Sri Lanka Institute of Information Technology

MLB_05.01_3

Online Fashion Store

Information System and Data Modelling– IT1090

B.Sc. (Hons) in Information Technology

Group Details

Group Number: MLB_05.01_3

Project Title: Online Fashion Store

Campus: Malabe Campus

Submission Date:

	Student ID	Student Name	Email	Contact Number
1	**IT20062088**	**EDIRISINGHE.D.B.**	**it20062088@my.sliit.lk**	**0766059061**
2	IT20150648	JAYAKODY.J.A.M.G.	it20150648@my.sliit.lk	0766927655
3	IT20602550	RATHNAYAKA.D.A.L.	it20602550@my.sliit.lk	0774933881
4	IT20298258	JAYAMANNA.H.E.	it20298258@my.sliit.lk	0710441728
5	IT20234034	MADIWILAGE.I.E.	it20234034@my.sliit.lk	0778661910

Content

1.Hypothetical scenario

The system demonstrates an online fashion store (TRENDZ). The customer is the main character in this system. All user wishes to use TRENDZ should get registered to the system first of all selected personal data will be retrieved they enter the password and user name to enter the site. TRENDZ provide various methods to pay for goods and services payment can be made via online or cash on delivery. TRENDZ has various types of clothes, shoes and accessories for all types of customers (women, men, kids) customer can select the size color. TRENDZ has talented staff they maintain the site efficiently and effectively check customer feedback and reports in order to make changes in the site. All customer details are stored in Microsoft SQL database safely only staff can access the database. The intension of our project is to transfer manual traditional fashion store to an online fashion store. Most traditional fashion stores have to come up with all the manual methodologies as for selecting items, order check-out, make reports etc. due to these we obtain lots of disadvantages like wasting time and human energy, searches take longer and are less efficiency, left behind on the information highway, putting limits on the future. In our online fashion store, the whole manual process can be assisted in a way to track order, user details, simple and easy to use.

2. Design Database for the system

2.1 Requirements Analysis

Functional Requirements

1.Customer

- should login to the system before see any content.
- user should be able to view the home page.
- user should be able to browse different categories.
- should be able to add any number of items to the shopping cart.
- be able to pay from credit cards/ debit cards/ cash.
- User can make payment.
- should be able to cancel the order and request refund.
- should be able to remove and add items shopping cart.

2. Staff

- must login to the system first.
- Can do all the tasks that member can do.
- Should be able to view users' information.
- Can update items.
- Can remove items from the main display.

- Can Update databases.
- Able to set up the bugs of the system.
- Must get the feedbacks of the members.
- Remove accounts from the system.
- Approve and decline payments.

Non-functional Requirements

1. Performance Requirements

- Response time
- Should be available
- Data should be accurate
- Manipulate expected and unexpected errors.
- Be able to handle big data
- Should be user friendly

2. Security Requirements

- Be at least two servers one main server and one backup server.
- Follow customer data protection rules (case in point: GDPR in Europe).
- User authentication and validation of members using their unique member ID.
- Proper accountability.
- Only administrator will see and manage all member account.
- For a safety login CAPTCHA will be used.
- Prevent some activities only for admins.
- Strong firewall is needed to protect the database.

2.2 Data Requirements

1. Customer
    - Customer ID(Member_ID)
    - Name(name)
        - ✦ First Name (Full_name)
        - ✦ Last Name (Last_name)
    - Email (Email)
    - Phone Number (Phone_num)
    - Age(age)
    - Gender (Gender)

2. product
    - product name(product_title)
    - product ID(product_ID)
    - product type
    - Price(price)
    - discount
    - Product_ category(product_type)

3. Staff
    - Staff ID(Staff_ID)
    - Name(name)
    - Phone Number (Phone_Number)
    - Email (Email)
    - NIC(NIC)

4. dependents
    - dependent name(dependent_name)
    - dependent ID
    - date of birth
    - gender

5. Feedback
    - Feedback ID(Feedback_ID)
    - Feedback (Feedback)

6. Report
    - Report Number (Report_ID)
    - Report Description(Report_Description)
    - Report ID(Report_NO)

7. cart
    - Cart ID (cart_ID)
    - Cart quantity(cart_quantity)
    - Cart total cost(cart_total)

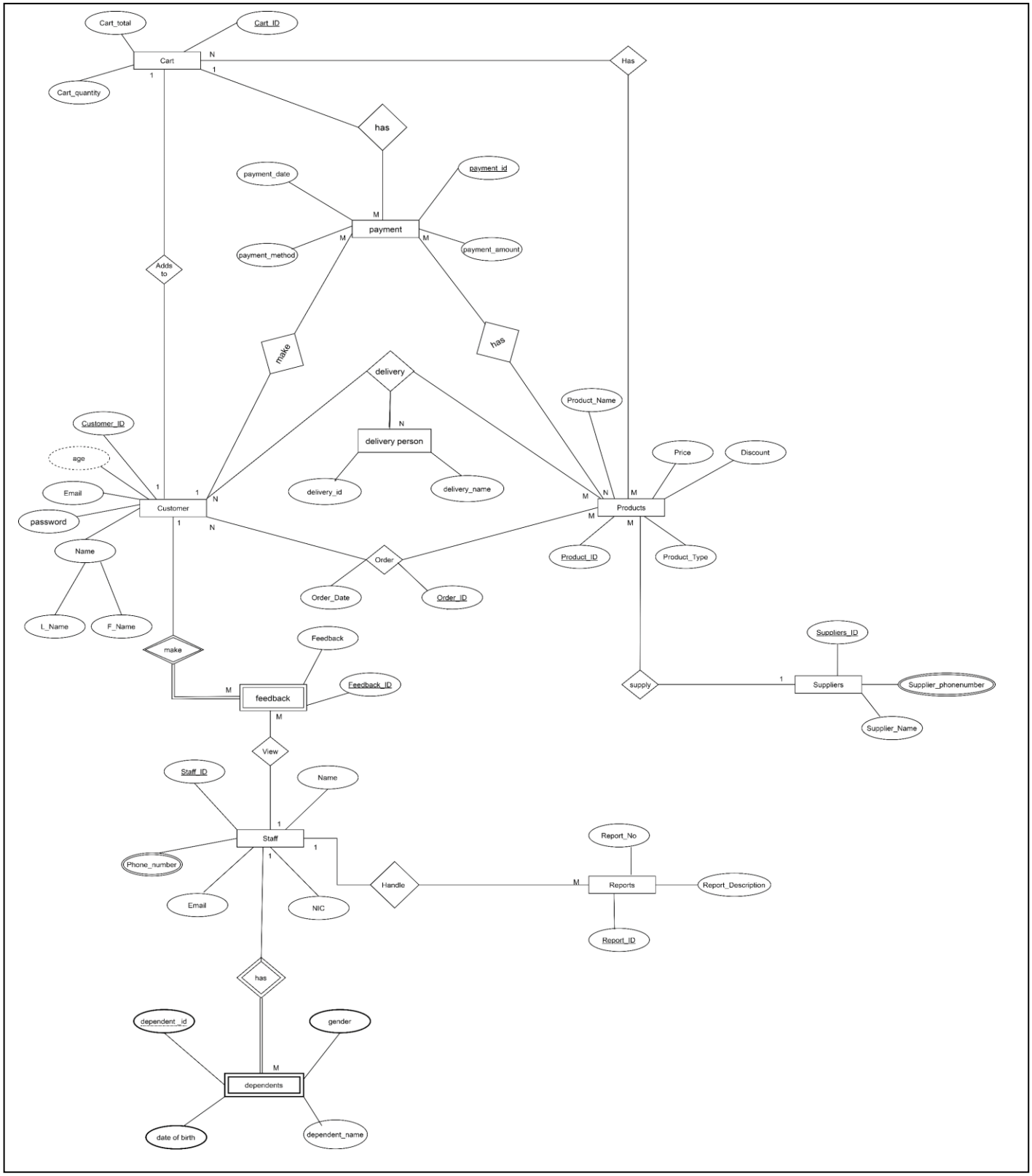
8. supplier
    - Supplier id(supplier_ID)
    - Supplier name(supplier_name)
    - Supplier phone number(supplier_number)

9. delivery person
    - Delivery ID
    - Delivery name

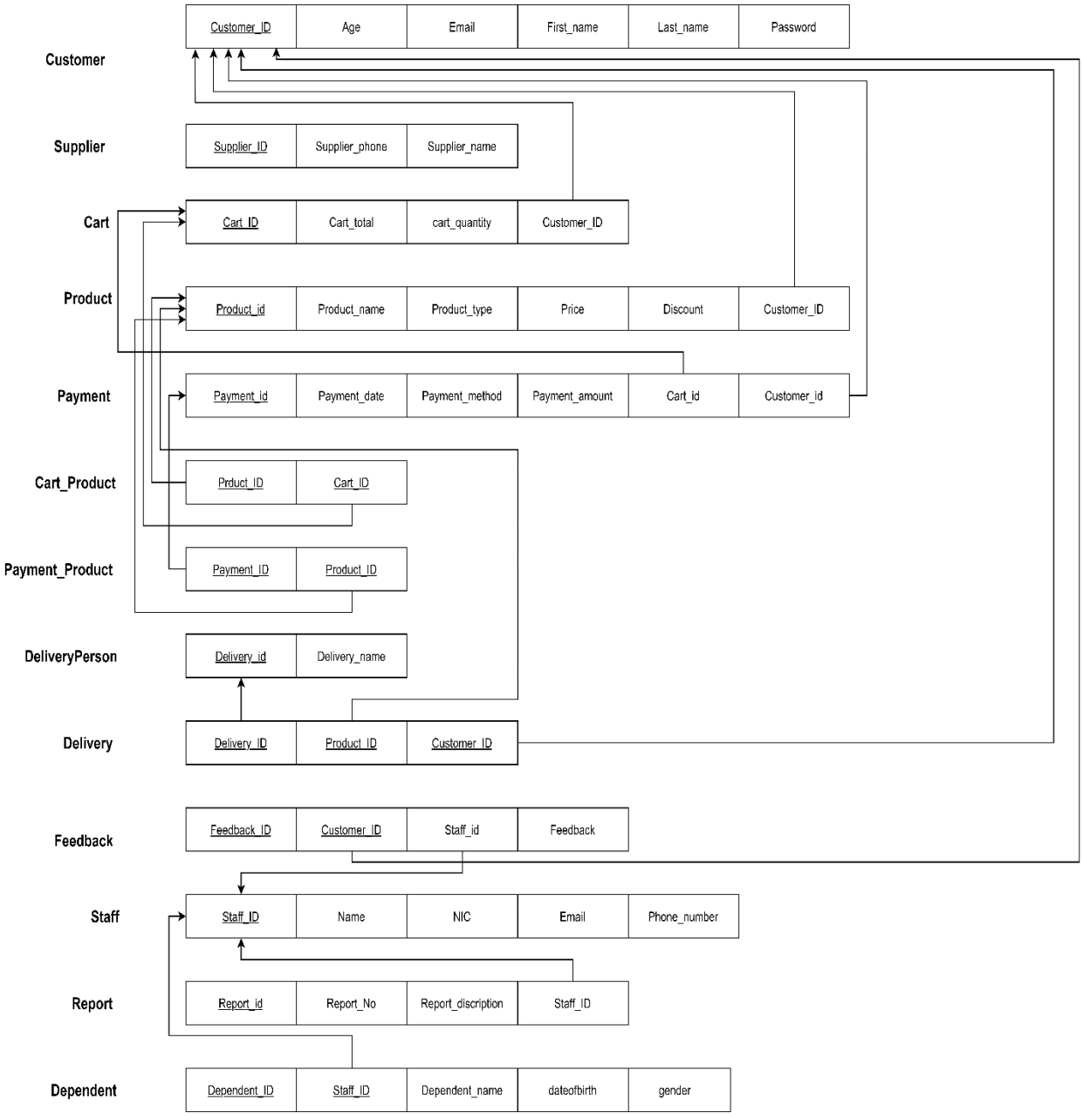
10. payment

- Payment ID
- Payment date
- Payment method
- Payment amount

2.3 ER-DIAGRAM



2.4 Schema


Customer
Customer_ID
Age
Email
First_name
Last_name
Password
Supplier
Supplier_ID
Supplier_phone
Supplier_name
Cart
Cart_ID
Cart_total
cart_quantity
Customer_ID
Product
Product_id
Product_name
Product_type
Price
Discount
Customer_ID
Payment
Payment_id
Payment_date
Payment_method
Payment_amount
Cart_id
Customer_id
Cart_Product
Prduct_ID
Cart_ID
Payment_Product
Payment_ID
Product_ID
DeliveryPerson
Delivery_id
Delivery_name
Delivery
Delivery_ID
Product_ID
Customer_ID
Feedback
Feedback_ID
Customer_ID
Staff_id
Feedback
Staff
Staff_ID
Name
NIC
Email
Phone_number
Report
Report_id
Report_No
Report_discription
Staff_ID
Dependent
Dependent_ID
Staff_ID
Dependent_name
dateofbirth
gender

2.5 SQL Commands to create the data base tables

```
/* MLB_05.01_3 Online Fashion Store*/


create table customer(
customer_ID char(6) NOT NULL,
F_Name varchar(255) NOT NULL,
L_Name varchar(255),
Email varchar(255),
Age varchar(3),
Password char(60) NOT NULL,
constraint customer_PK PRIMARY KEY(customer_ID)
);


create table supplier(
supplier_ID char(6) NOT NULL,
supplier_phone varchar (13),
supplier_name varchar (255),
constraint supplier_PK PRIMARY KEY(supplier_ID)
);

create table cart(
cart_ID char(6) NOT NULL,
cart_total varchar (10),
cart_quantity char (5),
customer_ID char (6),
constraint Cart_PK PRIMARY KEY(cart_ID),
constraint cart_FK FOREIGN KEY(customer_ID) REFERENCES customer(customer_ID)

);

create table product(
product_ID char(6) NOT NULL,
product_name varchar(255),
product_type varchar(255),
price float,
discount int,
customer_ID char (6),
constraint product_PK PRIMARY KEY(product_ID),
constraint product_FK FOREIGN KEY(customer_ID) REFERENCES customer(customer_ID)

);



create table payment(
payment_ID char (6) NOT NULL,
payment_amount varchar (255),
payment_date date,
payment_method varchar (50),
cart_ID char (6),
customer_ID char (6),
```

```
constraint payment_PK PRIMARY KEY(payment_ID),
constraint payment_FK1 FOREIGN KEY(cart_ID) REFERENCES cart(cart_ID),
constraint payment_FK2 FOREIGN KEY(customer_ID) REFERENCES customer(customer_ID)
);


create table cart_product(
product_ID char (6) NOT NULL,
cart_ID char (6) NOT NULL,
constraint cart_product_PK PRIMARY KEY(product_ID,cart_ID),
constraint cart_product_FK1 FOREIGN KEY(product_ID) REFERENCES product(product_ID),
constraint cart_product_FK2 FOREIGN KEY(cart_ID) REFERENCES cart(cart_ID)
);




create table payment_product(
payment_ID char (6),
product_ID char (6),
constraint payment_product_PK PRIMARY KEY(payment_ID,product_ID),
constraint payment_product_FK1 FOREIGN KEY(payment_ID) REFERENCES payment(payment_ID),
constraint payment_product_FK2 FOREIGN KEY(product_ID) REFERENCES product(product_ID)
);


create table deliveryperson(
delivery_ID char (6),
person_name varchar (255),
constraint deliveryperson_PK PRIMARY KEY(delivery_ID)

);


create table delivery (
delivery_ID char (6),
product_ID char(6),
customer_ID char (6),
constraint delivery_PK PRIMARY KEY(delivery_ID,product_ID,customer_ID),
constraint delivery_FK1 FOREIGN KEY (delivery_ID) REFERENCES deliveryperson(delivery_ID),
constraint delivery_FK2 FOREIGN KEY (product_ID) REFERENCES product(product_ID),
constraint delivery_FK3 FOREIGN KEY (customer_ID) REFERENCES customer(customer_ID)
);


create table staff(
staff_ID char(6) NOT NULL,
staff_name varchar (255),
NIC varchar (12),
phone_number varchar (13),
email varchar (255),
constraint staff_PK PRIMARY KEY(staff_ID)
);


create table feedback(
feedback_ID varchar(6) NOT NULL,
feedback varchar(255),
```

```
customer_ID char (6),
staff_ID char (6),
constraint feedbak_PK PRIMARY KEY(feedback_ID,customer_ID),
constraint feedback_FK1 FOREIGN KEY (customer_ID) REFERENCES customer(customer_ID),
constraint feedback_FK2 FOREIGN KEY (staff_ID) REFERENCES staff(staff_ID)

);



create table report(
report_ID char(6) NOT NULL,
report_no varchar (50),
report_desription varchar (255),
staff_ID char (6),
constraint report_PK PRIMARY KEY(report_ID),
constraint report_FK FOREIGN KEY (staff_ID) REFERENCES staff(staff_ID)

);


create table dependents(
dependent_ID char (6) NOT NULL,
staff_ID char (6) NOT NULL,
dateofbirth date,
gender varchar (50),
dependent_name char (255) NOT NULL,
constraint dependents_PK PRIMARY KEY(dependent_ID,staff_ID),
constraint feedback_FK FOREIGN KEY (staff_ID) REFERENCES staff(staff_ID)


);
```

2.6 Special Performance

- Always we maintain and update the server.
- We have a backup server.
- The system is always up to date.

2.7 Special Security Requirements

- We use encryption process for passwords.
- User information cannot be accessed by customers.
- There is a good encryption to store personal data.
- We have various customer validation methods.

3. Implemented samples of data

```
INSERT INTO Customer VALUES ('10001','Hashini','Nishadi','Hashi@123', '25','123');
INSERT INTO Customer VALUES('10002','Zaid','Ahamed', 'Zaiid@321' , '26','1234');
INSERT INTO Customer VALUES('10003', 'Jeni','Mashi','Jenii@999', '27','12345');
INSERT INTO Customer VALUES('10004', 'Siyath','Nimesha', 'Wela@456', '28','123456');
INSERT INTO Customer VALUES('10005', 'Ashini','Kaushi', 'Ashii@321', '29','1234567');
INSERT INTO Customer VALUES('10006', 'Nime','Gunarathne', 'Nimee@9876', '30','12345678');


INSERT INTO supplier VALUES('10091','0776543','sunil');
INSERT INTO supplier VALUES('10092','8978778','nimal' );
INSERT INTO supplier VALUES('10093', '98869697','kamal');
INSERT INTO supplier VALUES('10094', '787089','isura');
INSERT INTO supplier VALUES('10095', '78709890','malsha');
INSERT INTO supplier VALUES('10096', '70879888','hiru');



INSERT INTO cart VALUES('10061','10000','10','10001');
INSERT INTO cart VALUES('10062','20000','20','10002');
INSERT INTO cart VALUES('10063', '34000','30','10003');
INSERT INTO cart VALUES('10064', '44565','40','10004');
INSERT INTO cart VALUES('10065', '5655','50','10005');
INSERT INTO cart VALUES('10066', '69990','60','10006');

INSERT INTO product VALUES('10011','PRADA','garment','3000 ','1000','10001');
INSERT INTO product VALUES('10012','CHANEL','garment', ' 4000','1000','10002');
INSERT INTO product VALUES('10013', 'ARMANI','garment', ' 5000' ,'1000','10003');
INSERT INTO product VALUES('10014', 'BURBERRY','garment','6000' ,'1000','10004');
INSERT INTO product VALUES('10015', 'HERMES.','garment', '7000' ,'1000','10005');
INSERT INTO product VALUES('10016', 'FENDI','garment', '8000','1000','10006');

INSERT INTO payment VALUES('10071','24000','2021-09-30','Cash','10061','10001');
INSERT INTO payment VALUES('10072','29000','2021-09-30','card','10062','10002');
INSERT INTO payment VALUES('10073','20600','2021-09-30','Cash','10063','10003');
INSERT INTO payment VALUES('10074','207800','2021-09-30','Card','10064','10004');
INSERT INTO payment VALUES('10075','40000','2021-09-30','Cash','10065','10005');
INSERT INTO payment VALUES('10076','30000','2021-09-30','Card','10066','10006');


INSERT INTO cart_product VALUES('10011','10061');
INSERT INTO cart_product VALUES('10012','10062');
INSERT INTO cart_product VALUES('10013','10063');
INSERT INTO cart_product VALUES('10014','10064');
INSERT INTO cart_product VALUES('10015','10065');
INSERT INTO cart_product VALUES('10016','10066');


INSERT INTO payment_product VALUES('10071','10011');
INSERT INTO payment_product VALUES('10072','10012');
INSERT INTO payment_product VALUES('10073','10013');
INSERT INTO payment_product VALUES('10074','10014');
```

```
INSERT INTO payment_product VALUES('10075','10015');
INSERT INTO payment_product VALUES('10076','10016');

INSERT INTO deliveryperson VALUES('11001','Dimuth');
INSERT INTO deliveryperson VALUES('11002','jayawira');
INSERT INTO deliveryperson VALUES('11003','sumith');
INSERT INTO deliveryperson VALUES('11004','adikari');
INSERT INTO deliveryperson VALUES('11005','suamana');
INSERT INTO deliveryperson VALUES('11006','hirusha');

INSERT INTO delivery VALUES('11001','10011','10001');
INSERT INTO delivery VALUES('11002','10012','10002');
INSERT INTO delivery VALUES('11003','10013','10003');
INSERT INTO delivery VALUES('11004','10014','10004');
INSERT INTO delivery VALUES('11005','10015','10005');
INSERT INTO delivery VALUES('11006','10016','10006');



INSERT INTO staff VALUES('10021','Hashini','131831981','076602455','Hashi@123');
INSERT INTO staff VALUES('10022','sashini','13148366981','076602235','sashi@123');
INSERT INTO staff VALUES('10023','pashini','134333981','076502235','tashi@123');
INSERT INTO staff VALUES('10024','ishini','13184341','0766022455','Hahhi@123');
INSERT INTO staff VALUES('10025','Hashi','131834341','076602245','Hfshi@123');
INSERT INTO staff VALUES('10026','ashini','1313434','0766022675','Haklii@123');


INSERT INTO feedback VALUES('10031','great','10001','10021');
INSERT INTO feedback VALUES('10032','good','10002','10022');
INSERT INTO feedback VALUES('10033','great','10003','10023');
INSERT INTO feedback VALUES('10034','good','10004','10024');
INSERT INTO feedback VALUES('10035','nice','10005','10025');
INSERT INTO feedback VALUES('10036','happy','10006','10026');


INSERT INTO report VALUES('10041','1','financial reports','10021');
INSERT INTO report VALUES('10042','2','managment reports','10022' );
INSERT INTO report VALUES('10043', '3','administration reports','10023');
INSERT INTO report VALUES('10044', '4','database reports','10024');
INSERT INTO report VALUES('10045', '5','accounting reports','10025');
INSERT INTO report VALUES('10046', '6','employee reports','10026');

INSERT INTO dependents VALUES('10111','10021','1989-09-19','male','isura');
INSERT INTO dependents VALUES('10112','10022','1979-01-19','female','malshi');
INSERT INTO dependents VALUES('10113','10023','1998-08-09','male','thisura');
INSERT INTO dependents VALUES('10114','10024','1969-05-09','female','hashini');
INSERT INTO dependents VALUES('10115','10025','1989-09-17','male','idura');
INSERT INTO dependents VALUES('10116','10026','2000-01-01','female','Ashini');
```

Thank You.