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# DATABASE MANAGEMENT SYSTEM

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SQL capstone project

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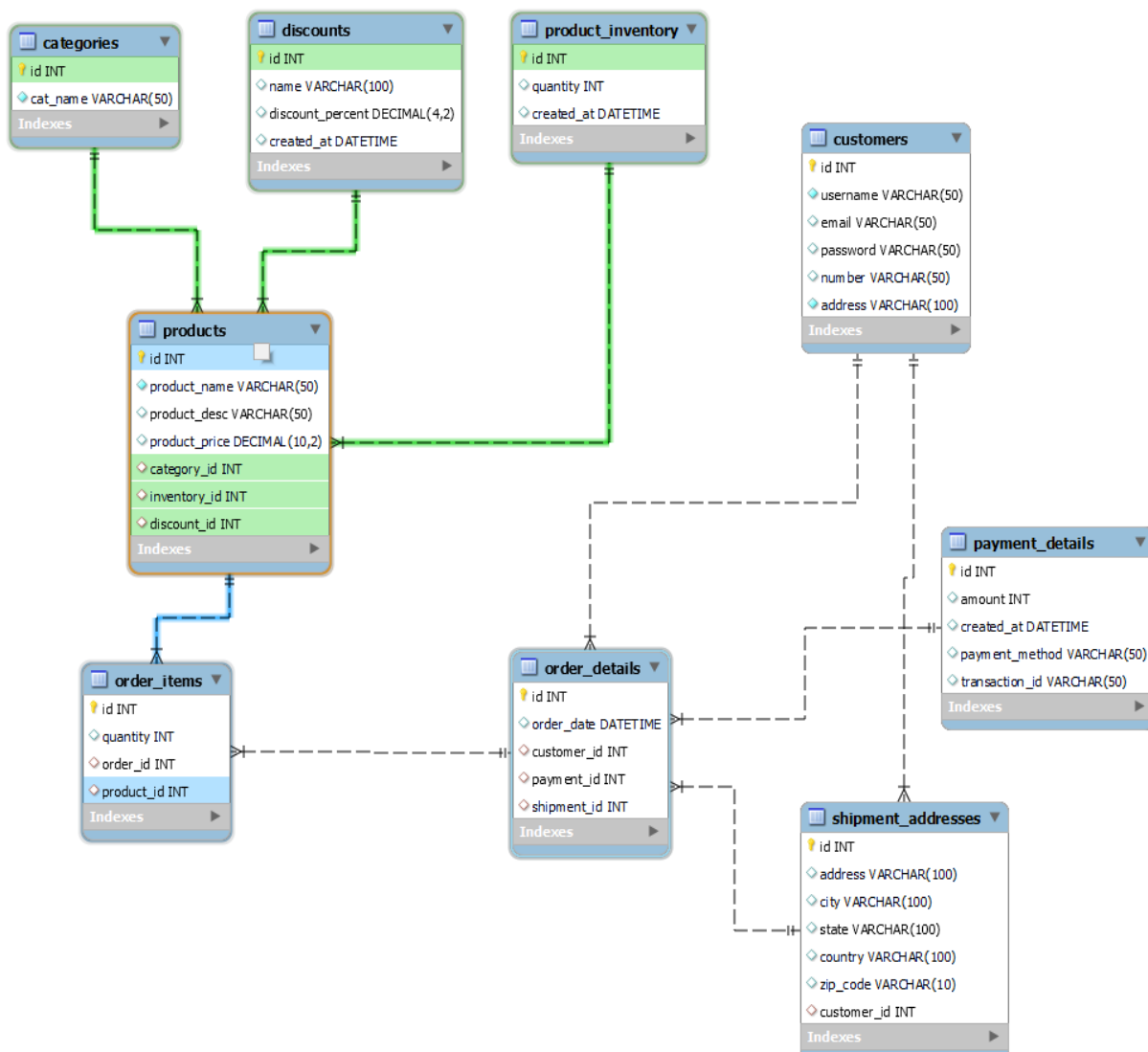
Course Code: CS 241



## Topic:

# Online retail System

Entity relationship diagram:



## Screenshots:

```

--- execution of the procedures
-- product information
exec allproducts;
-- product categories

```

82 %

Results		Messages					
	id	product_name	product_desc	product_price	category_id	inventory_id	discount_id
1	1	Smartphone	High-end smartphone	599.99	1	5	7
2	2	Laptop	Ultra-thin laptop	899.99	1	6	8
3	3	T-shirt	Cotton T-shirt	19.99	2	10	2
4	4	Jeans	Slim-fit jeans	49.99	2	12	5
5	5	Sofa	Comfortable sofa	799.99	3	15	3
6	6	Coffee Table	Modern coffee table	149.99	3	14	4
7	7	Board Game	Strategy board game	29.99	4	19	1
8	8	Action Figure	Collectible action figure	24.99	4	20	6
9	9	Novel	Bestselling novel	12.99	5	1	9
10	10	Cookbook	Delicious recipes	17.99	5	3	10
11	11	Yoga Mat	Non-slip yoga mat	29.99	6	8	15
12	12	Dumbbells	Set of dumbbells	39.99	6	9	12
13	13	Shampoo	Moisturizing shampoo	9.99	7	2	13
14	14	Facial Cleanser	Gentle facial cleanser	12.99	7	4	14
15	15	Car Battery	High-performance car battery	109.99	8	18	11
16	16	Motor Oil	Synthetic motor oil	24.99	8	17	16
17	17	Multivitamins	Daily multivitamin	14.99	9	11	17
18	18	Dog Food	Premium dog food	34.99	10	7	20
19	19	Printer	Wireless printer	79.99	11	13	19

Query executed successfully

```
-- exec allproducts;  
-- product categories  
exec allcategories;  
-- payments details  
exec allpayment_details;
```

82 %

Results Messages

	id	cat_name
1	1	Electronics
2	2	Clothing
3	3	Home and Garden
4	4	Toys and Games
5	5	Books
6	6	Sports and Outdoors
7	7	Beauty and Personal Care
8	8	Automotive
9	9	Health and Wellness
10	10	Pet Supplies
11	11	Office Supplies
12	12	Jewelry and Watches
13	13	Movies and Music
14	14	Baby Products
15	15	Food and Beverages
16	16	Home Appliances
17	17	Furniture
18	18	Tools and Hardware
19	19	Fitness Equipment

```

----- give the name of the product with the lowest quantity..
exec lowQuantityProduct;

---- name the discount offer which provides the highest discount percentage
exec highestdiscount;

```

82 %

Results Messages

	product_name	quantity
1	Motor Oil	3

```

exec lowQuantityProduct;

```

```

---- name the discount offer which provides the highest discount percentage
exec highestdiscount;

```

```

--- available products
exec availableProducts;

```

82 %

Results Messages

	name	discount_percent
1	Buy One Get One Free	50.00
2	Black Friday	40.00
3	Mega Deal	33.33

```

--- our top 3 goldern users details
exec topGoldenUsers;

```

```

--- customer and order details

```

```

exec customer_with_order_detail;

```

82 %

Results Messages

	username	order_date	amount	city	payment_method
1	Isabella	2023-07-31 12:34:56.000	4500	Denver	PayPal
2	Sophia	2023-07-17 16:48:09.000	4500	Philadelphia	PayPal
3	Ethan	2023-07-21 20:15:18.000	3000	Fort Worth	Credit Card

```
-- customers details
exec selectAllcustomers;
-- shipment addresses
exec allshipments;
-- order details
exec allorder_details;
-- order items information
exec allorder_items;
-- information about the inventory items;
```

82 %

Results

Messages

	id	username	email	password	number	address
1	1	John	john1@example.com	pass1	num1	123 Main Street
2	2	Emma	emma2@example.com	pass2	num2	456 Elm Avenue
3	3	Michael	michael3@example.com	pass3	num3	789 Oak Lane
4	4	Sophia	sophia4@example.com	pass4	num4	789 Maple Drive
5	5	William	william5@example.com	pass5	num5	555 Pine Road
6	6	Olivia	olivia6@example.com	pass6	num6	222 Cedar Lane
7	7	James	james7@example.com	pass7	num7	333 Birch Avenue
8	8	Ava	ava8@example.com	pass8	num8	444 Elm Street
9	9	Alexander	alexander9@example.com	pass9	num9	777 Oak Road
10	10	Isabella	isabella10@example.com	pass10	num10	999 Maple Drive
11	11	Ethan	ethan11@example.com	pass11	num11	111 Pine Avenue
12	12	Mia	mia12@example.com	pass12	num12	555 Cedar Lane
13	13	Daniel	daniel13@example.com	pass13	num13	777 Birch Road
14	14	Charlotte	charlotte14@example.com	pass14	num14	444 Elm Avenue
15	15	Matthew	matthew15@example.com	pass15	num15	333 Oak Lane
16	16	Amelia	amelia16@example.com	pass16	num16	888 Maple Drive
17	17	Oliver	oliver17@example.com	pass17	num17	999 Pine Road
18	18	Sophie	sophie18@example.com	pass18	num18	222 Cedar Lane
19	19	Lucas	lucas19@example.com	pass19	num19	777 Birch Avenue

```
----- which day of the week has the most orders;
```

```
exec order_throughout_the_week;
```

82 %

Results Messages

	week_day	(No column name)
1	Friday	3
2	Monday	3
3	Saturday	3
4	Sunday	3
5	Thursday	3
6	Tuesday	2
7	Wednesday	3

```
how many users do we have  
exec numberOfusers;
```

```
--- our top 3 goldern users details
```

```
exec topGoldenUsers;
```

```
--- customer and order details
```

82 %

Results Messages

	numberOfUsers
1	50

```
-- shipment overview
exec allshipments;
-- order details
exec allorder_details;
-- order items information
exec allorder_items;
```

82 %



Results



Messages

	id	address	city	state	country	zip_code	customer_id
1	1	123 Main Street	New York City	New York	USA	10001	6
2	2	456 Elm Avenue	Los Angeles	California	USA	90001	3
3	3	789 Oak Lane	Chicago	Illinois	USA	60601	1
4	4	789 Maple Drive	Houston	Texas	USA	77001	15
5	5	555 Pine Road	Phoenix	Arizona	USA	85001	18
6	6	222 Cedar Lane	Philadelphia	Pennsylvania	USA	19101	9
7	7	333 Birch Avenue	San Antonio	Texas	USA	78201	10
8	8	444 Elm Street	San Diego	California	USA	92101	3
9	9	777 Oak Road	Dallas	Texas	USA	75201	4
10	10	999 Maple Drive	San Jose	California	USA	95101	9
11	11	111 Pine Avenue	Austin	Texas	USA	78701	30
12	12	555 Cedar Lane	Jacksonville	Florida	USA	32201	21
13	13	777 Birch Road	Fort Worth	Texas	USA	76101	24
14	14	444 Elm Avenue	Columbus	Ohio	USA	43201	7
15	15	333 Oak Lane	Charlotte	North Carolina	USA	28201	23
16	16	888 Maple Drive	Indianapolis	Indiana	USA	46201	5
17	17	999 Pine Road	Seattle	Washington	USA	98101	11
18	18	222 Cedar Lane	Denver	Colorado	USA	80201	18
19	19	777 Birch Avenue	Washington	District of Columbia	USA	20001	2

```
----- sum of the total orders and their total amount
```

```
exec total_orders_and_amount;
```

```
----- which day of the week has the most orders;
```

```
exec order_throughout_the_week;
```

82 %



Results



Messages

	total_orders	amount
1	20	37100



## Capstone joins query:

```

create procedure customer_with_order_detail
as
select username as name, product_name, quantity, amount as Total_amount
, shipment_addresses.address as shippingAddress from order_details
inner join order_items on
order_items.order_id = order_details.id
inner join customers on order_details.customer_id = customers.id
inner join products on order_items.order_id = products.id
inner join payment_details on order_details.payment_id = payment_details.id
inner join shipment_addresses on shipment_addresses.id = order_details.shipment_id;
go

```

## Result from 5 tables:

```

exec top500users;

--- customer and order details

exec customer_with_order_detail;

----- sum of the total orders and their total amount
exec total_orders_and_amount;

----- which day of the week has the most orders;

```

82 %

Results Messages

	name	product_name	quantity	Total_amount	shippingAddress
2	Matthew	Laptop	15	300	789 Maple Drive
3	Matthew	Laptop	5	300	789 Maple Drive
4	Grace	T-shirt	4	300	999 Maple Drive
5	James	Jeans	3	1800	555 Pine Road
6	James	Jeans	2	1800	555 Pine Road
7	Daniel	Sofa	2	1000	456 Elm Avenue
8	Michael	Coffee Table	3	2500	999 Pine Road
9	Michael	Coffee Table	1	2500	999 Pine Road
10	Sophie	Board Game	2	2000	789 Maple Drive
11	Emily	Action Figure	1	2700	444 Elm Street
12	Emily	Action Figure	3	2700	444 Elm Street
13	Ava	Novel	1	500	555 Pine Road
14	Olivia	Cookbook	5	750	666 Elm Street
15	Olivia	Cookbook	3	750	666 Elm Street
16	Lucas	Shampoo	12	1500	444 Elm Avenue
17	Lucas	Shampoo	2	1500	444 Elm Avenue
18	Sophia	Car Battery	1	4500	222 Cedar Lane
19	Alexander	Multivitamins	4	300	789 Oak Lane
20	Charlotte	Printer	2	500	789 Maple Drive

Query executed successfully

# Thank You