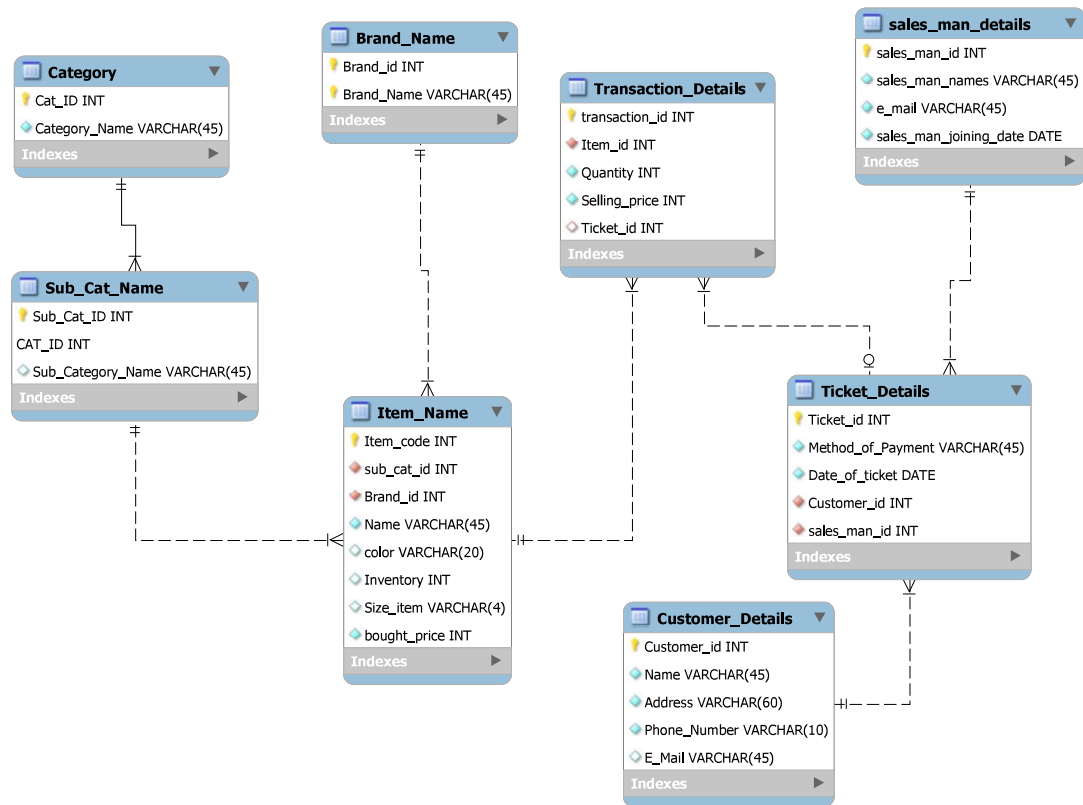


Data Modeling Assignment

Submitted by:	Team 1 Group O2
Group Members:	Rajat Prasad Carolin Kröger Sara Krumpak Mohamad el Charif Andrea Salvati Dominik Thausing Alejandro Torres Pérez
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ENTITY-RELATIONSHIP DIAGRAM



STATEMENTS FOR CREATING TABLE WITH PRIMARY AND FOREIGN KEY

```
connect to sample;
#####code to drop tables#####
drop table category;
drop table brand_name;
drop table sub_cat_name;
drop table item_name;
drop table customer_details;
drop table sales_man_details;
drop table ticket_details;
drop table Transaction_details;

#####code to create category table#####
create table Category(
cat_id int not null primary key generated always as identity (start with 1, increment by 1),
category_name varchar(45) not null
);
#####code to create brand details
table#####
create table brand_name(
brand_id int not null primary key generated always as identity (start with 1, increment by 1),
Brand_name varchar(45) not null
);
#####code to create sub-category table#####
create table sub_cat_name(
sub_cat_id int not null primary key generated always as identity (start with 1, increment by 1),
sub_category_name varchar(45) not null,
cat_id int not null references category(cat_id)
);
#####code to create item details table#####
create table Item_name(
Item_code int not null primary key generated always as identity (start with 1, increment by 1),
name varchar(45) not null,
sub_cat_id int not null references sub_cat_name(sub_cat_id),
brand_id int not null references Brand_name(brand_id),
inventory int not null,
color varchar(20) not null,
bought_price int not null,
size_item varchar(4)
);

#####code to create customer details
table#####
create table Customer_Details(
customer_id int not null primary key generated always as identity (start with 1, increment by 1),
name varchar(45) not null,
address varchar(60) not null,
phone_number varchar(10) not null,
e_mail varchar(45) not null
);

#####code to create sales man table#####
create table sales_man_details(
sales_man_id int not null primary key generated always as identity (start with 1, increment by 1),
sales_man_names varchar(45) not null,
e_mail varchar(45) not null,
sales_man_joining_date date not null
);
```

```
#####code to create ticket details
table#####
create table Ticket_Details(
Ticket_id int not null primary key generated always as identity (start with 1, increment by 1),
method_of_payment varchar(45) not null,
customer_id int not null references customer_details(customer_id),
sales_man_id int not null references sales_man_details(sales_man_id),
date_of_ticket date not null
);
#####code to create transaction details
table#####
create table Transaction_details(
Transaction_id int not null primary key generated always as identity (start with 1, increment
by 1),
item_id int not null references item_name(item_code),
ticket_id int not null references ticket_details(ticket_id),
quantity int not null,
selling_price int not null
);
```

STATEMENTS FOR INSERTING DATA IN TABLES

```
#####insert statements for brand
table#####

insert into brand_name( Brand_Name) values('Nautica');
insert into brand_name( Brand_Name) values('LEVIS');
insert into brand_name( Brand_Name) values('Green Day');
insert into brand_name( Brand_Name) values('G-STAR RAW');
insert into brand_name( Brand_Name) values('JACK AND JONES');
insert into brand_name( Brand_Name) values('HERE');
insert into brand_name( Brand_Name) values('Huetrap');
insert into brand_name( Brand_Name) values('Hypernation');
insert into brand_name( Brand_Name) values('GAP');
insert into brand_name( Brand_Name) values('ARROW');
insert into brand_name( Brand_Name) values('CALVIN KLEIN');
insert into brand_name( Brand_Name) values('Hubberholme');
insert into brand_name( Brand_Name) values('Harley-Davidson');
insert into brand_name( Brand_Name) values('H.E. By Mango');
insert into brand_name( Brand_Name) values('Hanes');
insert into brand_name( Brand_Name) values('H&M');
insert into brand_name( Brand_Name) values('zara');
insert into brand_name( Brand_Name) values('sears');
insert into brand_name( Brand_Name) values('vero moda');

#####insert statements for category
table#####

insert into Category( Category_Name) values('Men');
insert into Category( Category_Name) values('Women');
insert into Category( Category_Name) values('Kids');
insert into Category( Category_Name) values('Home & Living');

#####insert statements for subcategory
table#####

insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'T-Shirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Casual Shirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Formal Shirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Sweaters & Sweatshirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Jackets & Coats');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Blazers & Waistcoats');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Suits');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Clothing Fabric');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Jeans');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Casual Trousers');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Formal Trousers');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Shorts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Track Pants/Joggers');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Sports & Active Wear');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Active T-Shirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Track Pants & Shorts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Jackets & Sweatshirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Swimwear');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Smart Wearables');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Sports Accessories');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Sports Equipment');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(1,'Sports Shoes');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Dresses ');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Tops, T-Shirts & Shirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Jeans for women');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Trousers & Capris');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Shorts & Skirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Shrugs');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Sweaters & Sweatshirts');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Jackets & Coats');
insert into Sub_Cat_name( Cat_id,Sub_Category_Name) values(2,'Blazers & Waistcoats');
```



```
#####insert statements for customer details
table#####

insert into Customer_details(Name, address, phone_number, e_mail) values('Zacharias','11, calle
de principe de vergara','8990011212','zacharias@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Gomer','31, calle de
nenufar','8990011211','gomer@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Jude','20, calle de
velazquez','8990011213','jude@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Cyrus','11, calle de
lagasca','8990011214','cyrus@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Paul','13, calle de
principe de vergara','8990011215','paul@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Jacob','20, calle
rafael calvo','8990011216','jacob@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Hunter','calle de
alonso cano','8990011217','hunter@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('John','58, calle del
poeta de joan margall','8990011218','john@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Caleb','63, calle del
poeta de joan margall','8990011219','caleb@gmail.com');
insert into Customer_details(Name, address, phone_number, e_mail) values('Seth','100, paseo de
la casetellana','8990011220','seth@gmail.com');

#####insert statements for item details
table#####

insert into item_name(Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(1,1,'Checked Round Neck T-shirt',44,'Red',4,'s');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(1,2,'printed Round Neck T-shirt',45,'Black',2,'m');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(31,13,'Women Blazer',88,'white ',1,'l');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(19,17,'Aqua Silver Fitness Band',147,'Blue',7,'x');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(18,8,'speedo',113,'pink',1,'xl');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(19,18,'Unisex Blue Fitness Band',114,'violet',10,'s');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(13,11,'Black TRACK PANTS',140,'indigo',1,'m');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(13,19,'Men Joggers',22,'green',9,'l');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(17,10,'Men Solid Padded Jacket',79,'violet',6,'x');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(22,2,'Blue Running shoes',177,'white ',4,'xl');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(20,11,'Men Analogue watch',82,'Black',5,'s');
insert into item_name( Sub_cat_id,Brand_id,Name,Bought_Price,color,Inventory,Size_item)
values(29,1,'Black Sweater',61,'Blue',1,'m');

#####insert statements for sales man details
table#####

insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Laurel','laurel@gmail.com','12/01/2017');
insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Gabriel','gabriel@gmail.com','11/30/2016');
insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Bernice','bernice@gmail.com','11/30/2015');
insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Agate','agate@gmail.com','10/31/2016');
insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Delilah','delilah@gmail.com','09/30/2015');
insert into sales_man_details(sales_man_names, e_mail,sales_man_joining_date)
values('Trinity','trinity@gmail.com','11/30/2014');
```

```
#####insert statements for ticket details
table#####

insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('cash','01/01/2018',4,2);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('master card','02/01/2018',3,6);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('american express','03/02/2018',5,2);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('cash','04/30/2018',5,6);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('master card','05/19/2018',3,2);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('american express','06/01/2018',3,4);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('cash','07/01/2018',8,1);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('master card','08/01/2018',3,2);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('american express','09/01/2018',5,1);
insert into ticket_details( method_of_payment,date_of_ticket,customer_id,sales_man_id)
values('visa','10/01/2018',4,3);

#####insert statements for transaction details
table#####

insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(11,2,234,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(8,3,249,9);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(10,2,293,8);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(6,3,219,5);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(12,3,299,7);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(6,3,205,5);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(6,1,300,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(8,1,228,4);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(5,2,283,2);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(11,3,252,2);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(12,3,280,7);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(1,1,289,4);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(4,3,233,1);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,3,299,9);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(4,2,300,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,3,297,10);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(9,3,262,2);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(12,2,269,6);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(5,1,283,8);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(8,2,235,8);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(5,3,246,9);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(3,1,227,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,1,256,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(8,2,295,7);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,2,300,3);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,1,273,5);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(5,1,211,2);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(12,2,281,10);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(10,2,234,1);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(7,3,273,5);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(8,1,231,10);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(1,1,287,9);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(4,2,251,1);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(5,2,266,4);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(3,2,288,6);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(1,1,238,9);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(2,3,260,1);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(12,2,268,8);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(10,1,283,8);
insert into transaction_details( item_id,quantity,selling_price,ticket_id) values(1,2,229,3);
```

[illegible]

STATEMENTS FOR QUERIES AS GIVEN IN
ASSIGNMENT

#####Queries for Fashion Store#####

#####question 1) Which are the top 3 colors sold last season?#####

```
select sum(transaction_details.quantity) as quantity_sold, item_name.color from
transaction_details full outer join
item_name on transaction_details.item_id=item_name.item_code full outer join ticket_details on
ticket_details.ticket_id=transaction_details.ticket_id
where ticket_details.date_of_ticket between '04/01/2018' and '09/01/2018' group by
item_name.color order by quantity_sold desc fetch first 3 rows only;
```

```
QUANTITY_SOLD COLOR
-----
      23 Blue
      18 green
      18 white
```

3 record(s) selected.

#####2) Show the relation between credit card and the amount spent (ticket).#####

```
select sum(transaction_details.selling_price*transaction_details.quantity) as money_spent ,
ticket_details.method_of_payment from transaction_details full outer join
ticket_details on transaction_details.ticket_id=ticket_details.ticket_id group by
ticket_details.method_of_payment having ticket_details.method_of_payment<> 'cash';
```

```
MONEY_SPENT METHOD_OF_PAYMENT
-----
    15028 american express
    18025 master card
     7351 visa
```

3 record(s) selected.

--##### 3) What is the average amount spent per type of cloth.#####

```
select avg(coalesce(transaction_details.selling_price*transaction_details.quantity,0)) as
average_money_spent, sub_cat_name.sub_category_name
from item_name full outer
join sub_cat_name on
sub_cat_name.sub_cat_id=item_name.sub_cat_id full outer join transaction_details on
transaction_details.item_id=item_name.item_code
group by sub_cat_name.sub_category_name having
avg(coalesce(transaction_details.selling_price*transaction_details.quantity,0))<>0
order by avg(transaction_details.selling_price*transaction_details.quantity) desc;
```

```
AVERAGE_MONEY_SPENT SUB_CATEGORY_NAME
-----
    638 Sports Accessories
    587 Track Pants/Joggers
    540 Jackets & Sweatshirts
    480 Blazers & Waistcoats
    518 Smart Wearables
    472 Sweaters & Sweatshirts
    491 T-Shirts
    490 Sports Shoes
    486 Swimwear
```

9 record(s) selected.

```
--#####4) Which brand makes us earn more money
(profit)?#####

select sum(coalesce(transaction_details.selling_price,0))-
sum(coalesce(item_name.bought_price,0)) as profit_per_brand, brand_name.brand_id,
brand_name.brand_name
from transaction_details full outer join item_name
on transaction_details.item_id=item_name.item_code
full outer join brand_name on brand_name.brand_id=item_name.brand_id group by
brand_name.brand_id, brand_name.brand_name
having sum(transaction_details.selling_price)-sum(item_name.bought_price)<>0
order by (sum(transaction_details.selling_price)-sum(item_name.bought_price)) desc;
```

PROFIT_PER_BRAND	BRAND_ID	BRAND_NAME
4127	1	Nautica
2962	2	LEVIS
2530	19	vero moda
2032	11	CALVIN KLEIN
1538	13	Harley-Davidson
930	10	ARROW
927	18	sears
926	8	Hypernation
920	17	zara

9 record(s) selected.

```
--#####5) Which sales man made the most
sales?#####

select ticket_details.sales_man_id,
sum(transaction_details.quantity*transaction_details.selling_price),
sales_man_details.sales_man_names
from ticket_details full outer join
transaction_details on ticket_details.ticket_id=transaction_details.ticket_id full outer join
sales_man_details on
sales_man_details.sales_man_id=ticket_details.sales_man_id group by
ticket_details.sales_man_id,sales_man_details.sales_man_names

having sum(transaction_details.quantity*transaction_details.selling_price)<>0
order by sum(transaction_details.quantity*transaction_details.selling_price) desc fetch first 1
row only;
```

SALES_MAN_ID	2	SALES_MAN_NAMES
2	20527	Gabriel

1 record(s) selected.