E-Commerce Platform Management

ABSTRACT

In this modern era of online shopping no seller wants to be left behind, moreover due to its simplicity the shift from offline selling model to an online selling model is witnessing a rampant growth. This significant change in business model is witnessing tremendous growth around the globe and India is not an exception. A massive internet penetration has added to growth of E-commerce and more particularly start-ups have been increasingly using this option as a differentiating business model.

Moreover, E-Commerce has significant influences on the environment. Although the model is highly used in current business scenarios, the option has not been explored at its fullest. Therefore, as an engineer our job is to ease the path of this transition for the seller. Amongst many things that an online site requires the most important is a database system. Hence in this project we are planning to design a database where small clothing sellers can sell their product online.

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1. INTRODUCTION

'E-commerce' and 'online shopping' are often used interchangeably but at its core e-commerce is much broader than this – it embodies a concept for doing business online, incorporating a multitude of different services e.g. making online payments, booking flights etc.

E-commerce has experienced rapid growth since its humble beginnings with ecommerce sales projected to grow to 599.2 billion USD by the year 2024. The COVID-19 outbreak saw e-commerce sales spike 25% in March 2020 alone. The power of e-commerce should not be underestimated as it continues to pervade everyday life and present significant opportunities for small, medium, and large businesses and online investors.

it is important to spend some time considering the technology platform on which it operates. When analysing online businesses, the choice of platform is important; it will determine the basic customer experience, checkout process and the day-to-day management of orders etc.

To begin with, a decision needs to be made between a hosted or custom installation. Going down a 'hosted' route means that the hosting provider is responsible for maintenance of the hardware in their own data center. A custom installation will mean acquiring your own hardware. Both have practical implications for the owner, we have detailed some considerations below.

1.2 OBJECTIVES AND GOALS

E-commerce business drives profitable growth with reduction in cost-to-customer, developing customer-reach, and providing a unique customer experience. It has become more than essential for B2B as well as other businesses to make the right use of ecommerce. Now, ecommerce is evolving or better say evolved into digital commerce that implies to the entire business journey from buying to delivery with an online experience. Below are the few objectives of e-commerce website:

A. Reduce Management costs

B. Developing business relations

C. Providing unique customer experience

D. Boosting the efficiency of the services

E. Increasing sales

F. Making the shift easier to adapt from existing to e-commerce

G. Creating responsive e-commerce website

1.3 APPLICATION FEATURES

•A new user can register on the website.

•A customer can see details of the product present in the cart

•A customer can view his order history.

•Admin can start a sale with a certain discount on every product.

•Customers can filter the product based on the product details.

•A customer can add or delete a product from the cart.

•A seller can unregister/ stop selling his product.

•A seller/ customer can update his details.

•Admin can view the products purchased on a particular date.

•Admin can view the number of products sold on a particular date.

•A customer can view the total price of the product present in the cart unpurchased.

•Admin can view details of customers who have not purchased anything.

•Admin can view total profit earned from the website.

2. MOTIVATION

In this ongoing covid pandemic, all kinds of businesses expect a select few have suffered greatly. No matter what big, medium or small retailers have taken a big hit in general. During this perilous time, the global economy itself succumbed to a new low. This led to a wave of unemployment and left the economic situation in jeopardy. Thus, we want to use this project to provide a chance for retailers to regain their prosperity and aid the economy. Here are some of the reasons why e- commerce websites can drastically improve the living standards in this period of crisis:

I.   Global Market

II.   Open 24/7

III.   High conversion rate

IV.   Marketing via social media and search engine

V.   Less Risk

VI.   Personalised Services

VII.   More convenient

2.2 LITERATURE REVIEW

2.2.1 Journal Details:

Yan, Hou & Chen, Huafei & Yang, Shuling. (2016). Research on the Business Model of E-commerce Platform based on Value Co-creation Theory. International Journal of u- and e- Service, Science and Technology. 9. 415-424. 0.14257/ijunesst.2016.9.3.39.

Work Done:

In this paper, they analyze interactive process of value co-creation and study the influencing factors. Using empirical analysis, the result shows that website quality, reciprocity and altruism has a positive correlation with customer value creating behavior, however, incentive mechanism doesn't influence value cocreation behavior. On this basis, we put forward some concrete suggestions to the social business.

Inference:

This study through social commerce experience create value process and influencing factors of the model are discussed and get the conclusion of the study are as follows, users in the participation of the business community experience

create value when, in different time stage, different users and socialization of the business interaction, different period user participation psychology will change.

2.2.2 Journal Details:

Bhat, Dr. Shahid & Kansana, Keshav & Majid, Jenifur. (2016). A Review Paper on E-Commerce. TIMS 2016-International Conference.

Work Done:

The current research has been undertaken to describe the scenario of ECommerce, analyze the trends of E-Commerce. The study further examines the key variables imperative for the success of E-commerce business models. Objective: The objectives of present study are: 1. To understand the present status and trends of E-Commerce; and 2. To reveal the key variables influencing the increased usage of E-Commerce.

Inference:

A developing country may well attempt to be modernized if it introduces ecommerce effectively and efficiently. It will improve its output and lead to its competitive advantage. Information Technology (IT) has uplifted ecommerce worldwide. Now it's at ease to enter to a new market and marketers' can easily evaluate their product and company's performance.

2.2.3 Journal Details:

Jain, Vipin & Malviya, Bindoo & Arya, Satyendra. (2021). An Overview of Electronic Commerce (e-Commerce). Journal of Contemporary Issues in Business and Government. 27. 665-670. 10.47750/cibg.2021.27.03.090.

Work Done:

This review article discussed the aspects of electronic commerce including its importance, facilitators, benefits, challenges and scope in the Indian market.

Inference:

In the years to come, the industry of electronic commerce will be a one of the leading sector in the field of electronic business. The revolution in electronic commerce has huge positive impact on the transaction industry by fast offering new markets and crossing edges.

2.2.4 Journal Details:

Alrashdan, Mosab & Al-Maatouk, Qusay & Alrshdan, Maen & Xuan, Teo. (2020). Blockchain Technology in E-commerce Platform. INTERNATIONAL JOURNAL OF MANAGEMENT. 11. 1688-1697. 10.34218/IJM.11.10.2020.154.

Work Done:

The proposed system addresses the issue by introducing blockchain nodes concept into the database and inheriting data secureness of distributed peer to peer connection.

Inference:

For this paper, it can be summarized as integration of blockchain technology into the database system of e-commerce business platforms is essential for protecting data from data breaches issues. This method is significantly better than implementing a traditional database system since it is easy to be attacked by hackers or using only blockchain technology as the database system which is inefficient to the daily business process.

2.2.5 Journal Details:

Tran, Lobel. (2021). Managing the effectiveness of e-commerce platforms in a pandemic. Journal of Retailing and Consumer Services. 58. 102287. 10.1016/j.jretconser.2020.102287.

Work Done:

Using a sample of 617 online consumers with PLS analytical technique, this study finds a positive moderating effect of pandemic fear on the relationships among PEEP, economic benefits, and sustainable consumption.

Inference:

The contribution of this study is its examination of how economic benefit mediates the PEEP and sustainable consumption relationship which is dependable on the levels of pandemic fear. Implications for managers and theory are also discussed.

2.2.6 Journal Details:

Kathirvel, Deepika. (2018). ARTIFICIAL INTELLIGENCE OF ECOMMERCE PLATFORM. Asian Journal of Marketing. 9. 533-549.

Work Done:

Research on ARTIFICIAL INTELLIGENCE OF E-COMMERCE PLATFORM

Inference:

Online business is presently embracing this innovation to recognize designs in light of perusing, buy history, credit checks, account data and so forth. This information gathered at that point shape the premise of making altered suggestions for every client. Google and Microsoft are now putting into new AI activities. Numerous web-based business organizations have begun actualizing

distinctive types of AI to better comprehend their clients, and give an upgraded client encounter.

2.2.7 Journal Details:

Marrero, Luciano & Olsowy, Verena & Tesone, Fernando & Thomas, Pablo & Delia, Lisandro & Pesado, Patricia. (2021). Performance Analysis in NoSQL Databases, Relational Databases and NoSQL Databases as a Service in the Cloud. 10.1007/978-3-030-75836-3_11.

Work Done:

This work represents the continuation of previous studies and aims to compare and analyze 4 local NoSQL Database engines, 2 NoSQL Database as a Service engines in the cloud and a Relational Database engine, using different schemas and under large data volume.

Inference:

According to this work, NoSQL, unlike the relational model, does not respond to a Data Base type, but represents a set of Database types, with different implementations and characteristics to represent the information.

2.2.8 Journal Details:

Mishra, Jitendra. (2012). The Need for an E-Commerce Platform for India. Atna - Journal of Tourism Studies. 7. 15-28. 10.12727/ajts.7.2.

Work Done:

In this article the perception of operators as well as perspective tourists have been studied. The samples of operators and tourists in the Union Territory of Puducherry were selected as per the convenience of the researcher. The data collected through structured questionnaire were compared based on the Student's T-test.

Inference:

The samples in Puducherry seem to have supported the move to have an ecommerce platform of the entire country as opposed to the move of their associations at national level. The findings have been substantiated with the related literature in the field.

2.2.9 Journal Details:

Cen, Yukuo & Zhang, Jing & Wang, Gaofei & Qian, Yujie & Meng, Chuizheng & Dai, Zonghong & Yang, Hongxia & Tang, Jie. (2019). Trust Relationship Prediction in Alibaba E-Commerce Platform. IEEE Transactions on Knowledge and Data Engineering. PP. 1-1. 10.1109/TKDE.2019.2893939.

Work Done:

This paper introduces how to infer trust relationships from billion-scale networked data to benefit Alibaba E-Commerce business. To effectively leverage the network correlations between labeled and unlabeled relationships to predict trust, they formalize trust into multiple types and propose a graphical model to incorporate type-based dyadic and triadic correlations, namely e-Trust.

Inference:

Systematically, in this paper they evaluate the proposed methods on four different genres of datasets with labeled trust relationships: Alibaba, Epinions, Ciao and Advogato. Experimental results show that the proposed methods achieve significantly better performance than several comparison methods

2.2.10 Journal Details:

Zhang, Huibing & Dong, Junchao. (2020). Prediction of Repeat Customers on E-Commerce Platform Based on Blockchain. Wireless Communications and Mobile Computing. 2020. 1-15. 10.1155/2020/8841437.

Work Done:

The existing ensemble learning models have low prediction accuracy when the purchase behaviour sample is unbalanced and the information dimension of feature engineering is single. To overcome this problem, an ensemble learning prediction model based on multisource information fusion is proposed. Tests on the Tmall dataset showed that the accuracy and AUC values of the model reached 91.28% and 70.53%, respectively.

Inference:

The effectiveness of the proposed method has been evaluated on the Tmall real dataset. The experimental results showed that the proposed model is superior to the reference models. Tests on the Tmall dataset showed that the accuracy and AUC values of the model reached 91.28% and 70.53%, respectively.

3. RELATIONAL DATABASE SCHEMA &ER-DIAGRAM

3.1 RELATIONAL DATABASE SCHEMA
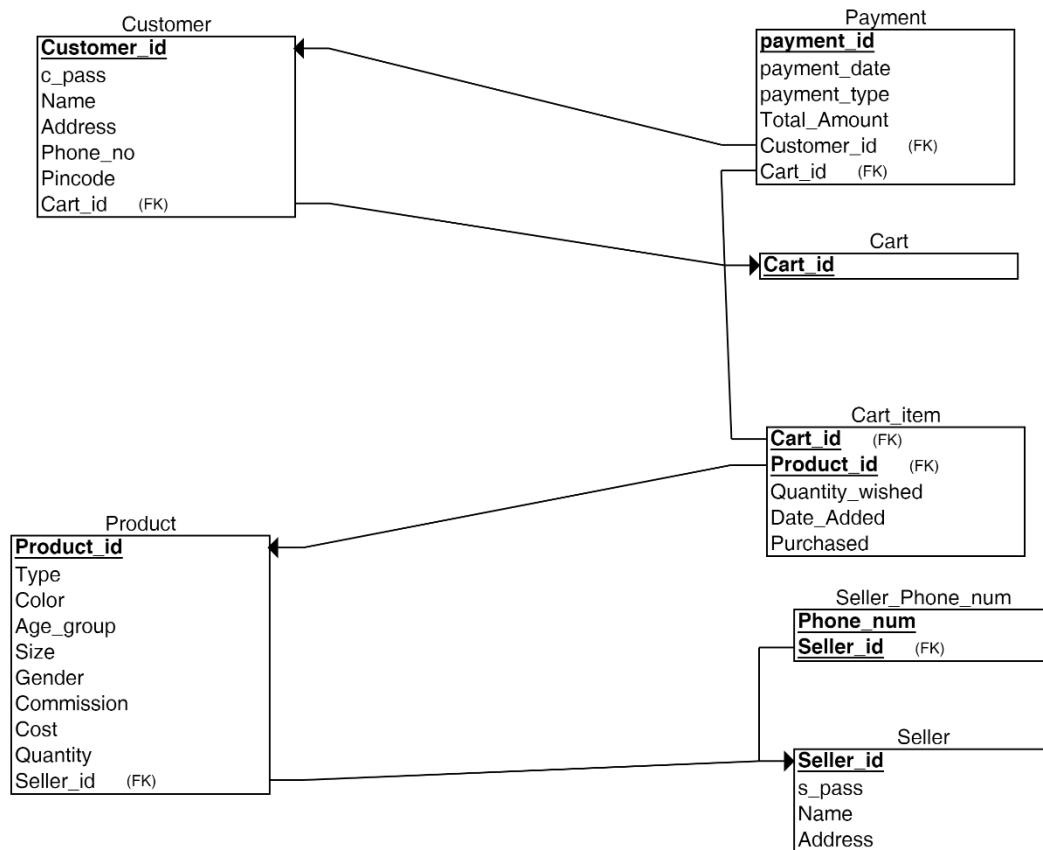
3.2 ENTITY RELATION DIAGRAM
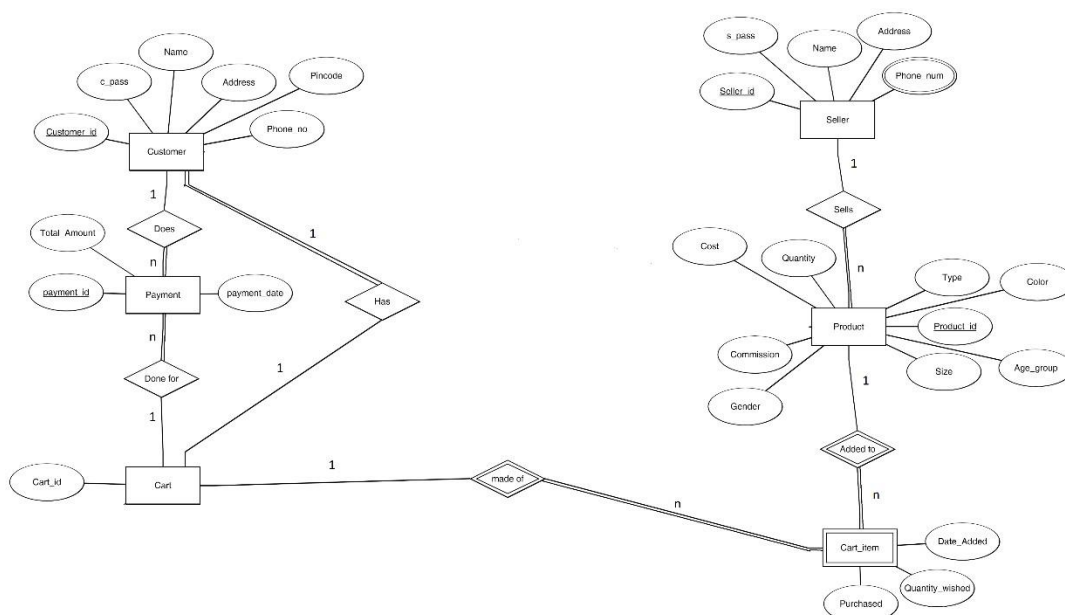
3.3 IMPLEMENTATION STEPS WITH SCREEN SHOTS

CREATING TABLES

Cart table

```
CREATE TABLE  "CART"
   (    "CART_ID" VARCHAR2(7) NOT NULL ENABLE,
         PRIMARY KEY ("CART_ID")
  USING INDEX  ENABLE
    )
/
```

Cart Item table

```
CREATE TABLE  "CART_ITEM"
   (    "QUANTITY_WISHED" NUMBER(1,0) NOT NULL ENABLE,
        "DATE_ADDED" DATE NOT NULL ENABLE,
        "CART_ID" VARCHAR2(7) NOT NULL ENABLE,
        "PRODUCT_ID" VARCHAR2(7) NOT NULL ENABLE,
        "PURCHASED" VARCHAR2(3) DEFAULT 'NO',
         PRIMARY KEY ("CART_ID", "PRODUCT_ID")
  USING INDEX  ENABLE
    )
/
ALTER TABLE  "CART_ITEM" ADD FOREIGN KEY ("CART_ID")
         REFERENCES  "CART" ("CART_ID") ENABLE
/
ALTER TABLE  "CART_ITEM" ADD FOREIGN KEY ("PRODUCT_ID")
         REFERENCES  "PRODUCT" ("PRODUCT_ID") ENABLE
/
```

Customer table

```
CREATE TABLE  "CUSTOMER"
   (    "CUSTOMER_ID" VARCHAR2(6) NOT NULL ENABLE,
        "C_PASS" VARCHAR2(10) NOT NULL ENABLE,
        "NAME" VARCHAR2(20) NOT NULL ENABLE,
        "ADDRESS" VARCHAR2(20) NOT NULL ENABLE,
        "PINCODE" NUMBER(6,0) NOT NULL ENABLE,
        "PHONE_NUMBER_S" NUMBER(10,0) NOT NULL ENABLE,
        "CART_ID" VARCHAR2(7) NOT NULL ENABLE,
         PRIMARY KEY ("CUSTOMER_ID")
  USING INDEX  ENABLE
    )
/
ALTER TABLE  "CUSTOMER" ADD FOREIGN KEY ("CART_ID")
         REFERENCES  "CART" ("CART_ID") ENABLE
/
```

Product table:

```
CREATE TABLE  "PRODUCT"
   (    "PRODUCT_ID" VARCHAR2(7) NOT NULL ENABLE,
        "TYPE" VARCHAR2(7) NOT NULL ENABLE,
        "COLOR" VARCHAR2(15) NOT NULL ENABLE,
        "P_SIZE" VARCHAR2(2) NOT NULL ENABLE,
        "GENDER" CHAR(1) NOT NULL ENABLE,
        "COMMISSION" NUMBER(2,0) NOT NULL ENABLE,
        "COST" NUMBER(5,0) NOT NULL ENABLE,
        "QUANTITY" NUMBER(2,0) NOT NULL ENABLE,
        "SELLER_ID" VARCHAR2(6),
         PRIMARY KEY ("PRODUCT_ID")
  USING INDEX  ENABLE
   )
/
ALTER TABLE  "PRODUCT" ADD FOREIGN KEY ("SELLER_ID")
         REFERENCES  "SELLER" ("SELLER_ID") ON DELETE SET NULL ENABLE
/
```

Seller table

```
CREATE TABLE  "SELLER"
   (    "SELLER_ID" VARCHAR2(6) NOT NULL ENABLE,
        "S_PASS" VARCHAR2(10) NOT NULL ENABLE,
        "NAME" VARCHAR2(20) NOT NULL ENABLE,
        "ADDRESS" VARCHAR2(10) NOT NULL ENABLE,
         PRIMARY KEY ("SELLER_ID")
  USING INDEX  ENABLE
   )
/
```

Seller phone number table

```
CREATE TABLE  "SELLER_PHONE_NUM"
   (    "PHONE_NUM" NUMBER(10,0) NOT NULL ENABLE,
        "SELLER_ID" VARCHAR2(6) NOT NULL ENABLE,
         PRIMARY KEY ("PHONE_NUM", "SELLER_ID")
  USING INDEX  ENABLE
   )
/
ALTER TABLE  "SELLER_PHONE_NUM" ADD FOREIGN KEY ("SELLER_ID")
         REFERENCES  "SELLER" ("SELLER_ID") ON DELETE CASCADE ENABLE
/
```

Payment table

```
CREATE TABLE  "PAYMENT"
   (    "PAYMENT_ID" VARCHAR2(7) NOT NULL ENABLE,
        "PAYMENT_DATE" DATE NOT NULL ENABLE,
        "PAYMENT_TYPE" VARCHAR2(10) NOT NULL ENABLE,
        "CUSTOMER_ID" VARCHAR2(6) NOT NULL ENABLE,
        "CART_ID" VARCHAR2(7) NOT NULL ENABLE,
        "TOTAL_AMOUNT" NUMBER(6,0),
         PRIMARY KEY ("PAYMENT_ID")
  USING INDEX  ENABLE
    )
/
ALTER TABLE  "PAYMENT" ADD FOREIGN KEY ("CUSTOMER_ID")
         REFERENCES  "CUSTOMER" ("CUSTOMER_ID") ENABLE
/
ALTER TABLE  "PAYMENT" ADD FOREIGN KEY ("CART_ID")
         REFERENCES  "CART" ("CART_ID") ENABLE
/
```

4.1 SOFTWARE/CLOUD PLATFORMS USED

Oracle Database Express Edition (Oracle Database XE) is a free, smaller-footprint edition of Oracle Database. Oracle Database XE is easy to install and easy to manage.

With Oracle Database XE and related tools you can:

- Administer the database

- Create tables, views, and other database objects

- Import, export, and view table data

- Run queries and SQL scripts

4.2 CODING AND ANALYSIS

CREATING TABLES:

CREATE TABLE Cart

(

Cart_id VARCHAR(7) NOT NULL,

PRIMARY KEY(Cart_id)

);

CREATE TABLE Customer

(

Customer_id VARCHAR(6) NOT NULL,

c_pass VARCHAR(10) NOT NULL,   Name

VARCHAR(20) NOT NULL,

Address VARCHAR(20) NOT NULL,

Pincode NUMBER(6) NOT NULL,

Phone_number_s number(10) NOT NULL,

PRIMARY KEY (Customer_id),

Cart_id VARCHAR(7) NOT NULL,

FOREIGN KEY(Cart_id) REFERENCES cart(Cart_id)

);

CREATE TABLE Seller

(

Seller_id VARCHAR(6) NOT NULL,

```
    s_pass VARCHAR(10) NOT NULL,

    Name VARCHAR(20) NOT NULL,

    Address VARCHAR(10) NOT NULL,

    PRIMARY KEY (Seller_id)

);

CREATE TABLE Seller_Phone_num

(

    Phone_num NUMBER(10) NOT NULL,

    Seller_id VARCHAR(6) NOT NULL,

    PRIMARY KEY (Phone_num, Seller_id),

    FOREIGN KEY (Seller_id) REFERENCES Seller(Seller_id)

    ON DELETE CASCADE

);

CREATE TABLE Payment

(

    payment_id VARCHAR(7) NOT NULL,

payment_date DATE NOT NULL,

    Payment_type VARCHAR(10) NOT NULL,

    Customer_id VARCHAR(6) NOT NULL,

    Cart_id VARCHAR(7) NOT NULL,

    PRIMARY KEY (payment_id),
```

```
FOREIGN KEY (Customer_id) REFERENCES Customer(Customer_id), FOREIGN

        KEY (Cart_id) REFERENCES Cart(Cart_id), total_amount numeric(6)

);

CREATE TABLE Product

(

    Product_id VARCHAR(7) NOT NULL,

    Type VARCHAR(7) NOT NULL,

    Color VARCHAR(15) NOT NULL,

    P_Size VARCHAR(2) NOT NULL,

    Gender CHAR(1) NOT NULL,

    Commission NUMBER(2) NOT NULL,

    Cost NUMBER(5) NOT NULL,

    Quantity NUMBER(2) NOT NULL,

    Seller_id VARCHAR(6),

    PRIMARY KEY (Product_id),

    FOREIGN KEY (Seller_id) REFERENCES Seller(Seller_id)

    ON DELETE SET NULL

);

CREATE TABLE Cart_item

(

    Quantity_wished NUMBER(1) NOT NULL,

    Date_Added DATE NOT NULL,
```

Cart_id VARCHAR(7) NOT NULL,

Product_id VARCHAR(7) NOT NULL,

FOREIGN KEY (Cart_id) REFERENCES Cart(Cart_id),

FOREIGN KEY (Product_id) REFERENCES Product(Product_id),

Primary key(Cart_id,Product_id)

);

alter table Cart_item add purchased varchar(3) default 'NO';

INSERTING VALUES:

insert into Cart values('crt1011');

insert into Customer values ('cid100','ABCM1235','rajat','G-453','632014',9893135876, 'crt1011');   insert into Seller

values('sid100','12345','aman','delhi cmc');

insert into Product

values('pid1001','jeans','red','32','M',10,10005,20,'sid100');

insert into Seller_Phone_num values('9943336206','sid100');

insert into Cart_item values(3,to_date('10-OCT-1999','dd-monyyyy'),'crt1011','pid1001','Y');

insert into Payment values('pmt1001',to_date('10-OCT-1999','dd-monyyyy'),'online','cid100','crt1011',NULL);

QUERIES:

1. If the customer wants to see details of product present in the cart

select * from product where product_id in(select product_id from Cart_item where (Cart_id in (select Cart_id from Customer where Customer_id='cid100'))and purchased='Y'); 2. If a customer wants to see order history

select product_id,Quantity_wished from Cart_item where (purchased='Y' and Cart_id in (select Cart_id from customer where Customer_id='cid100')); 3. Customer wants to see filtered products on the basis of size,gender,type

select product_id, color, cost, seller_id from product where (type='jeans' and p_size='32' and gender='F' and quantity>0) 4. If customer wants to modify the cart

delete from cart_item where (product_id='pid1001' and Cart_id in (select cart_id from Customer where Customer_id='cid100'));

5. If a seller stops selling his product

delete from seller where seller_id = 'sid100'; update product set quantity = 00 where seller_id is NULL;

6. If admin want to see what are the product purchased on the particular date

select product_id from cart_item where (purchased='Y' and date_added='12dec-2018');

7. How much product sold on the particular date

select count(product_id) count_pid,date_added from Cart_item where purchased='Y' group by(date_added);

8. If a customer want to know the total price present in the cart

select sum(quantity_wished * cost) total_payable from product p join cart_item c on p.product_id=c.product_id where c.product_id in (select product_id from cart_item where cart_id in(select Cart_id from customer where customer_id='cid101') and purchased='Y');

9.Show the details of the customer who has not purchased any thing

Select * from customer where customer_id not in (select customer_id from Payment);

10. Find total profit of the website from sales.

select sum(quantity_wished * cost * commission/100) total_profit from product p join cart_item c on p.product_id=c.product_id where purchased='Y';

11. Updating the cost of cart items in payment table update

    payment set total_amount=total_cost(cart_id);

12. Cost filter select * from product where cost in

    (100,150);

PL/SQL FUNCTION

Procedure which returns the type of product with the cost less than the given cost

create or replace procedure cost_filter(c in number,t in varchar)

  is

  cs product.cost%type;   ty

product.type%type;   id

product.product_id%type;

cursor cf is

```
select product_id,cost,type from product where cost<c and type=t;    begin

open cf;    loop    fetch cf into id,cs,ty;    exit when cf%notfound;

dbms_output.put_line('Product' || id || 'has cost ' || cs || ' and the type is' || ty);

end loop;    close cf;    exception    when no_data_found then

dbms_output.put_line('Sorry no such products exist');    end;
```

Function which returns total number of products which a particular seller sells

```
create or replace function totalProducts(sId in varchar)    return number

    is

    total number(2):=0;

begin    select count(*)

into total    from product


    where seller_id=sId;

return total;    end;

    /
```

Function execution:

```
declare    c number(2);    begin

c:=totalProducts('sid102');

dbms_output.put_line('Total products is : '|| c);

end;
```

Procedure which returns the total quantity of product with the given ID

```
create or replace procedure prod_details(p_id in varchar)

    is

    quan number(2);    begin    select quantity into quan from

product where product_id=p_id;    exception    when

no_data_found then    dbms_output.put_line('Sorry no such

product exist !!');    end;

    /
```

TRIGGERS

Trigger that will execute before inserting new customer to database and inserting a new cartId to the cart_items table

```
create or replace function total_cost(cId in varchar)    return number

    is

    total number(2) :=0;

begin

    select sum(cost) into total from product,cart_item where
product.product_id=cart_item.product_id and cart_id=cId;

    return total;

end;


    create or replace trigger before_pay_up

before insert    on    payment    for each
```

```
row    declare    total number(3);

begin    total :=total_cost(:new.cart_id);


   insert into payment
values(:new.payment_id,:new.payment_date,:new.payment_type,:new.custome
r_id,:new.cart_id,total);    end;
```

Trigger to update the total amount of user everytime he adds something to payment

table
```
create or replace function total_cost(cId in varchar)    return number

   is

   total number(2) :=0;

begin

   select sum(cost) into total from product,cart_item where
product.product_id=cart_item.product_id and cart_id=cId;

   return total;

end;


   create or replace trigger before_pay_up

before insert    on    payment    for each

row    declare    total number(3);


   begin    total

:=total_cost(:new.cart_id);
```

insert into payment

values(:new.payment_id,:new.payment_date,:new.payment_type,:new.customer_id,:new.cart_id,total);   end;

4.3 RESULTS AND ANALYSIS

Product(EDIT)

	Product ID ↑≡	Type	Color	P Size	Gender	Commission	Cost	Quantity	Seller
	pid1001	jeans	red	32	M	10	55	20	12345
	pid1002	jeans	blue	32	M	25	100	20	12345
	pid1003	jeans	grey	32	M	20	200	15	12345
	pid1004	jeans	green	32	M	15	110	25	12345
	pid1005	jeans	blue	32	F	15	150	25	12345
	pid2001	boots	black	9	M	15	75	30	12123
	pid2002	boots	black	9	F	15	55	25	12123
	pid2003	boots	black	10	M	10	140	20	12123
	pid2004	boots	black	10	F	10	90	25	12123
	pid2005	boots	brown	10	U	15	100	20	12123
	pid3001	T-Shirt	White	38	M	10	60	25	23234
	pid3002	T-Shirt	Black	38	M	10	70	20	23234
	pid3003	T-Shirt	Red	38	M	10	50	30	23234
	pid3004	T-Shirt	Pink	36	F	12	90	20	23234
	pid3005	T-Shirt	White	36	F	12	80	25	23234

Customer(EDIT)

	Customer ID ↑≡	C Pass	Name	Address	Pincode	Phone Number S	Cart
	cid100	ABCM1235	rajat	G-453	632,014	9,893,135,876	crt1011
	cid200	ABF123	Mala	CBE	642,102	9,087,324,571	crt1012
	cid300	BCF765	Bigil	Chennai	600,028	7,790,326,712	crt1013
	cid400	STK144	Kaneki	Delhi	100,001	8,023,547,618	crt1014
	cid500	ADI321	Modi	Surat	500,321	9,876,543,210	crt1015
	cid600	AQW123	STR	Huaweii	123,456	9,087,567,890	crt1016
	cid700	123sdf	asd	asdfg	677,231	1,234	crt1017

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Cart(EDIT)

	Quantity Wished ↑≡	Date Added	Cart	Product	Purchased
	2.0	5/26/2021	crt1012	boots	Y
	3.0	5/25/2021	crt1011	jeans	Y
	3.0	5/24/2021	crt1013	jeans	Y
	4.0	5/27/2021	crt1014	boots	Y
	4.0	5/24/2021	crt1013	boots	Y
	4.0	5/26/2021	crt1012	T-Shirt	Y
	5.0	5/25/2021	crt1011	boots	Y

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Payment(EDIT)

	Payment ID ↑≡	Payment Date	Payment Type	Customer	Cart	Total Amount
✎	pmt1001	5/25/2021	online	ABCM1235	crt1011	130
✎	pmt1002	5/26/2021	online	ABF123	crt1012	145
✎	pmt1003	5/27/2021	cash	BCF765	crt1013	155
✎	pmt1004	5/28/2021	cash	STK144	crt1014	90

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5. CONCLUSION AND FUTUREWORK

In this modern era of online shopping no seller wants to be left behind, moreover due to its simplicity the shift from offline selling model to an online selling model is witnessing a rampant growth. Therefore, as an engineer our job is to ease the path of this transition for the seller. Amongst many things that an online site requires the most important is a database system. Hence in this project we are planning to design a database where small clothing sellers can sell their product online.