

# Online Shopping System

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## **PURPOSE**

Online web stores, such as Amazon and eBay, have gained huge popularity over the years because one can buy almost everything at these stores. These web stores also give an opportunity to a lot of small-scale companies and manufactures to reach the global market and to directly sell their products to people without involving different other companies or middlemen before their product can reach the shelves of a physical store. Further, instead of using the available platforms, manufacturers can bring a concept of designing their own web store to sell their products directly to the masses. The objective of this project is to develop a general purpose e-commerce store where any products can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online Shopping system.

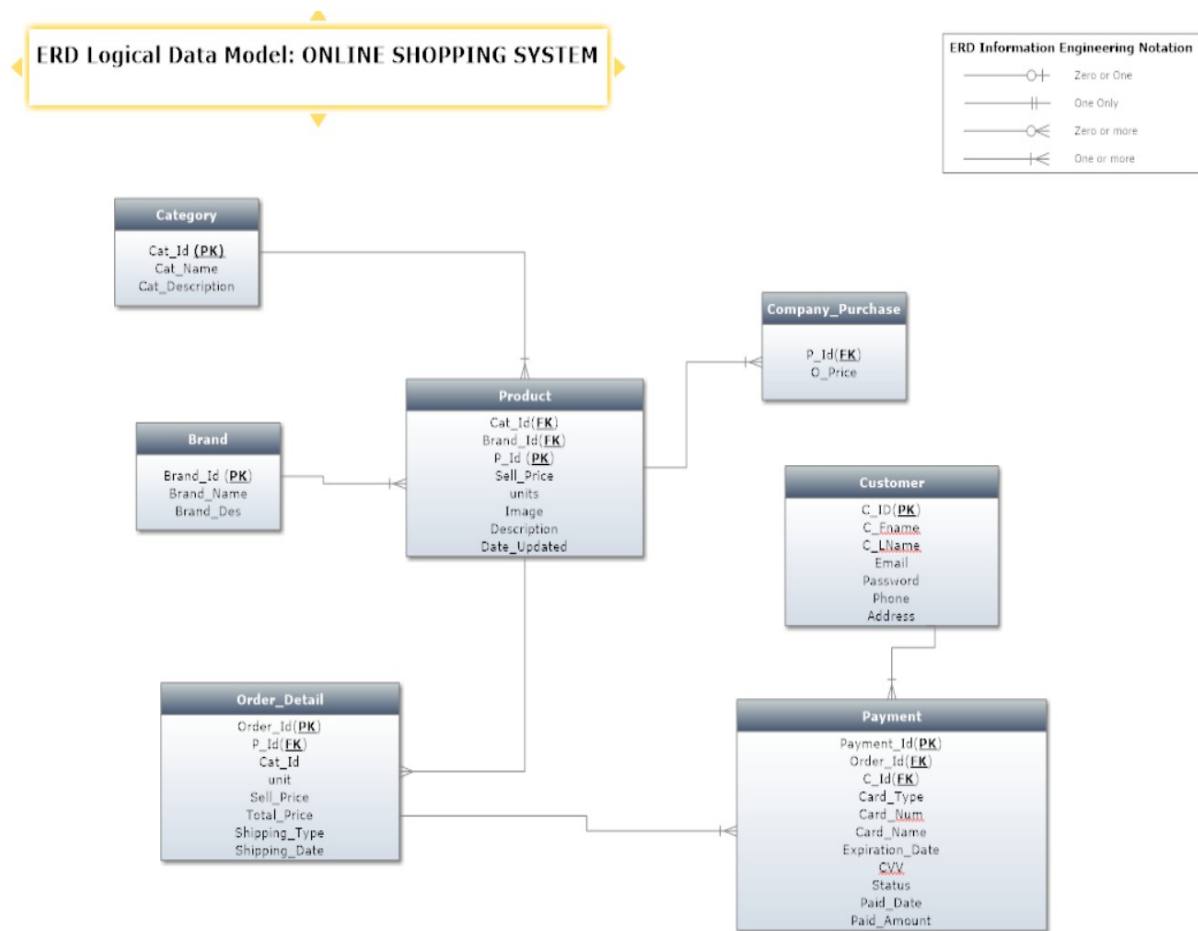
## **INTRODUCTION**

This paper presents the design of a database system for a online Electronics device store using ORACLE database that performs search functions for selected products and different types of tables. It will store various products data as well as users order details to run shopping system from admin side and user side with user login.

## **NAME OF TABLES**

1. Customer\_login\_tbl
2. Brand\_tbl
3. Category
4. Products
5. Order\_Detail
6. Sales\_tbl
7. Payment\_tbl

## ER DIAGRAM



## SCREENSHOTS OF CREATE TABLE AND INSERTED DATA

### Create Customer Table

```
SQL> CREATE TABLE Customer
 2  (
 3  C_Id varchar(10) NOT NULL PRIMARY KEY,
 4  C_Fname varchar(10) NOT NULL,
 5  c_Lname varchar(10) NOT NULL,
 6  Email varchar(300) NOT NULL,
 7  password varchar(10) NOT NULL,
 8  Phone int NOT NULL,
 9  Address varchar(100) NOT NULL
10 )
11 ;

Table created.
```

```
INSERT INTO Customer
VALUES ('1000','Sapna','Makadia','sapana.makadia@gmail.com','s4909','5513587862','jersey city');
INSERT INTO Customer
VALUES ('1001','Rushil','Patel','rushil.patel@gmail.com','r143','5513588036','jersey city');
INSERT INTO Customer
VALUES ('1002','Jay','Gosai','jay.g@yahoo.com','jg556','2015622589','edison');
INSERT INTO Customer
VALUES ('1003','Utsav','Thakkar','utsav255@gmail.com','4853','5545236574','union city');
INSERT INTO Customer
VALUES ('1004','Hiral','Rudani','hiral.rudani@gmail.com','h210','5513218526','jersey city');
INSERT INTO Customer
VALUES ('1005','Ekta','Dalsaniya','eku455@gmail.com','45563','8015321468','newark');
INSERT INTO Customer
VALUES ('1006','Himil','Patel','patelhm@yahoo.com','214hmz09','5519852147','jersey city');
INSERT INTO Customer
VALUES ('1007','Dhruv','Makadia','dhruv.makadia@gmail.com','dh241785','3571582468','hoboken');
INSERT INTO Customer
VALUES ('1008','John','nishy','john.ny@gmail.com','151jh421','6852858541','secausus');
INSERT INTO Customer
VALUES ('1009','Michel','filler','micky@gmail.com','ds2685df','5513525282','westwood');
```

## Create Category Table

```
SQL> cr^?^?  
unknown command "" - rest of line ignored.  
SQL> c^?  
Invalid change string.  
SQL> CREATE TABLE Category  
2  (  
3  Cat_Id varchar(10) NOT NULL,  
4  Cat_Name varchar(30) NOT NULL,  
5  Cat_Dec varchar(100)  
6  )  
7  ;  
  
Table created.
```

```
INSERT INTO Category  
VALUES ('11220','Mobile','List of all Mobiles');  
INSERT INTO Category  
VALUES ('11221','Laptops','List of all Laptops');  
INSERT INTO Category  
VALUES ('11222','video game','List of all video games');  
INSERT INTO Category  
VALUES ('11223','TV','List of all TV');  
INSERT INTO Category  
VALUES ('11224','Camera','List of all Camera');  
INSERT INTO Category  
VALUES ('11225','Tablets','List of all Tablets');  
INSERT INTO Category  
VALUES ('11226','Fitness watch','List of all Fitness watch');  
INSERT INTO Category  
VALUES ('11227','Bluetooth & wireless speakers','List of all Bluetooth & wireless speakers');  
INSERT INTO Category  
VALUES ('11228','GPS','List of all GPS');
```

## Create Brand Table

```
SQL> CREATE TABLE Brand
  2  (
  3  Brand_Id varchar(10) NOT NULL PRIMARY KEY,
  4  Brand_Name varchar(20) NOT NULL,
  5  Brand_Dec varchar(500)
  6  )
  7  ;

Table created.
```

```
INSERT INTO Brand
VALUES ('2200','Apple','Apple is a Largest Selling Company for their Very Special Product iPhones')
;
INSERT INTO Brand
VALUES ('2201','Samsung','Samsung has been dedicated to making a better world through diverse businesses that today span advanced
;
INSERT INTO Brand
VALUES ('2202','HTC','HTC brings brilliance to life through leading innovation in smart mobile device and experience design. Begi
;
INSERT INTO Brand
VALUES ('2203','LG','LG is a global leader and technology innovator in consumer electronics, mobile communications and home appli
;
INSERT INTO Brand
VALUES ('2204','Sony','Sony has introduced a stream of revolutionary products, including the transistor radio, the Trinitron tele
;
INSERT INTO Brand
VALUES ('2205','Microsoft','one of the largest, most respected computer science research organizations in the world.')
;
INSERT INTO Brand
VALUES ('2206','Dell','The largest direct-sale computer vendor in the world, Dell Computer Corporation sells desktop personal com
;
INSERT INTO Brand
VALUES ('2207','Lenovo','Lenovo is a US$34 billion personal technology company and the worlds largest PC vendor.')
;
INSERT INTO Brand
VALUES ('2208','HP','Our vision is to create technology that makes life better for everyone, everywhere - every person, every org
;
INSERT INTO Brand
VALUES ('2209','Xbox','The all-in-one entertainment system. Where the best games, multiplayer, and your favorite movies, music, s
```

## Create product Table

```
SQL> CREATE TABLE Products
 2  (
 3  Cat_Id varchar(10) NOT NULL,
 4  Brand_Id varchar(10) NOT NULL,
 5  Product_Id varchar(10) NOT NULL PRIMARY KEY,
 6  Price float NOT NULL,
 7  Unit int,
 8  Image blob,
 9  DDescription varchar(500),
10  Date_Updated date,
11  FOREIGN KEY (Cat_Id) REFERENCES Category(Cat_Id),
12  FOREIGN KEY (Brand_Id) REFERENCES Brand(Brand_Id)
13  )
14  ;

Table created.
```

```
INSERT INTO Product
VALUES('11220','2200','4402','350','4','','Ipods',TO_DATE('12122015','mmddyyyy'));
INSERT INTO Product
VALUES('11220','2201','4403','450','13','','Galaxy Phones',TO_DATE('10122015','mmddyyyy'));
INSERT INTO Product
VALUES('11220','2202','4404','78','10','','HTC',TO_DATE('08122015','mmddyyyy'));
INSERT INTO Product
VALUES('11221','2200','4405','800','7','','MacBook',TO_DATE('07122015','mmddyyyy'));
INSERT INTO Product
VALUES('11223','2201','4406','1200','6','','Samsung TV',TO_DATE('07112015','mmddyyyy'));
INSERT INTO Product
VALUES('11225','2201','4407','120','3','','Samsung Tablets',TO_DATE('12122015','mmddyyyy'));
INSERT INTO Product
VALUES('11224','2204','4408','500','10','','Sony Camera',TO_DATE('11112015','mmddyyyy'));
INSERT INTO Product
VALUES('11220','2206','4409','190','15','','Dell Phones',TO_DATE('10102015','mmddyyyy'));
INSERT INTO Product
VALUES('11225','2200','4410','600','18','','Ipads',TO_DATE('10082015','mmddyyyy'));
INSERT INTO Product
VALUES('11227','2201','4411','1189.99','17','','Lenovo Laptops',TO_DATE('05122015','mmddyyyy'));
INSERT INTO Product
VALUES('11221','2205','4412','289.99','8','','Microsoft Surface',TO_DATE('12092015','mmddyyyy'));
INSERT INTO Product
VALUES('11226','2205','4413','119.99','25','','Microsoft Fitness Belt',TO_DATE('09092015','mmddyyyy'));
```



**Create Order\_detail Table**

```
SQL> desc order_detail;
Name                               Null?    Type
-----
ORDER_ID                          NOT NULL VARCHAR2(10)
P_ID                              NOT NULL VARCHAR2(10)
C_ID                              NOT NULL VARCHAR2(10)
UNITS                             NOT NULL NUMBER(38)
SELL_PRICE                        NOT NULL FLOAT(126)
TOTAL_PRICE                       NOT NULL FLOAT(126)
SHIPPING_TYPE                     NOT NULL VARCHAR2(10)
SHIPPING_DATE                     NOT NULL DATE
```

```
INSERT INTO Order_Detail
VALUES('9900','4400','1001','1','89.99','89.99','CarryOut',To_DATE('12152015','mmddyyyy'));

INSERT INTO Order_Detail
VALUES('9901','4401','1002','1','99.99','99.99','Delivery',To_DATE('12182015','mmddyyyy'));

INSERT INTO Order_Detail
VALUES('9902','4402','1003','2','350','700','CarryOut',To_DATE('12202015','mmddyyyy'));

INSERT INTO Order_Detail
VALUES('9903','4403','1004','1','450','450','Delivery',To_DATE('12252015','mmddyyyy'));

INSERT INTO Order_Detail
VALUES('9904','4404','1005','3','78','234','CarryOut',To_DATE('01012015','mmddyyyy'));
```

## Create Payment Table

```
SQL> create table Payment
2 (
3 C_Id varchar(10) NOT NULL,Payment_Id varchar(20) NOT NULL,Card_Type varchar(10) NOT NULL,Card_Num int NOT NULL,Card_Name varchar(20) NOT NULL,Exp_Date date NOT NULL,
4 CVV int NOT NULL,
5 Status varchar(10) NOT NULL,Paid_Date date NOT NULL,Paid_amount float NOT NULL,FOREIGN KEY (C_Id) REFERENCES Customer(C_Id)
6 );

Table created.

SQL> desc Payment
+-----+-----+-----+
Name          Null?   Type
+-----+-----+-----+
C_ID          NOT NULL VARCHAR2(10)
PAYMENT_ID    NOT NULL VARCHAR2(20)
CARD_TYPE     NOT NULL VARCHAR2(10)
CARD_NUM      NOT NULL NUMBER(38)
CARD_NAME     NOT NULL VARCHAR2(20)
EXP_DATE      NOT NULL DATE
CVV           NOT NULL NUMBER(38)
STATUS        NOT NULL VARCHAR2(10)
PAID_DATE     NOT NULL DATE
PAID_AMOUNT   NOT NULL FLOAT(126)

SQL>
```

```
INSERT INTO Payment
VALUES('1001','5500','VISA','1234567891234567','CUST',TO_DATE('022019','MMYYYY'),'123','SUCESSFUL',TO_DATE('12122015','mmddyyyy'))

INSERT INTO Payment
VALUES('1002','5501','MASTERCARD','4512369645123678','Rushil',TO_DATE('042020','MMYYYY'),'996','SUCESSFUL',TO_DATE('11122015','mmddyyyy'))

INSERT INTO Payment
VALUES('1003','5502','DISCOVER','252589631451278','Sapna',TO_DATE('092018','MMYYYY'),'900','SUCESSFUL',TO_DATE('12102015','mmddyyyy'))

INSERT INTO Payment
VALUES('1004','5503','VISA','9979410236127180','Jesse',TO_DATE('102019','MMYYYY'),'056','SUCESSFUL',TO_DATE('12092015','mmddyyyy'))

INSERT INTO Payment
VALUES('1005','5504','DISCOVER','6469312578903370','Sabir',TO_DATE('102020','MMYYYY'),'846','SUCESSFUL',TO_DATE('12082015','mmddyyyy'))
```

## SCREENSHOTS OF VIEWS

### 1. View for sales by category

```
SQL> CREATE VIEW SALES_BY_CATEGORY
AS
  2      3  SELECT Payment.PAYMENT_ID, Order_Detail.Order_Id, Product.Cat_Id, Payment.PAID_AMOUNT
FROM Product, Order_Detail, Payment
Where Payment.Order_Id=Order_Detail.Order_Id AND Order_Detail.P_Id=Product.P_Id AND Product.Cat_Id IN(select Cat_Id from Product)
;  4
  5      6

View created.

SQL> SQL> select * from sales_by_category;
```

PAYMENT_ID	ORDER_ID	CAT_ID	PAID_AMOUNT
5502	9902	11220	700
5504	9904	11220	234
5500	9900	11220	89.99
5501	9901	11221	99.99
5503	9903	11221	450

### 2. View for sales by products

```
SQL> CREATE VIEW SALES_BY_Productss
AS
SELECT Product.P_Id, Order_Detail.Order_Id, Payment.PAYMENT_ID, Payment.PAID_AMOUNT
from product, Order_Detail, Payment
  2      3      4      5  where
  6  Payment.Order_Id=Order_Detail.Order_Id AND Order_Detail.P_Id=Product.P_Id
;  7

View created.

SQL> select * from sales_by_productss;
```

P_ID	ORDER_ID	PAYMENT_ID	PAID_AMOUNT
4401	9901	5501	99.99
4402	9902	5502	700
4403	9903	5503	450
4404	9904	5504	234
4400	9900	5500	89.99

### 3. View for sales by brand

```
SQL> CREATE VIEW SALES_BY_BRAND
AS
SELECT Payment.PAYMENT_ID, Order_Detail.Order_Id, Product.Brand_Id, Payment.PAID_AMOUNT
FROM Product, Order_Detail, Payment
  2  Where Payment.Order_Id=Order_Detail.Order_Id AND Order_Detail.P_Id=Product.P_Id AND Product.Brand_Id IN(select Brand_Id from Product)
;  3      4      5      6

View created.

SQL> SELECT * FROM SALES_BY_BRAND;
```

PAYMENT_ID	ORDER_ID	BRAND_ID	PAID_AMOUNT
5502	9902	2200	700
5500	9900	2200	89.99
5501	9901	2201	99.99
5503	9903	2201	450
5504	9904	2202	234

#### 4. View to check profit by category

```
SQL> CREATE VIEW PROFIT_BY_CATEGORY
AS
SELECT Company_Purchase.P_Id,Product.Sell_Price,Company_Purchase.O_Price,Product.Cat_Id,(Product.Sell_Price - Company_Purchase.O_Price) AS DIFF
FROM Product,Company_Purchase 2 3 4
where Product.P_Id=Company_Purchase.P_Id
; 5 6

View created.

SQL> SELECT * FROM PROFIT_BY_CATEGORY;
```

P_ID	SELL_PRICE	O_PRICE	CAT_ID	DIFF
4400	89.99	70	11220	19.99
4400	89.99	70	11220	19.99
4401	99.99	70	11221	29.99
4402	350	300	11220	50
4403	450	400	11221	50
4404	78	50	11220	28
4405	800	700	11221	100

```
7 rows selected.
```

#### 5.View to check profit by product

```
SQL> CREATE VIEW PROFIT_BY_PRODUCT
2 AS
SELECT Company_Purchase.P_Id,Product.Sell_Price,Company_Purchase.O_Price,(Product.Sell_Price - Company_Purchase.O_Price) AS DIFF
FROM Product,Company_Purchase 3
where Product.P_Id=Company_Purchase.P_Id
4 5 6 ;

View created.

SQL> select * from PROFIT_BY_PRODUCT;
```

P_ID	SELL_PRICE	O_PRICE	DIFF
4400	89.99	70	19.99
4400	89.99	70	19.99
4401	99.99	70	29.99
4402	350	300	50
4403	450	400	50
4404	78	50	28
4405	800	700	100

```
7 rows selected.
```

## 6.View to check profit by brand

```
SQL> CREATE VIEW PROFIT_BY_BRAND
AS
SELECT Company_Purchase.P_Id,Product.Sell_Price,Company_Purchase.O_Price,Product.Brand_Id, (Product.Sell_Price - Company_Purchase.O_Price) AS DIFF
FROM Product,Company_Purchase
  4 where Product.P_Id=Company_Purchase.P_Id
; 5      6

View created.

SQL> SELECT * FROM PROFIT_BY_BRAND;
```

P_ID	SELL PRICE	O PRICE	BRAND ID	DIFF
4400	89.99	70	2200	19.99
4400	89.99	70	2200	19.99
4401	99.99	70	2201	29.99
4402	350	300	2200	50
4403	450	400	2201	50
4404	78	50	2202	28
4405	800	700	2200	100

```
7 rows selected.
```

## SCREENSHOTS OF INDEXING

```
SQL> create index payment_detail
ON Payment(Payment_Id,Order_Id,status);  2

Index created.
```

```
SQL> create index Prdt_Detail
ON Product(P_Id,Sell_Price)  2  ;

Index created.
```