
                            NO
                                         NULL
```

## C)products table

```
MySQL localhost:3306 shop SQL > CREATE TABLE Products_detail(
-> Product_ID varchar(5),
-> Product_Name varchar(50) Not Null,
-> Product_quantity int Not Null,
-> Product_weight int Not Null,
-> Product_Arrdate date Not Null,
-> Product_Exdate date,
-> Product_Cp int Not Null,
-> Product_Sp int Not Null,
-> primary key(Product_ID));
Ouery OK, 0 rows affected (0.6160 sec)
```

```
localhost:3306 shop SQL > desc products;
Field
                                 Null |
                                        Key | Default | Extra
                   Type
Product ID
                   varchar(5)
                                        PRI
                                              NULL
                                 NO
Product Name
                   varchar(50)
                                 NO
                                              NULL
Product quantity
                   int(11)
                                 NO
                                              NULL
Product weight
                   varchar(11)
                                 NO
                                              NULL
Product_Arrdate
                   date
                                 NO
                                              NULL
Product Exdate
                   date
                                 YES
                                              NULL
Product Cp
                   int(11)
                                 NO
                                              NULL
Product_Sp
                   int(11)
                                 NO
                                              NULL
```

## D)Orders table

```
MySQL localhost:3306 shop SQL > CREATE TABLE Orders_detail(
-> Order_ID varchar(5),
-> Customer_ID varchar(5),
-> Product_ID varchar(5),
-> Order_Amount int Not null,
-> Order_status varchar(15),
-> primary key(Order_ID),
-> foreign key(Customer_ID) references Customers_detail(Customer_ID),
-> foreign key(Product_ID) references Products_detail(Product_ID));
```

```
MySQL localhost:3306 shop SQL > desc orders;
 Field
               Type
                             Null
                                    Key
                                          Default
                                                    Extra
 Order ID
               varchar(5)
                                    PRI
                             NO
                                          NULL
 Customer ID
               varchar(5)
                             YES
                                    MUL
                                          NULL
               varchar(5)
 Product ID
                             YES
                                    MUL
                                          NULL
 Order Amount
               int(11)
                             NO
                                          NULL
 Order status
               varchar(15)
                             YES
                                          NULL
```

#### E)expenses table

Total Amount

int(11)

NO

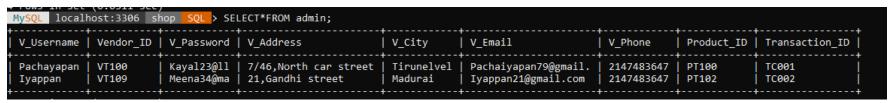
```
MySQL localhost:3306 shop SQL > CREATE TABLE Expenses_detail(
                              -> Vendor ID varchar(5),
                              -> Transaction ID varchar(5),
                              -> Bill date date Not Null,
                              -> Total Amount int Not Null,
                              -> foreign key(Vendor ID) references Vendors_detail(Vendor_ID),
                              -> foreign key(Transaction ID) references Vendors detail(Transaction ID));
Query OK, 0 rows affected (0.0803 sec)
MySQL localhost:3306 shop SQL > desc expenses
                                     -> ;
  Field
                                   Null
                                                  Default
                     Type
                                           Key
                                                              Extra
  Vendor ID
                     varchar(5)
                                   YES
                                           MUL
                                                  NULL
  Transaction ID
                     varchar(5)
                                   YES
                                           MUL
                                                  NULL
  Bill date
                     date
                                    NO
                                                  NULL
```

NULL

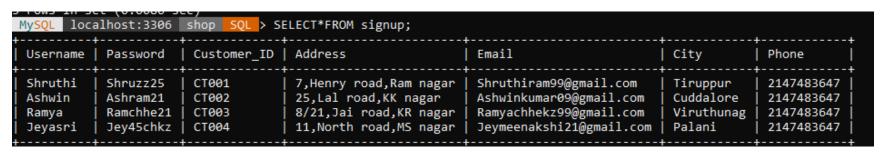


#### **ENTRIES OF THE TABLE:**

## 1)ADMIN



#### 2)CUSTOMERS



# 3)PRODUCTS

MySQL localhost:3306 sho	p SQL > SELECT*FROM	products;					
Product_ID   Product_Name	Product_quantity	Product_weight	Product_Arrdate	Product_Exdate	Product_Cp	Product_Sp	
PT100	78   6		0000-00-00   0000-00-00	0000-00-00   0000-00-00	4   60	5     65	

Date is truncated.

# 4)orders

MySQL loca	alhost:3306 s		LECT*FROM ORDERS	
Order_ID	Customer_ID		Order_Amount	
0T001   0T002   0T003   0T005	СТ001 СТ003 СТ004 СТ002	PT100   PT102   PT100   PT100	2   1   3   10	NOT DELIVERED   NOT DELIVERED   NOT DELIVERED   DELIVERED

#### **TRIGGERS:**

Once a order is placed, The quantity of the respective item ordered will change in products table.

## **Trigger created:**

```
MySQL localhost:3306 shop SQL > DELIMITER $$

MySQL localhost:3306 shop SQL > CREATE OR REPLACE TRIGGER order_insert

-> BEFORE INSERT ON orders
-> FOR EACH ROW
-> BEGIN
-> UPDATE products SET
-> products.Product_Quantity=products.Product_Quantity-new.Order_Amount
-> WHERE products.Product_ID=new.Product_ID;
-> END$$

Query OK, 0 rows affected (0.0590 sec)
```

## **Before product quantity**

My <mark>SQL</mark> localh	nost:3306 shop	SQL > SELECT*FROM	products;				
Product_ID	Product_Name	Product_quantity	Product_weight	Product_Arrdate	Product_Exdate	Product_Cp	Product_Sp
PT100	Pen	78	25g	0000-00-00	0000-00-00	4	5
PT102	Grapes	6	20kg	0000-00-00	0000-00-00	60	65
+		+	+	+	+		++

## Before product quantity

TT						
Product_ID   Product_Name	Product_quantity	Product_weight	Product_Arrdate	Product_Exdate	Product_Cp	Product_Sp
PT100		25g   20kg	0000-00-00   0000-00-00	0000-00-00 0000-00-00	4 60	5   65

#### **VIEWS:**

## 1)A view for particular customers

#### **INSERTION**

```
MySQL localhost:3306 shop SQL > INSERT INTO Reg_Customer values('Latha','latha69','CT007','23,Kl street,Lal nagar','vallabilatha69@gmail.com','Tiruppur','98 25173425');
Query OK, 1 row affected, 1 warning (0.0180 sec)
Warning (code 1264): Out of range value for column 'Phone' at row 1

MySQL localhost:3306 shop SQL > SELECT*FROM Reg_customer;

| Username | Password | Customer_ID | Address | Email | City | Phone |

| Shruthi | Shruzz25 | CT001 | 7,Henry road,Ram nagar | Shruthiram99@gmail.com | Tiruppur | 2147483647 |

| Latha | latha69 | CT007 | 23,Kl street,Lal nagar | vallabilatha69@gmail.com | Tiruppur | 2147483647 |
```

#### **UPDATION:**

```
MySQL localhost:3306 shop SQL > UPDATE Reg Customer SET Username='Ashwinkumar' WHERE Customer ID='CT007';
Duery OK, 1 row affected (0.0088 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MySQL localhost:3306 shop SQL > SELECT*FROM Reg Customer;
 Username
               Password |
                          Customer ID
                                         Address
                                                                  Email
                                                                                             City
                                                                                                         Phone
                                                                  Shruthiram99@gmail.com
 Shruthi
               Shruzz25
                          CT001
                                         7, Henry road, Ram nagar
                                                                                              Tiruppur
                                                                                                         2147483647
                                                                  vallabilatha69@gmail.com
                                         23,Kl street,Lal nagar
 Ashwinkumar
               latha69
                          CT007
                                                                                              Tiruppur
                                                                                                         2147483647
 rows in set (0.0013 sec)
      localhost:3306 shop SQL > SELECT*FROM Customers detail;
 Username
               Password
                           Customer ID
                                          Address
                                                                   Email
                                                                                              City
                                                                                                            Phone
 Shruthi
               Shruzz25
                           CT001
                                          7, Henry road, Ram nagar
                                                                   Shruthiram99@gmail.com
                                                                                               Tiruppur
                                                                                                            2147483647
 Ashwin
               Ashram21
                           CT002
                                          25, Lal road, KK nagar
                                                                   Ashwinkumar@9@gmail.com
                                                                                               Cuddalore
                                                                                                            2147483647
                                                                   Ramyachhekz99@gmail.com
               Ramchhe21
                                          8/21, Jai road, KR nagar
                                                                                               Viruthunag
 Ramya
                           CT003
                                                                                                            2147483647
                                                                   Jeymeenakshi21@gmail.com
 Jeyasri
               Jey45chkz
                           CT004
                                          11, North road, MS nagar
                                                                                               Palani
                                                                                                            2147483647
                                                                   vallabilatha69@gmail.com
 Ashwinkumar
                                          23,Kl street,Lal nagar
               latha69
                           CT007
                                                                                               Tiruppur
                                                                                                            2147483647
```

#### **DELETION:**

```
MySQL localhost:3306 shop SQL > DELETE FROM Reg_Customer WHERE Username LIKE '%I%';
ERROR: 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`shop`.`orders_detail`, CONSTRAINT `orders_detail_ibfk_1` FOREIGN KEY
(`Customer_ID`) REFERENCES `customers_detail` (`Customer_ID`))
```

## 2) VIEW FOR ORDERS

Here Particular columns can be selected as Some of the columns can have null values in the orders table (unlike customers table which doesn't have that property). So we are choosing two columns of the orders table and creating view out of it.

#### **INSERTION**

```
MySQL localhost:3306 shop SQL > INSERT INTO Order_list values('OT090','20');
Query OK, 1 row affected (0.0093 sec)
MySQL localhost:3306 shop SQL > SELECT*FROM Order_list;
 Order ID | Order Amount |
 OT001
                       2
 OT003
                       3
 OT005
                      10
 OT010
                       5
 OT090
                      20
5 rows in set (0.0025 sec)
MySQL localhost:3306 shop SQL > SELECT*FROM orders;
 Order_ID | Customer_ID | Product_ID | Order_Amount |
            CT001
 OT001
                          PT100
                                                  2
                                                     NOT DELIVERED
 OT002
            CT003
                          PT102
                                                     NOT DELIVERED
                                                  1
 OT003
            CT004
                          PT100
                                                  3
                                                     NOT DELIVERED
                                                 10 | DELIVERED
 OT005
            CT002
                          PT100
 OT010
            CT002
                          PT100
                                                 5 | DELIVERED
 OT090
            NULL
                          NULL
                                                 20 NULL
 0T101
            NULL
                          NULL
                                                  1 | NULL
7 rows in set (0.0016 sec)
```

#### **UPDATION**

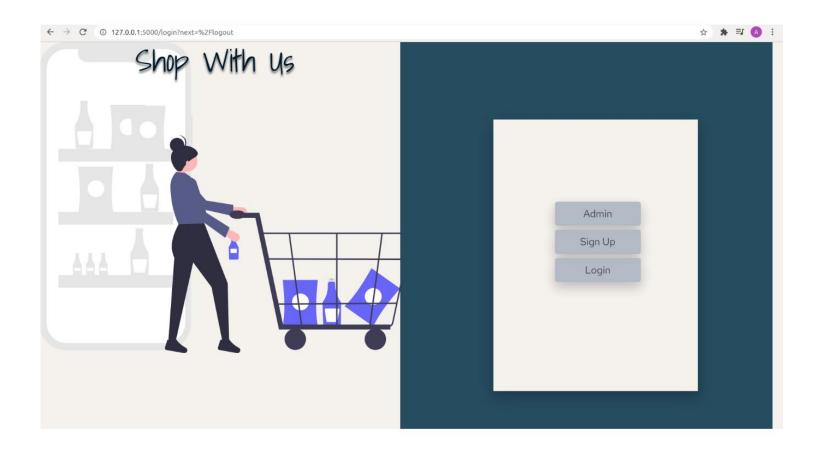
```
MySQL localhost:3306 shop SQL > UPDATE Order_list SET Order_ID='OT200' WHERE Order_Amount='5';
Query OK, 1 row affected (0.0105 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MySQL localhost:3306 shop SQL > SELECT*FROM Order list;
 Order ID | Order Amount
  OT001
                        2
                        3
  OT003
  OT005
                       10
  OT090
                       20
  OT200
                        5
5 rows in set (0.0028 sec)
MySQL localhost:3306 shop SQL > SELECT*FROM orders;
 Order_ID | Customer_ID | Product_ID | Order_Amount |
                                                      Order_status
  OT001
            CT001
                           PT100
                                                       NOT DELIVERED
 OT002
                                                      NOT DELIVERED
            CT003
                           PT102
                                                   1
                                                      NOT DELIVERED
  OT003
             CT004
                           PT100
  OT005
            CT002
                                                  10
                                                      DELIVERED
                           PT100
  OT090
            NULL
                          NULL
                                                  20
                                                       NULL
  0T101
            NULL
                          NULL
                                                  1
                                                       NULL
  OT200
            CT002
                           PT100
                                                      DELIVERED
7 rows in set (0.0023 sec)
```

#### **DELETION**

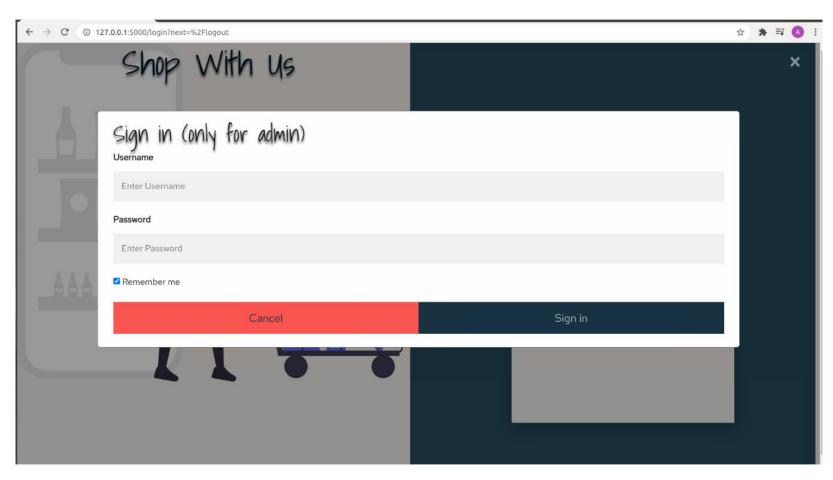
```
MySQL localhost:3306 shop SQL > DELETE FROM Order list WHERE Order ID='OT200';
Query OK, 1 row affected (0.0190 sec)
MySQL localhost:3306 shop SQL > SELECT*FROM Order_list;
 Order_ID | Order_Amount
 OT001
                       2
 OT003
                       3
 OT005
                      10
 OT090
                      20
4 rows in set (0.0029 sec)
MySQL localhost:3306 shop SQL > SELECT*FROM orders;
 Order ID | Customer ID | Product ID | Order Amount | Order status
 OT001
            CT001
                          PT100
                                                     NOT DELIVERED
                                                 1 NOT DELIVERED
 OT002
            CT003
                          PT102
 OT003
            CT004
                          PT100
                                                 3 | NOT DELIVERED
 OT005
            CT002
                          PT100
                                                 10 | DELIVERED
 OT090
            NULL
                          NULL
                                                 20 NULL
 0T101
            NULL
                          NULL
                                                  1 | NULL
6 rows in set (0.0059 sec)
MySQL localhost:3306 shop SQL >
```

## **FRONT-END**

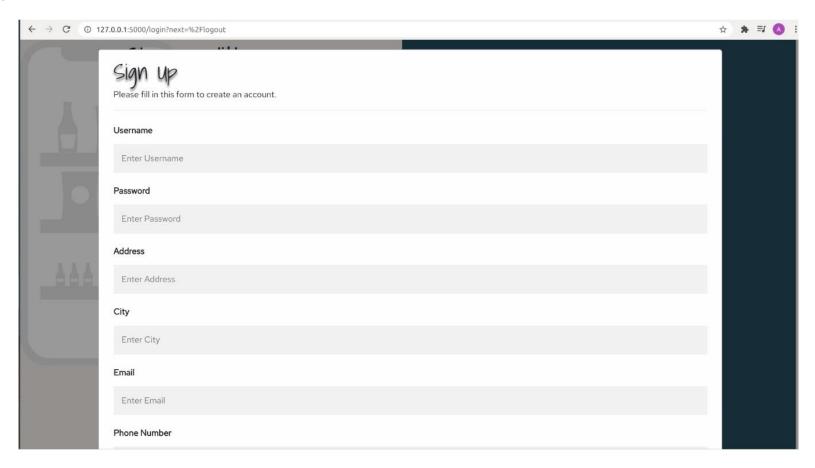
# 1)ENTRY PAGE

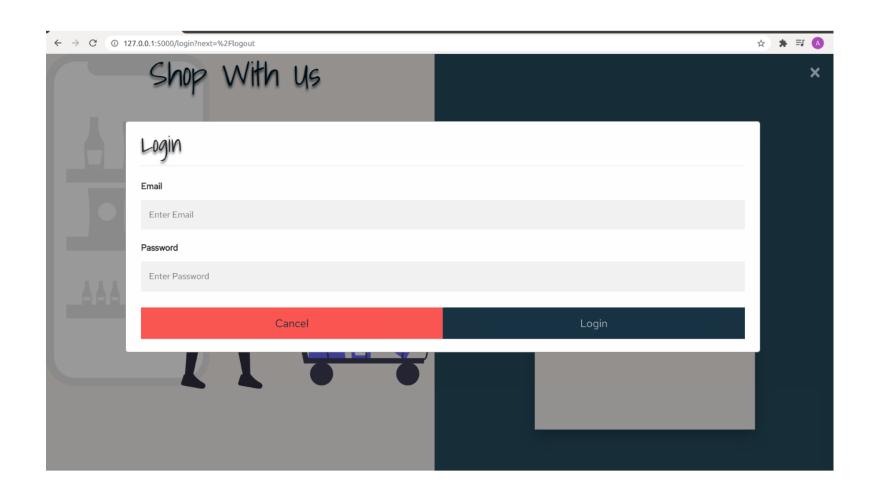


## 2)ADMIN SIGNIN

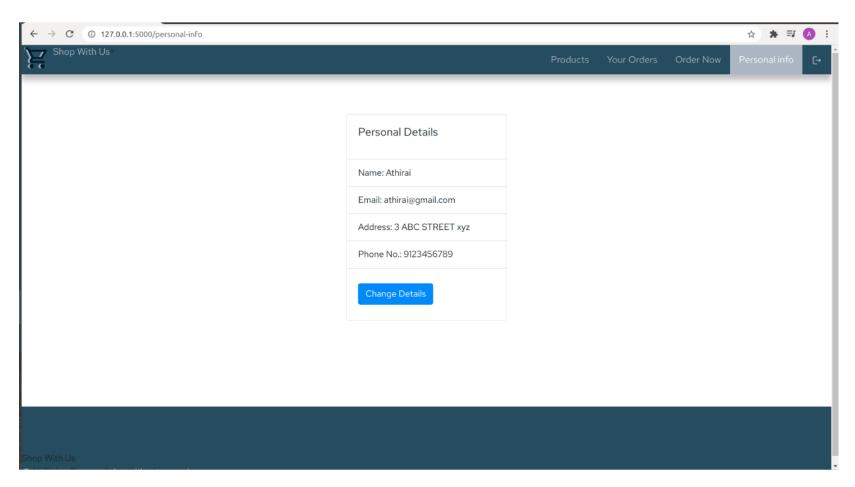


## 3)CUSTOMER LOGIN AND SIGNUP

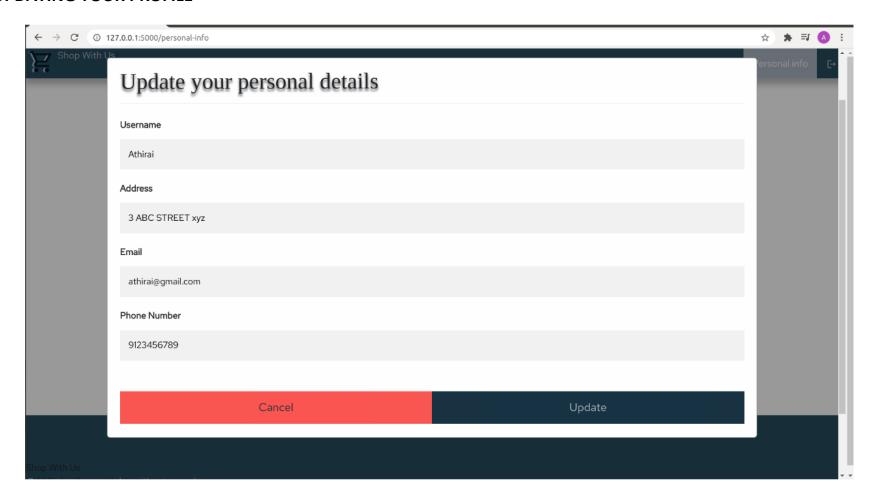




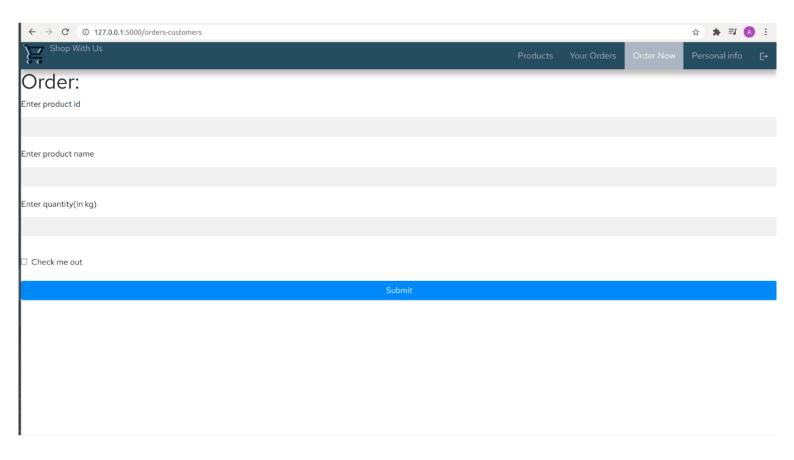
## 4)CUSTOMERS PERSONAL INFO



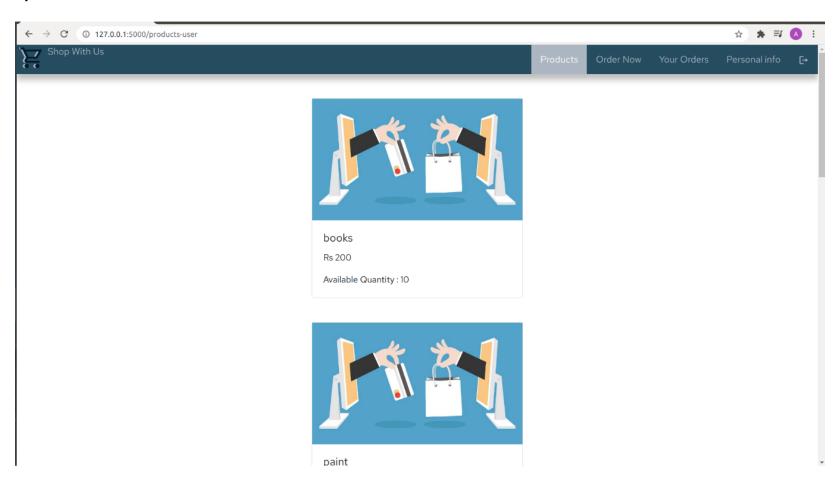
## **UPDATING YOUR PROFILE**



## **5)PLACING ORDERS**



## 6)AVAILABLE PRODUCTS IN THE SHOP



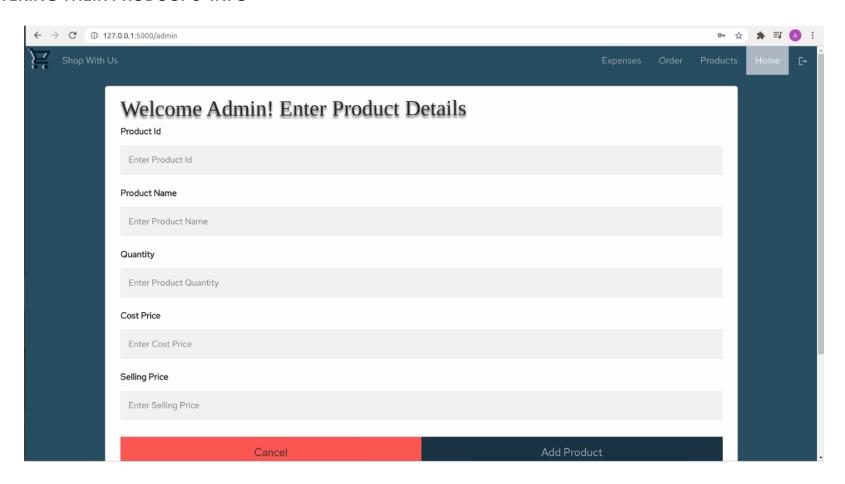
# 7)PLACED ORDERS



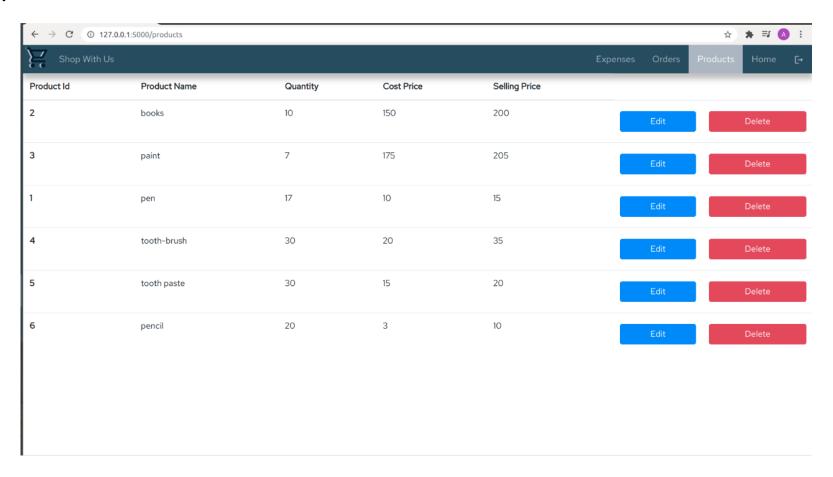


## 8)ADMIN PAGE

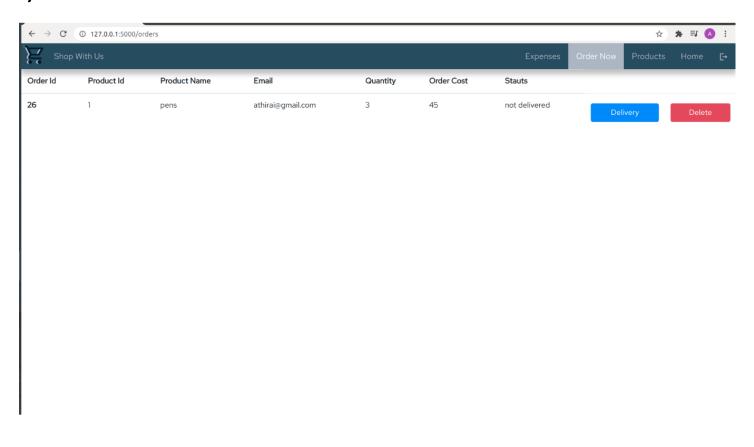
## **ENTERING THEIR PRODUCT'S INFO**



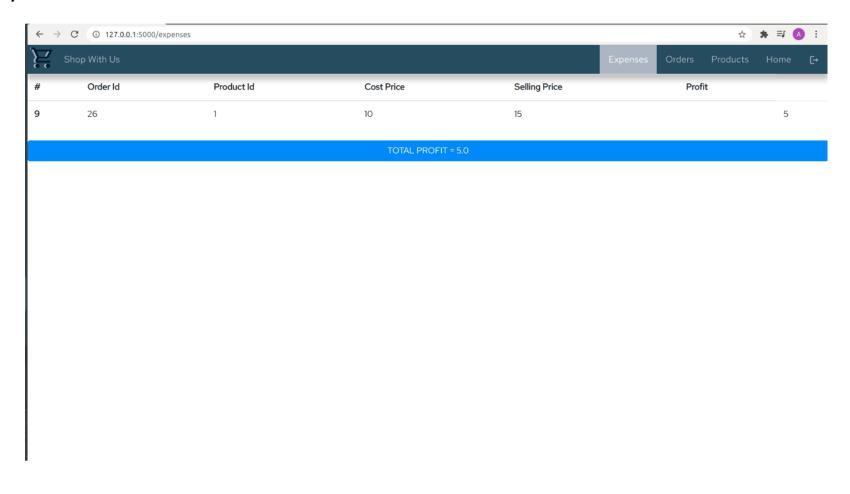
# 9)INFOS OF ALL PRODUCTS THEY ENTERED



# **10)DELIVERY STATUS OF THEIR PRODUCTS**



# 11)TOTAL PROFIT FOR THEM



#### **FRONT END:**

Home, Customer = Dhivya Shri, Athirai

Admin = Athirai, Niruthiya Shri

## **BACK END:**

Flask integration: Athirai, For products: Dhivya

SQL: Design- All together, Creation of tables, views, design- Niruthiya Shri

Insertion, Updation, Methods-Athirai, Dhivya Shri, Niruthiya Shri

