



# **CLOTHES STORE DB**

**DBMS GROUP(L) PROJECT**

**IIT PALAKKAD**



## Participants:

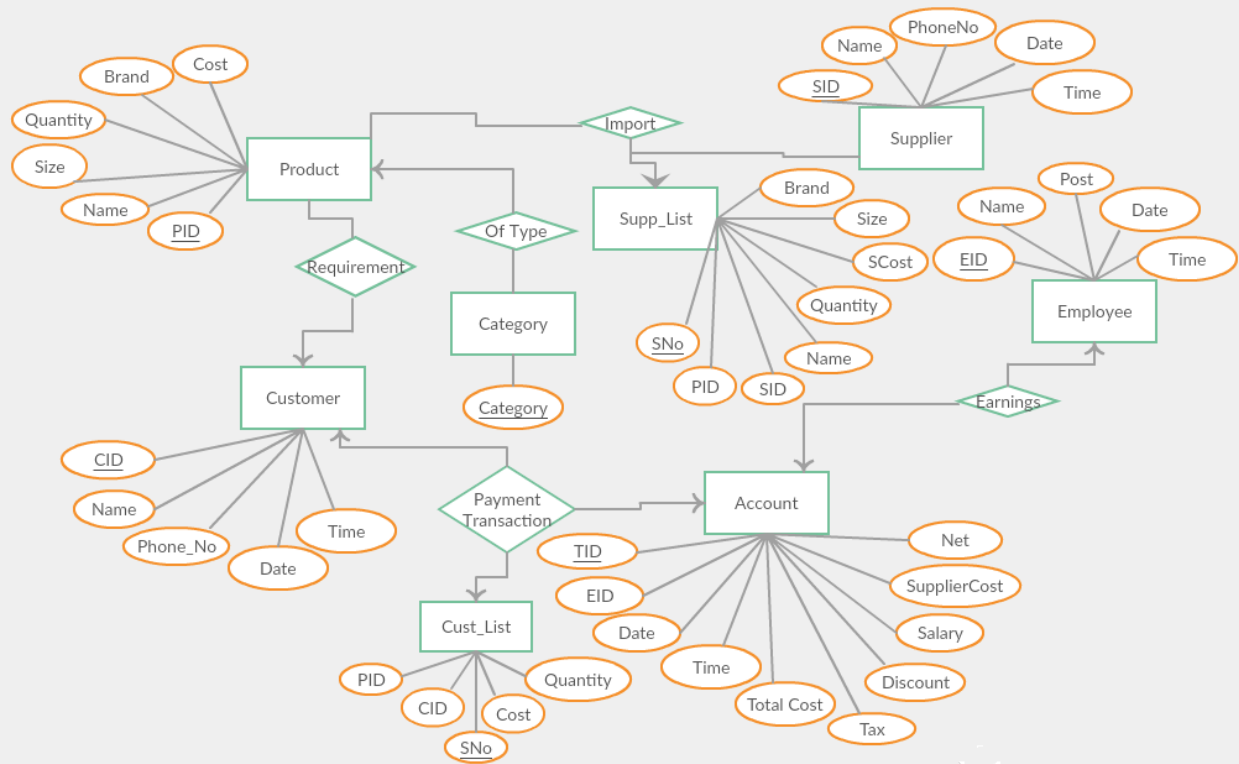
- 1) Deekshith P(111501018)
- 2) Vinay Krishna Ande(111501004)
- 3) Roubal (111501027)
- 4) Vishwajeet kawale(111501013)

## Requirement Analysis:

- The products in store are bought by the customers .
- Products are supplied from a Supplier.
- A single Product can have different number of Quantity.
- The product table has a column called Quantity which describes whether the product is present or not based on the amount of the Quantity.

- The employees maintain the store and draw salaries based on their position from the stores Account.
- Customer ID is his Bill ID for that visit.
- Customer's bill is generated by the accounts table after adding the tax and subtracting discount from the total price.
- All the tables in the database are in BCNF.

## ER Diagram:



## Schema:

Customer(CID,TotalCost, Name,PhoneNo, Date, Time)

Product(PID, Name, Size, Brand, Cost,Category,Quantity)

Supplier(SID,Date,Time,Name)

Account(Tax, Discount, Date,Time, Net, TID, EID,  
TotalCost, Salary, SupplierCost)

Employee(Name, Post, Date, Time, EID)

Supp\_list(SNo,PID,SID, Name, Size, Brand, SCost)

Cust\_list(SNo,PID,CID,Cost)

## Tables in database :

```
MariaDB [ClothStore2]> desc Account;
```

Field	Type	Null	Key	Default	Extra
Date	varchar(10)	YES		NULL	
Time	varchar(5)	YES		NULL	
TID	varchar(14)	NO	PRI	NULL	
EID	varchar(14)	YES	MUL	NULL	
Tax	int(11)	YES		0	
Net	decimal(40,2)	YES		0.00	
Discount	decimal(20,2)	YES		0.00	
Salary	decimal(20,2)	YES		0.00	
TotalCost	decimal(40,2)	YES		0.00	
SupplierCost	decimal(40,2)	YES		0.00	

```
+ list_trigger is created to store the  
10 rows in set (0.092 sec)
```

```
MariaDB [ClothStore2]> desc Customer;
```

Field	Type	Null	Key	Default	Extra
CID	varchar(14)	NO	PRI	NULL	
Name	varchar(20)	YES		NULL	
PhoneNo	varchar(10)	YES		NULL	
Date	varchar(10)	YES		NULL	
Time	varchar(5)	YES		NULL	

```
5 rows in set (0.001 sec)
```

```
MariaDB [ClothStore2]> desc Supplier;
```

Field	Type	Null	Key	Default	Extra
SID	varchar(14)	NO	PRI	NULL	
Name	varchar(20)	YES		NULL	
Date	varchar(10)	YES		NULL	
Time	varchar(5)	YES		NULL	
PhoneNo	varchar(10)	YES		NULL	

```
5 rows in set (0.001 sec)
```

```
MariaDB [ClothStore2]> desc Product;
```

Field	Type	Null	Key	Default	Extra
PID	varchar(14)	NO	PRI	NULL	
Name	varchar(8)	YES		NULL	
Size	varchar(3)	YES		NULL	
Brand	varchar(8)	YES		NULL	
Quantity	int(11)	YES		0	
Cost	decimal(20,2)	YES		0.00	
Category	varchar(18)	YES	MUL	NULL	

```
7 rows in set (0.002 sec)
```



```
MariaDB [ClothStore2]> desc supp_list;
```

Field	Type	Null	Key	Default	Extra
Name	varchar(8)	YES		NULL	
Size	varchar(3)	YES		NULL	
Brand	varchar(8)	YES		NULL	
SID	varchar(14)	YES	MUL	NULL	
SCost	decimal(40,2)	YES		0.00	
Quantity	int(11)	YES		1	
PID	varchar(14)	YES		NULL	
SNo	int(11)	NO	PRI	NULL	auto_increment

```
8 rows in set (0.070 sec)
```

```
MariaDB [ClothStore2]> desc cust_list;
```

Field	Type	Null	Key	Default	Extra
PID	varchar(14)	YES		NULL	
CID	varchar(11)	YES	MUL	NULL	
Cost	decimal(20,2)	YES		0.00	
Quantity	int(11)	YES		1	
SNo	int(11)	NO	PRI	NULL	auto_increment

```
5 rows in set (0.002 sec)
```



```
MariaDB [ClothStore2]> desc Employee;
```

Field	Type	Null	Key	Default	Extra
EID	varchar(14)	NO	PRI	NULL	
Name	varchar(15)	YES		NULL	
Post	varchar(20)	YES		NULL	
Date	varchar(10)	YES		NULL	
Time	varchar(5)	YES		NULL	
Salary	decimal(20,2)	YES		0.00	

```
6 rows in set (0.002 sec)
```

# Triggers in database :

- A trigger named cust\_list\_trigger is created to store the all the items purchased by the customer in the cust\_list table and decrease the amount of the Quantity of these items in the Product table.

```
DELIMITER $$
```

```
create trigger cust_list_trigger
```

```
after insert on Customer
```

```
for each row
```

```
begin
```

```
insert into Account(Date,Time,TID) select Date,Time,CID from Customer order by  
convert(`CID`,decimal) desc limit 1;
```

```
end $$
```

```
DELIMITER ;
```

- A trigger named total\_cost\_trigger is created to find out the total amount of price of the items a customer purchased and update it in the Account table for that transaction.

DELIMITER \$\$

CREATE trigger total\_cost\_trigger

after insert on cust\_list

for each row

begin

update Account set Tax = Tax+(select IF(Cost>1000,0.12\*Cost,0.5\*Cost) from cust\_list where SNo = (select MAX(SNo) from cust\_list)) where Account.TID=(select MAX(CID) from Customer);

update Account set TotalCost = (select sum(Cost\*Quantity) from cust\_list where CID=(select MAX(CID) from Customer)) where Account.TID=(select MAX(CID) from Customer);

update Product set Quantity = Quantity-(select Quantity from cust\_list where SNo=(select MAX(SNo) from cust\_list)) where Product.PID=(select PID from cust\_list where SNo=(select MAX(SNo) from cust\_list));

```

update Account set Discount = (select IF(TotalCost>1000,5,0) from Account
where TID=(select MAX(CID) from Customer)) where Account.TID=(select MAX(CID)
from Customer);

call NET((select max(CID) from Customer));

end $$

DELIMITER ;

```

---

- A trigger named `supp_list_trigger` is created to store all the items provided by all the suppliers to the store and those items in the Product table.

```

DELIMITER $$

create trigger supp_list_trigger

after insert on Supplier

for each row

begin

insert into Account(Date,Time,TID) select Date,Time,SID from Supplier order by
convert(`SID`,decimal) desc limit 1;

end $$

DELIMITER ;

```

- 
- A trigger named `supplier_cost_trigger` is created to find the total amount of price a supplier need to be paid from the store and update it in the Account table in `SupplierCost` column.

DELIMITER \$\$

```
CREATE trigger supp_cost_trigger
after insert on supp_list
for each row
begin
    update Account set SupplierCost = (select sum(SCost*Quantity) from supp_list
where SID=(select MAX(SID) from Supplier)) where Account.TID=(select MAX(SID)
from Supplier);

    update Product set Quantity = (Quantity+(select Quantity from supp_list where
SNo = (select max(SNo) from supp_list))) where Product.PID=(select PID from
supp_list where SNo = (select max(SNo) from supp_list)) and exists(select * from
Product where PID = (select PID from supp_list where SNo = (select max(SNo) from
supp_list))) ;

    insert into Product(PID,Name,Size,Brand,Quantity,Cost) select
PID,Name,Size,Brand,Quantity,SCost*1.07 from supp_list where not exists(select *
```

```
from Product where PID = (select PID from supp_list where SNo = (select max(SNo)
from supp_list))) and SNo = (select max(SNo) from supp_list) ;

    update Account set Net=SupplierCost where TID = (select max(SID) from
Supplier);

end $$

DELIMITER ;
```

---

## Roles in database :

- Three roles are made based on our requirements namely,
  - Admin - with users  
Deekshith, Vinay, Roubal and Vishwajeeth
  - Manager
  - Cashier
- Admin has access to all the tables in the database.
- Manager has access to Supplier, supp\_list tables.
- Cashier has access to Account, Customer and cust\_list tables.

## Use Cases:

We created a Use case which shows the Trend of the Store on daily basis like (“Heavy Sales,Normal Sales and Low Sales”).

---

```
SELECT Date,  
CASE WHEN COUNT(TID)>30 THEN "Heavy sales"  
WHEN COUNT(TID)< 30 AND COUNT(TID)>20 THEN "Normal sales"  
ELSE "Low sales"  
END AS SalesTrend  
FROM Account where Salary = 0 AND SupplierCost = 0  
GROUP BY 'Date';
```

---



For finding the maximum sold product we used the query.

```
select PID,Sum(Quantity) As TotalQuantity from cust_list group  
by PID order by sum(Quantity) DESC limit 5;
```

For finding the minimum sold product we used the query.

```
select PID,Sum(Quantity) As TotalQuantity from cust_list group  
by PID order by sum(Quantity) ASC limit 5;
```

For finding the most repeated customer we used the query.

```
select Name ,PhoneNo ,count(CID) As Visits from Customer  
group by Name,PhoneNo order by count(CID) DESC limit 5;
```

---

## Functions and Procedures:

- A procedure named NET is made to find the net amount a customer need to pay based on the Tax and Discount provided from the cashier and update it in the Account table.

delimiter \$\$

create procedure NET (IN i\_d varchar(14))

begin

declare a\_1 int default 0;

declare a\_2 int default 0;

declare a\_3 int default 0;

declare b\_1 int default 0;

declare b\_2 int default 0;

declare b\_3 int default 0;

select Salary into a\_1 from Account where TID=i\_d;

select TotalCost into a\_2 from Account where TID=i\_d;

select SupplierCost into a\_3 from Account where TID=i\_d;

select Tax into b\_1 from Account where TID=i\_d;

select Discount into b\_2 from Account where TID=i\_d;

set b\_3=(a\_1)+(a\_2)+(a\_3)-((b\_2)+(b\_1))\*0.01\*a\_2;

update Account set Net=b\_3 where TID=i\_d;

end \$\$

delimiter;

-----

- A procedure named S\_History is made to find all the products provided by a supplier for that transaction.

```
delimiter $$
```

```
create procedure S_history (IN i_d varchar(14))
```

```
begin
```

```
select * from supp_list where SID=i_d;
```

```
end $$
```

```
delimiter;
```

---

- A procedure named T\_History is made to find all the products purchased by the customer for that transaction.

```
delimiter $$
```

```
create procedure T_history (IN i_d varchar(14))
```

```
begin
```

```
select * from cust_list where CID=i_d;
```

```
end $$
```

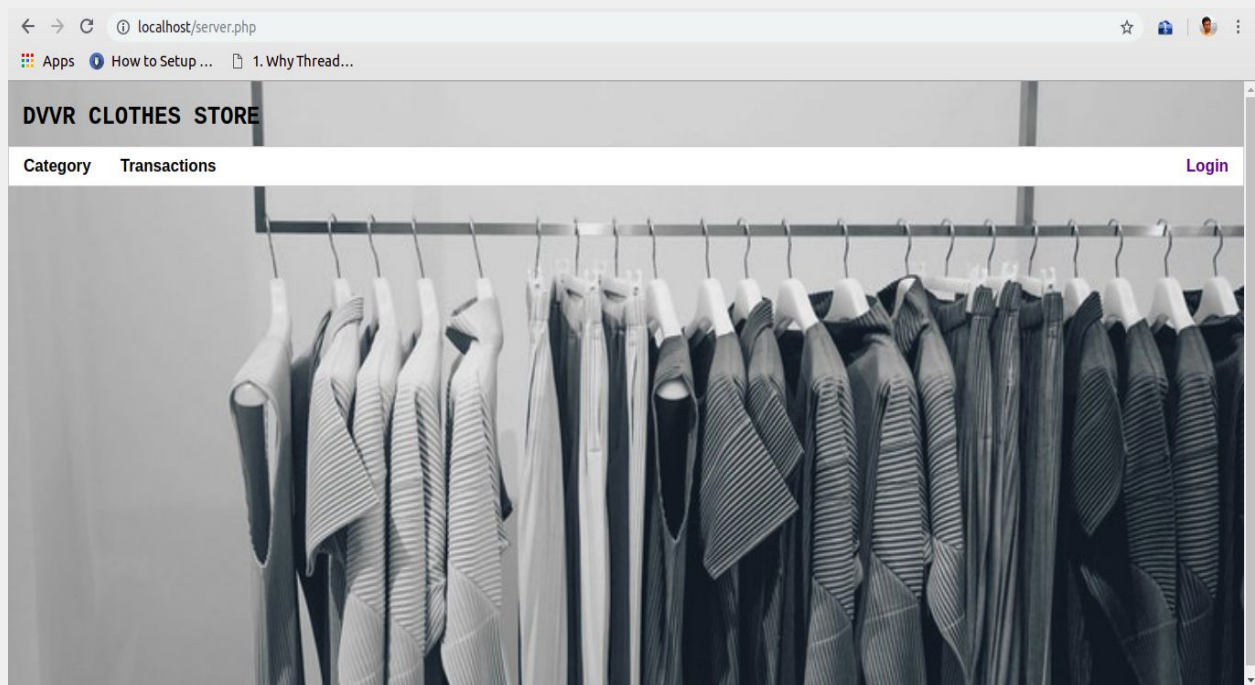
```
delimiter;
```

---

# GUI:

Our Project starts with this page i.e. server.php

Our Main Home page contains Categories and transaction tabs.



## Server.php

- Category tab contains list of categories through which we can find the products based on a particular category.

## DVVR CLOTHES STORE

Category

Transactions

Login

X

Accessories

Bottom Wear

Indian Wear

Inner Wear

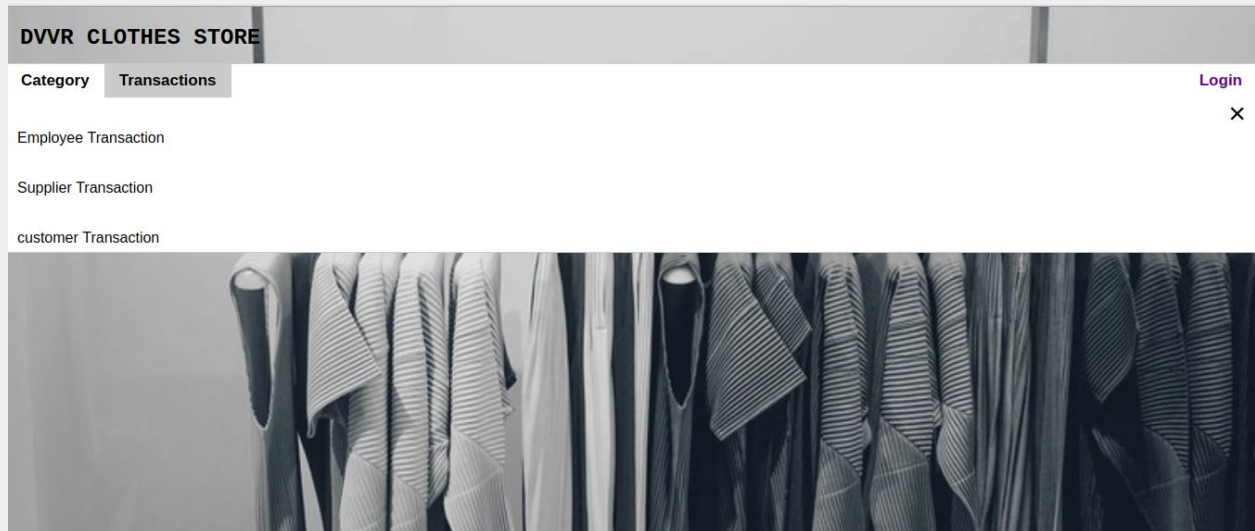
Sports Wear

Top Wear

Winter Wear

Server.php

- Transaction tab contains three sub partitions namely,



**Server.php**

### **Employee transaction**

- In this page after entering Employee ID and Employee name it will present a table containing all the salary transactions he received.

HomeLogin

Employee Name:  ID:  GO

Account details

TID	Date	Time	Net	Salary
30001	20/01/2019	08:00	5000.00	5000.00

**accounthome.php**

## Supplier transaction

- In this page after entering transaction ID of the supplier it will present a table to show all the products provided by that supplier in that transaction.



HomeTransactionLogin

Supplier Name: ID: GO

Product details

PID	Name	Size	Brand	SCost	Quantity
00001	Jeans	XL	Pepe	1000.00	100
00002	T-shirt	XXL	Pepe	500.00	100
00003	Jeans	XL	Us Polo	900.00	100
00004	T-shirt	M	Us Polo	500.00	100
00005	Sweater	L	Lenin	400.00	100
00006	Sweater	M	Lenin	350.00	100
00007	Jacket	XL	Armani	1500.00	100
00008	Tie	XL	Us Polo	300.00	100

## Suppliertransaction.php

### Customer Transaction

- In this page after entering transaction ID of the customer it will present a table to show all the products provided by that customer in that transaction.

Home Transactions Login

Customer Name:  ID:

Product details

PID	Cost	Quantity
00001	1070.00	10
00002	535.00	10
00003	963.00	10
00004	535.00	10
00005	428.00	10
00006	374.00	10
00007	1605.00	10

## customertransaction.php

- We have a Login option at the right top corner of the Homepage for the login of the three roles.

Login

Username

Password

## login.php

- Login page is with users as admin,cashier and manager.
- Cashier can enter the customer and product details the customer ordered and to generate the bill.

HomeCashierLogout

Customer details

CID	Name	PhoneNo	Date	Time	
10001	Deekshith	9856743210	29/03/2019	02:55	
10002	Puja	9856743211	29/03/2019	03:00	
10003	Pranavi	9856741230	12/01/2019	04:15	

ADD Customer

Cashier.php

[Home](#)   [Customer](#)   [Logout](#)

Customer ID:

Name:

Phone Number

Date

Time

Submit

## customer\_insert.php

[Home](#)   [Cashier](#)   [Logout](#)

Purchase details

PID	Cost	Quantity	
00001	1070.00	1	

Insert Item

Next

## customer\_list.php

[Home](#)
[Cashier](#)
[Logout](#)

### Purchased details

Name	Brand	Size	Cost	Quantity
Jeans	Pepe	XL	1070.00	1

[Finish](#)

**Tax = 128.40**  
**Discount = 5.00**  
**Total Cost = 1070.00**  
**NET = 1145.00**

## Print\_for\_customer.php

- Manager can enter the supplier and product details provided by the supplier and generate the bill.

[Home](#)
[Manager](#)
[Logout](#)

### Supplier details

SID	Name	PhoneNo	Date	Time
20001	Vinay	987654311	20/01/2019	02:22
20002	Anil	987654312	20/01/2019	02:55
20003	Vishal	987654313	20/01/2019	03:03
20004	kumar	987654314	20/01/2019	03:55
20005	Mouni	9874561230	02/02/2019	05:30
20006	Pran	986574130	12/01/2019	04:15

[ADD Supplier](#)

## Manager.php

HomeSupplierLogout

Supplier ID:

Name:

Phone Number

Date

Time

Submit

insert\_supplier.php

HomeManagerLogout

Warehouse

PID	Name	Size	Brand	SID	SCost	Quantity	
00009	Jeans	XL	Mufti	20006	1000.00	100	
00001	Jeans	XL	Pepe	20006	1000.00	100	
00001	Jeans		Pepe	20006	1000.00	100	
00001	Jeans	XL	Pepe	20006	1000.00	100	

Insert ItemNext

supplier\_list.php

[Home](#)
[manager](#)
[Logout](#)

Supplier ID:   
Product ID:   
Name:   
Size:   
Brand:   
SCost:   
Quantity:

## insert\_supp\_list.php

[Home](#)
[Manager](#)
[Logout](#)

### Purchased details

Name	Brand	Size	Cost	Quantity
Jeans	Mufti	XL	1000.00	100
Jeans	Pepe	XL	1000.00	100
Jeans	Pepe	XL	1000.00	100
Jeans	Pepe	XL	1000.00	100

Tax = 0.00  
Discount = 0.00  
Total Cost = 0.00  
NET = 400000.00

## Print\_for\_supplier.php



## Contribution:

**Deekshith:** Created tables ,Schema, Triggers, Report, GUI starting, BCNF, Procedures.

**Vinay Krishna:** Created tables ,Schema, Triggers, Report, Use Cases, BCNF, Procedures,Cashier pages.

**Roubal :**Created ERD, Views, Roles and Users, Use Cases,BCNF,Login page,GUI starting design,Manager pages.

**Vishwajeeth:** Created ERD, Views, Roles and Users, GUI starting,BCNF,Main page, three transaction pages .