DBMS for Online Retail Store

A Project Report submitted in partial fulfillment for the award of

MBA (FinTech)

Submitted by

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GITAM INSTITUTE OF MANAGEMENT

GITAM UNIVERSITY

(U/s 3 of UGC Act)

VISAKHAPATNAM

(2019-21)

DECLARATION

I, the undersigned, hereby declare that, the project titled “DBMS for Online Retail Store” submitted to GITAM Institute of Management, GITAM University for the award of the Masters of Business Administration (FinTech) is the original work done by us, under the guidance of Mr.DivakarAllavarapu, Assistant Professor, GITAM Institute of Management.

The empirical findings in this report are based on the data collected by us. It was not copied from any other project. The project has not been submitted to any Substitute/University for the award of any Diploma/Degree.

Date: - Abhigna Sai Bathina (121923901001**)**

Place: - Visakhapatnam Sai Prathyusha Pusarla (121923901008)

CERTIFICATE

This is to certify that the project entitled, “DBMS for Online Retail Store”, is a bonafide work done by ABHIGNA SAI BATHINA(121923901001) and is submitted in partial fulfillment for the Masters of Business Administration (Fintech) of GITAM University. It has not been submitted for the award of any diploma/degree in any other Institution/University.

Date: Mr.DivakarAllavarapu

Place: Visakhapatnam Assistant Professor

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I am thankful toProf. Y. Gowtham Rao, Director, GITAM Institute of Management, GITAM University, Vishakhapatnam, for giving me an opportunity to learn and have a study on very important topic of management.

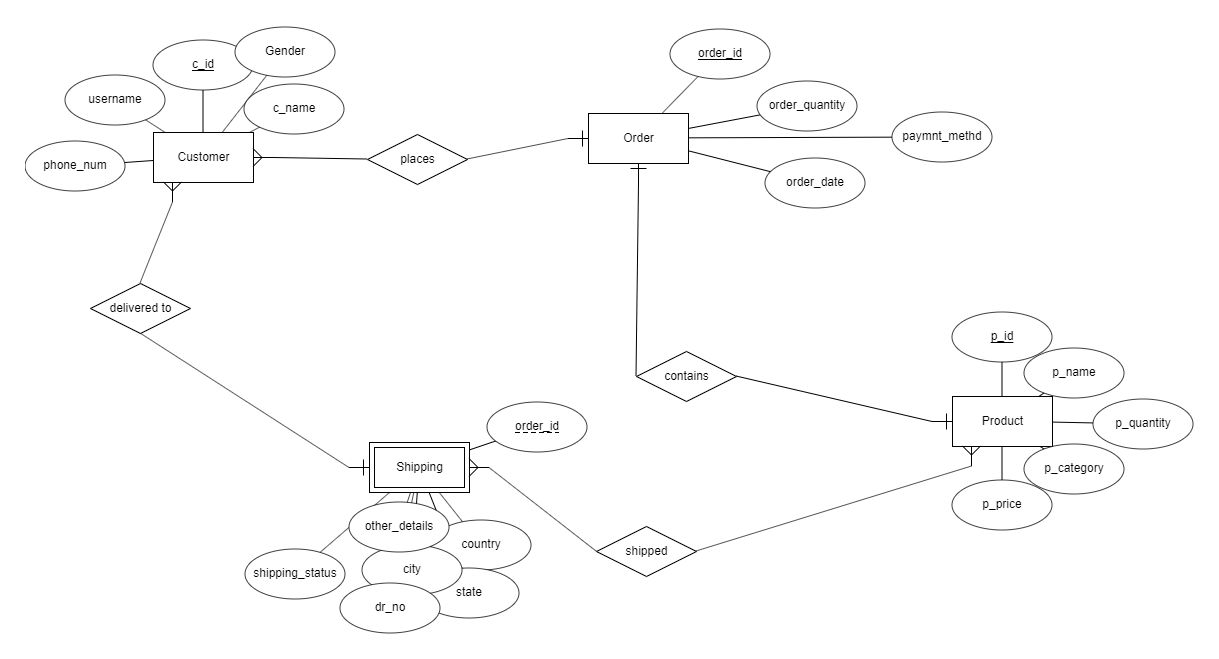
I am thankful to Mr.DivakarAllavarapu, for his guidance and Mr. Leben Johnson, Program Coordinator for his constant support.

Abhigna Sai Bathina (121923901001**)**

Sai Prathyusha Pusarla (121923901008)

**ER Diagram:**

The entity relationship diagram of the online retail store is as follows.



**Procedure:**

* Creating tables and inserting the values for various entities.

1. Creating Customer Table

* create table customer (c\_id number(25) primary key, c\_name varchar(25), username varchar(25), phone\_num number(10));

Table created.

* Inserting the data into customer table

> insert into customer values(12301, 'Abhi', 'abhi\_01', 8769289021);

> insert into customer values(12302, 'Bobby', 'bob\_rock', 7834589021);

> insert into customer values(12303, 'prathyusha', 'prathyu', 7985324672);

> insert into customer values(12304, 'lavanya', 'love\_u', 9876324672);

> insert into customer values(12305, 'Arjun', 'ar\_june', 9854726543);

1. Creating Product Table

* create table products (p\_id varchar(5) primary key, p\_name varchar(20), p\_quantity number(5), p\_category varchar(15), p\_price number(6));

Table created.

* Inserting values into product table

> insert into products values('p101', 'phonecase', 100, 'accessory', 250);

> insert into products values('p102', 'phone', 200, 'electronics', 20000);

> insert into products values('p103', 'menshirt', 200, 'apparel', 1500);

> insert into products values('p104', 'popsocket', 100, 'accessory', 200);

> insert into products values('p105', 'earrings', 100, 'accessory', 600);

1. Creating Orders Table

* create table orderr(order\_id varchar(10) PRIMARY KEY, order\_quantity number(6), order\_date date, payment\_method varchar(10),c\_id not null,FOREIGN KEY(c\_id) REFERENCES customer(c\_id),p\_id not null,FOREIGN KEY (p\_id) REFERENCES products(p\_id));
* Inserting data into orders table

> insert into orderrvalues('A12F501', 1, '12-feb-2018', 'card', 12309, 'p103');

> insert into orderrvalues('A12F502', 2, '12-nov-2019', 'cod', 12305, 'p101');

> insert into orderrvalues('A12F503', 1, '12-nov-2019', 'cod', 12305, 'p102');

> insert into orderrvalues('A12F504', 1, '20-dec-2019', 'cod', 12315, 'p118');

> insert into orderrvalues('A12F505', 5, '11-apr-2019', 'online', 12315, 'p104');

1. Creating Shipping Table

* create table shipping(shipping\_status varchar(10) , add\_countryvarchar(10), add\_cityvarchar(10), dr\_no number(5),other\_details varchar(10), c\_id not null,FOREIGN KEY(c\_id) REFERENCES customer(c\_id),order\_id not null,FOREIGN KEY (order\_id) REFERENCES products(order\_id));
* Inserting Values into shipping Table

> insert into shipping values('delivered','india', 'mumbai', 11 , 12309, 'A12F501');

> insert into shippingvalues('delivered','india', 'hyderabad', 52 , 12305, 'A12F502');

> insert into shippingvalues('delivered','india', 'hyderabad', 25 , 12305, 'A12F503');

> insert into shippingvalues('dispatched','india', 'chennai', 75 ,', 12315, 'A12F504');

> insert into shippingvalues('dispatched','india', 'chennai', 75, 12315, 'A12F505');

* Getting all the data from the Tables for view.

> select \* from customer;

C\_ID C\_NAME USERNAME PHONE\_NUM G

---------- ------------------------- ------------------------- ---------- -

12301 Abhi abhi\_01 8769289021 f

12302 Bobby bob\_rock 7834589021 m

12303 prathyusha prathyu 7985324672 f

12304 lavanya love\_u 9876324672 f

12305 Arjun ar\_june 9854726543 m

12306 Pavitra pavs\_04 8888826543 f

12307 harshith harshey 8885542456 m

12308 arnav arnav 7584542456 m

12309 saranya sarna 7584542456 f

12310 kalki kal\_ki 7785423994 f

12311 nagma nag\_ni 7785424575 f

C\_ID C\_NAME USERNAME PHONE\_NUM G

---------- ------------------------- ------------------------- ---------- -

12312 aashna ashh 8885424575 f

12313 poornima poo\_h 8885424545 f

12314 karan karan 896321456 m

12315 spandana sweety 9963214578 f

12316 bhagmathi bag\_ghee 944568217 f

12317 akshay akshay 775842369 m

12318 monica mon\_ka 888556699 f

12319 chandler chandilier 988556699 m

12320 joey joe 9855656699 m

20 rows selected.

> select \* from products;

P\_ID P\_NAME P\_QUANTITY P\_CATEGORY P\_PRICE

----- -------------------- ---------- --------------- ----------

p101 phonecase 100 accessory 250

p102 phone 200 electronics 20000

p103 menshirt 200 apparel 1500

p104 popsocket 100 accessory 200

p105 earrings 100 accessory 600

p106 womentop 200 apparel 1600

p107 womenskirt 100 apparel 2000

p108 womenbottom 100 apparel 1800

p109 trouser 100 apparel 1000

p110 trouser2 100 apparel 1200

p111 earphones 250 electronics 800

P\_ID P\_NAME P\_QUANTITY P\_CATEGORY P\_PRICE

----- -------------------- ---------- --------------- ----------

p112 pendrive 200 electronics 1000

p113 laptop 100 electronics 50000

p114 womenblouse 100 apparel 1200

p115 menbelt 100 apparel 500

p116 stole 100 apparel 800

p117 sandals 100 apparel 600

p118 shoes 200 apparel 1200

p119 tablet 100 electronics 30000

p120 keyboard 200 electronics 9000

20 rows selected.

> select \* from orderr;

ORDER\_ID ORDER\_QUANTITY ORDER\_DAT PAYMENT\_ME C\_ID P\_ID

---------- -------------- --------- ---------- ---------- -----

A12F501 1 12-FEB-18 card 12309 p103

A12F502 2 12-NOV-19 cod 12305 p101

A12F503 1 12-NOV-19 cod 12305 p102

A12F504 1 20-DEC-19 cod 12315 p118

A12F505 5 11-APR-19 online 12315 p104

A12F506 1 19-SEP-19 online 12311 p111

A12F507 1 22-OCT-19 card 12308 p115

A12F508 1 22-OCT-19 card 12308 p109

A12F509 1 02-SEP-18 online 12301 p120

A12F510 1 02-DEC-19 online 12310 p114

A12F511 1 14-OCT-19 card 12304 p107

ORDER\_ID ORDER\_QUANTITY ORDER\_DAT PAYMENT\_ME C\_ID P\_ID

---------- -------------- --------- ---------- ---------- -----

A12F512 2 24-DEC-19 cod 12301 p116

A12F513 5 22-DEC-19 card 12318 p105

A12F514 1 02-DEC-19 card 12314 p110

A12F515 2 14-DEC-19 card 12302 p120

A12F516 1 14-DEC-19 card 12302 p113

A12F517 1 24-NOV-19 cod 12307 p111

A12F518 1 05-DEC-19 cod 12306 p108

A12F519 1 15-DEC-19 online 12320 p118

A12F520 1 28-DEC-19 online 12318 p110

20 rows selected.

>select \* from shipping;

SHIPPING\_S ADD\_COUNTR ADD\_CITY DR\_NO OTHER\_DET C\_ID ORDER\_ID

---------- ---------- ---------- ---------- ---------- ---------- ----------

delivered indiamumbai 11 12309 A12F501

deliveredindiahyderabad 52 12305 A12F502

delivered indiahyderabad 52 12305 A12F503

dispatchedindiachennai 25 12315 A12F504

dispatchedindiachennai 25 12315 A12F505

dispatchedindiavizag 25 neargitam 12311 A12F506

delivered indiahyderabad 25 12308 A12F507

delivered indiahyderabad 25 12308 A12F508

delivered indiavizag 25 12301 A12F509

shippedindiabanglore 67 12310 A12F510

delivered indiabanglore 72 gandinagar 12304 A12F511

SHIPPING\_S ADD\_COUNTR ADD\_CITY DR\_NO OTHER\_DETA C\_ID ORDER\_ID

---------- ---------- ---------- ---------- ---------- ---------- ----------

dispatchedindiabanglore 52 office 12301 A12F512

dispatchedindiahyderabad 52 12318 A12F513

shippedindiavizag 14 gajuwaka 12314 A12F514

shippedindiavizag 19 nad 12302 A12F515

shippedindiavizag 19 nad 12302 A12F516

delivered indiachennai 19 12307 A12F517

shippedindiavizag 52 12307 A12F518

dispatchedindiahyderabad 55 12320 A12F519

dispatchedindiahyderabad 17 office 12318 A12F520

20 rows selected.

QUERIES

1. Selecting customer if who ordered products after 2nd December 2019

>select distinct(c\_id) from customer where c\_id in(select c\_id from orderr where order\_date> '02-DEC-19');

* Output

C\_ID

----------

12301

12302

12306

12315

12318

12320

1. selecting male cutomers who lives in hyderbad pays with card

>select c\_name from customer where gender='m' and c\_idin(select c\_id from orderr where payment\_method='card' and c\_id in(select c\_id from shipping where add\_city='hyderabad'));

* Output

C\_NAME

-------------------------

arnav

1. selecting male cutomers who lives in vizag

>select c\_name from customer where gender='m' and c\_idin(select c\_id from shipping where add\_city='vizag');

* Output

C\_NAME

-------------------------

Bobby

harshith

karan

1. selecting cutomers who orderd only electronics

>select c\_name from customer where c\_idin(select c\_id from orderr where p\_id in(select p\_id from products where p\_category ='electronics'));

* Output

C\_NAME

-------------------------

Abhi

Bobby

Arjun

harshith

nagma

1. retriving average price of the products using avrage function

>select avg(p\_price) from products;

* Output

AVG(P\_PRICE)

------------

6262.5

1. retreving name of customers whos phone numbers start with 888

>select c\_name from customer where phone\_num like '888%';

* Output

C\_NAME

-------------------------

Pavitra

harshith

aashna

poornima

monica

1. reteving all the products whos quantity is more than 200

> select \* from products where p\_quantity>= 200;

* Output

P\_ID P\_NAME P\_QUANTITY P\_CATEGORY P\_PRICE

----- -------------------- ---------- --------------- ----------

p102 phone 200 electronics 20000

p103 menshirt 200 apparel 1500

p106 womentop 200 apparel 1600

p111 earphones 250 electronics 800

p112 pendrive 200 electronics 1000

p118 shoes 200 apparel 1200

p120 keyboard 200 electronics 9000

1. displaying all the names of customers in ascending order

> select c\_name from customer order by c\_nameasc ;

* Output

C\_NAME

-------------------------

Abhi

Arjun

Bobby

Pavitra

aashna

akshay

arnav

bhagmathi

chandler

harshith

joey

C\_NAME

-------------------------

kalki

karan

lavanya

monica

nagma

poornima

prathyusha

saranya

spandana

1. displaying nnumber of customers who orederd products and payed with card

>select count(c\_id) from customer where c\_id in(select c\_id from orderr where payment\_method=’card’);

* Output

COUNT(C\_ID)

-----------

6

1. retreving names of the customers whos goods got deliverd and payed when deliverd

>select c\_name from customer where c\_idin(select c\_id from orderr where payment\_method='cod' and c\_id in(select c\_id from shipping whereshipping\_status='delivered'));

* Output

C\_NAME

-------------------------

Arjun

Abhi

harshith

1. retreving names of the customers who odered more than 4 goods

>select c\_name from customer where c\_idin(select c\_id from orderr where order\_quantity>4);

* Output

C\_NAME

-------------------------

spandana

monica

1. retreving all the name of customers who got received their orders

>select c\_name from customer where c\_idin(select c\_id from shipping where shipping\_status=’delivered’);

* Output

C\_NAME

-------------------------

saranya

Arjun

arnav

Abhi

lavanya

harshith

6 rows selected.

1. retreving all the customers who received their orders and lives in vizag

>select c\_name from customer where c\_idin(select c\_id from shipping where shipping\_status =’delivered’ and add\_city=’vizag’);

* Output

C\_NAME

-------------------------

Abhi

1. retreving all the names of customers who orderd either phone or earphones

>select c\_id from orderr where p\_idin(select p\_id from products where p\_name='phone' or p\_name='earphones');

* Output

C\_ID

----------

12305

12311

12307

1. counting how many male customers are present using count function

>select COUNT(c\_name) from customer where gender='m';

* Output

COUNT(C\_NAME)

-------------

8

1. counting how many female customers are present using count function

>select COUNT(c\_name) from customer where gender='f';

* Output

COUNT(C\_NAME)

-------------

12

1. counting who many customers orderd products

>select count(distinct(c\_id)) from orderr;

* Output

COUNT(DISTINCT(C\_ID))

---------------------

14

1. retreving number of keyboards sold

select sum(order\_quantity) from orderr where p\_id in(select p\_id from products where p\_name='keyboard');

* Output

SUM(ORDER\_QUANTITY)

-------------------

3

1. joining products and orderr table using join

>select p\_price,order\_quantity from products join orderr on products.p\_id=orderr.p\_id;

* Output

P\_PRICE ORDER\_QUANTITY

---------- --------------

1500 1

250 2

20000 1

1200 1

200 5

800 1

500 1

1000 1

9000 1

1200 1

2000 1

P\_PRICE ORDER\_QUANTITY

---------- --------------

800 2

600 5

1200 1

9000 2

50000 1

800 1

1800 1

1200 1

1200 1

1. joining products and order table using join

>select p\_quantity,order\_quantity from products join orderr on products.p\_id=orderr.p\_id;

* Output

P\_QUANTITY ORDER\_QUANTITY

---------- --------------

200 1

100 2

200 1

200 1

100 5

250 1

100 1

100 1

200 1

100 1

100 1

P\_QUANTITY ORDER\_QUANTITY

---------- --------------

100 2

100 5

100 1

200 2

100 1

250 1

100 1

200 1

100 1

1. retreving product ids and grouping them using their category

select count(p\_id),p\_category from products group by p\_category;

COUNT(P\_ID) P\_CATEGORY

----------- ---------------

11 apparel

3 accessory

6 electronics

1. retreving number of customers whos name starts with a

>select count(c\_id) from customer where c\_name like 'a%';

* Output

COUNT(C\_ID)

-----------

3

1. retreving name and their ids of customers whos name starts with a

>select c\_name,c\_id from customer where c\_name like 'a%';

* Output

C\_NAME C\_ID

------------------------- ----------

arnav 12308

aashna 12312

akshay 12317

1. selecting all the products whos product price is more than 1000

>select p\_name from products where p\_price>1000;

* Output

P\_NAME

--------------------

phone

menshirt

womentop

womenskirt)

womenbottom

trouser2

laptop

womenblouse

shoes

tablet

keyboard

1. Getting the female customer names using payment method other than cod

>select c\_name from customer where gender='f' and c\_id in(select c\_id from orderr where payment\_method<> 'cod');

* Output

C\_NAME

-------------------------

saranya

spandana

nagma

Abhi

kalki

lavanya

monica

7 rows selected.

1. select c\_name from customer where c\_id in(select c\_id from orderr where order\_date BETWEEN '01-DEC-19' AND '25-DEC-19');

* Output

C\_NAME

-------------------------

spandana

kalki

Abhi

monica

karan

Bobby

Pavitra

joey

8 rows selected.

1. select p\_name as product from products where p\_category='electronics';

* Output

PRODUCT

--------------------

phone

earphones

pendrive

laptop

tablet

keyboard

6 rows selected.

1. select p\_id,avg(order\_quantity) from orderr group by p\_id;

* Output

P\_ID AVG(ORDER\_QUANTITY)

----- -------------------

p102 1

p118 1

p115 1

p120 1.5

p114 1

p108 1

p111 1

p101 2

p110 1

p107 1

p103 1

P\_ID AVG(ORDER\_QUANTITY)

----- -------------------

p104 5

p116 2

p105 5

p109 1

p113 1

16 rows selected.

1. select p\_category, avg(p\_price) from products group by p\_category;

P\_CATEGORY AVG(P\_PRICE)

--------------- ------------

apparel 1218.18182

accessory 350

electronics 18466.6667

1. select count(order\_id),p\_id from orderr group by p\_id;

COUNT(ORDER\_ID) P\_ID

--------------- -----

1 p102

2 p118

1 p115

2 p120

1 p114

1 p108

2 p111

1 p101

2 p110

1 p107

1 p103

COUNT(ORDER\_ID) P\_ID

--------------- -----

1 p104

1 p116

1 p105

1 p109

1 p113

16 rows selected.