

# **SQL PROJECT ON CLASSIC MODELS DATABASE**

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# About the project.

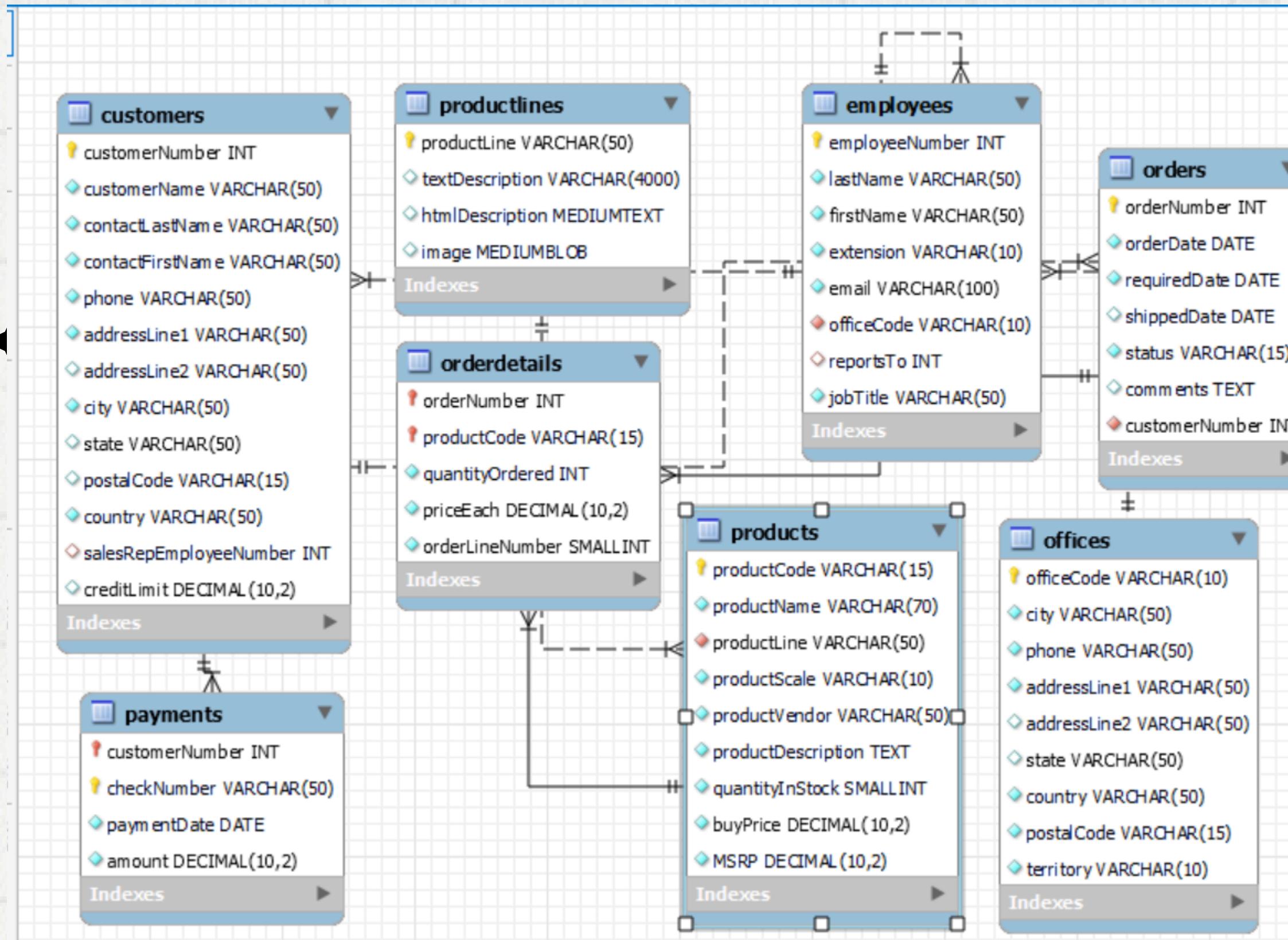
This project explores Classic Models database, a sample database commonly used for learning SQL. The database contains tables representing a fictional company's operations, including employees, customers, orders, products, and offices.

Through this project, I have demonstrated various SQL concepts, including data retrieval, aggregation and joins. Key highlights include extracting basic information on revenue and analyzing customer order patterns.

This project highlights practical SQL skills and the ability to derive meaningful business insights from data.



# DATABASE SCHEMA



# **Queries used to derive insights from the data.**

1. Find all orders placed in 2005.
2. Show the product names and quantities in each order.
3. Show customers' names and their credit limits.
4. Display order details for order number 10100.
5. Find the total revenue generated from all orders.
6. List the top 5 customers with highest credit limit.
7. Find orders with total value exceeding 10,000.
8. Get the orders placed by specific customer.
9. Find customers who have placed more than 5 orders.
10. Find the most expensive product in each product line.

# Find all orders placed in 2005.

```
SELECT COUNT(orderNumber) FROM orders  
WHERE YEAR(orderDate) = 2005;
```

	COUNT(orderNumber)
▶	64

# Show the product names and quantities in each order.

```
SELECT p.productcode, p.productName, SUM(od.quantityOrdered) AS total_quantity  
FROM orderdetails AS od JOIN products AS p  
ON od.productCode= p.productCode  
GROUP BY p.productCode, p.productName;
```

	productcode	productName	total_quantity
▶	S10_1678	1969 Harley Davidson Ultimate Chopper	1057
	S10_1949	1952 Alpine Renault 1300	961
	S10_2016	1996 Moto Guzzi 1100i	999
	S10_4698	2003 Harley-Davidson Eagle Drag Bike	985
	S10_4757	1972 Alfa Romeo GTA	1030
	S10_4962	1962 Lancia Delta 16V	932
	S12_1099	1968 Ford Mustang	933

# Show customers' names and their credit limits.

```
SELECT customerName, creditLimit FROM customers;
```

	customerName	creditLimit
▶	Atelier graphique	21000.00
	Signal Gift Stores	71800.00
	Australian Collectors, Co.	117300.00
	La Rochelle Gifts	118200.00
	Baane Mini Imports	81700.00
	Mini Gifts Distributors Ltd.	210500.00
	Havel & Zbyszek Co	0.00

# Display order details for order number 10100.

```
SELECT orderNumber, productCode, quantityOrdered, priceEach, orderLineNumber  
FROM orderdetails  
WHERE orderNumber = 10100;
```

	orderNumber	productCode	quantityOrdered	priceEach	orderLineNumber
▶	10100	S18_1749	30	136.00	3
	10100	S18_2248	50	55.09	2
	10100	S18_4409	22	75.46	4
	10100	S24_3969	49	35.29	1
●	NULL	NULL	NULL	NULL	NULL

# Find the total revenue generated from all orders.

```
SELECT SUM(quantityOrdered*priceEach) AS total_revenue  
FROM orderdetails;
```

	total_revenue
▶	9604190.61

# List the top 5 customers with highest credit limit.

```
SELECT customerNumber, customerName, creditLimit  
FROM customers  
ORDER BY creditLimit DESC  
LIMIT 5;
```

	customerNumber	customerName	creditLimit
▶	141	Euro+ Shopping Channel	227600.00
	124	Mini Gifts Distributors Ltd.	210500.00
	298	Vida Sport, Ltd	141300.00
	151	Muscle Machine Inc	138500.00
	187	AV Stores, Co.	136800.00
	HULL	HULL	HULL

# Find orders with total value exceeding 10,000.

```
SELECT orderNumber, SUM(quantityOrdered*priceEach) AS total_order  
FROM orderdetails  
GROUP BY orderNumber  
HAVING total_order>10000;
```

	orderNumber	total_order
▶	10100	10223.83
	10101	10549.01
	10103	50218.95
	10104	40206.20
	10105	53959.21
	10106	52151.81
	10107	22292.62

# Get the orders placed by specific customer.

```
SELECT orderNumber, orderDate, requiredDate, shippedDate  
FROM orders JOIN customers  
ON orders.customerNumber= customers.customerNumber  
WHERE customers.customerName= "Atelier graphique";
```

	orderNumber	orderDate	requiredDate	shippedDate
▶	10123	2003-05-20	2003-05-29	2003-05-22
	10298	2004-09-27	2004-10-05	2004-10-01
	10345	2004-11-25	2004-12-01	2004-11-26

# Find customers who have placed more than 5 orders.

```
SELECT customerNumber, COUNT(orderNumber) AS no_of_orders_placed  
FROM orders  
GROUP BY customerNumber  
HAVING no_of_orders_placed >5;
```

	customerNumber	no_of_orders_placed
▶	124	17
	141	26

# Find the most expensive product in each product line.

```
SELECT productCode, productName, productline, buyPrice  
FROM products  
ORDER BY buyPrice DESC  
LIMIT 1;
```

	productCode	productName	productline	buyPrice
▶	S10_4962	1962 Lancia Delta 16V	Classic Cars	103.42
●	NULL	NULL	NULL	NULL

**Thank you!**