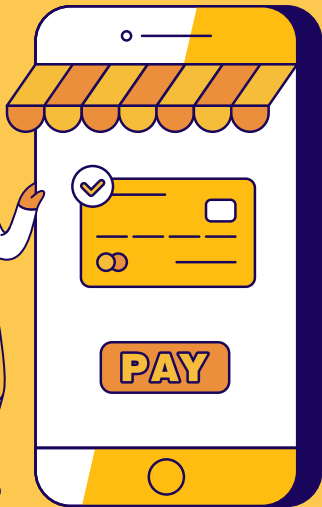# SQL PROJECT

ONLINE STORE

DATABASE ANALYSIS

-Balamurugan

QUERY : 1 > GET ORDER DETAILS FOR EACH PRODUCT IN AN ORDER

```sql
SELECT O.ORDER_ID, O.CUSTOMER_ID, P.PRODUCT_NAME, OD.QUANTITY, P.PRODUCT_ID
FROM ORDERS AS O
JOIN ORDER_DETAILS AS OD ON O.ORDER_ID = OD.ORDER_ID
JOIN PRODUCTS AS P ON OD.PRODUCT_ID = P.PRODUCT_ID;
```

ORDER_ID	CUSTOMER_ID	PRODUCT_NAME	QUANTITY	PRODUCT_ID
1	1	PlayStation 5	1	1
1	1	Gaming Headset	1	5
2	2	The Last of Us Part II	2	3
3	3	T-shirt - Gamer Edition	2	7

QUERY : 2 > JOIN THE PRODUCTS TABLE WITH THE CATEGORIES TABLE TO DISPLAY PRODUCT DETAILS ALONG WITH THE CATEGORY NAME

```sql
SELECT P.PRODUCT_NAME, P.PRICE, C.CATEGORY_NAME
FROM PRODUCTS AS P
JOIN CATEGORIES AS C ON P.CATEGORY_ID = C.CATEGORY_ID;
```

PRODUCT_NAME	PRICE	CATEGORY_NAME
PlayStation 5	499.99	Consoles
Xbox Series X	499.99	Consoles
The Last of Us Part II	59.99	Video Games
Call of Duty: Modern Warfare	39.99	Video Games
Gaming Headset	89.99	Accessories
Gaming Mouse	49.99	Accessories
T-shirt - Gamer Edition	19.99	Merchandise
Gaming Mug	14.99	Merchandise

QUERY : 3 > TO DISPLAY ALL PRODUCT, INCLUDING THOSE WITHOUT A CATEGORY
SELECT P.PRODUCT_NAME, P.PRICE, C.CATEGORY_NAME
FROM PRODUCTS AS P
LEFT JOIN CATEGORIES AS C ON P.CATEGORY_ID = C.CATEGORY_ID;

PRODUCT_NAME	PRICE	CATEGORY_NAME
PlayStation 5	499.99	Consoles
Xbox Series X	499.99	Consoles
The Last of Us Part II	59.99	Video Games
Call of Duty: Modern Warfare	39.99	Video Games
Gaming Headset	89.99	Accessories
Gaming Mouse	49.99	Accessories
T-shirt - Gamer Edition	19.99	Merchandise
Gaming Mug	14.99	Merchandise
Power Joystick	999.99	NULL

QUERY : 4 > FIND PRODUCTS WITH PRICES GREATER THAN A AVERAGE PRICE

SELECT PRODUCT_NAME, PRICE FROM PRODUCTS
WHERE PRICE > (SELECT AVG(PRICE) FROM PRODUCTS);

PRODUCT_NAME	PRICE
PlayStation 5	499.99
Xbox Series X	499.99
Power Joystick	999.99

QUERY : 5 >FIND PRODUCTS IN A SPECIFIC CATEGORY WHERE CATEGORY_NAME IS 'CONSOLES"

```
SELECT PRODUCT_NAME FROM PRODUCTS
WHERE CATEGORY_ID = (SELECT CATEGORY_ID FROM CATEGORIES WHERE
CATEGORY_NAME = 'CONSOLES');
```

PRODUCT_NAME
PlayStation 5
Xbox Series X

QUERY : 6 > COUNT THE TOTAL NUMBER OF PRODUCTS IN EACH CATEGORY

```sql
SELECT C.CATEGORY_NAME, COUNT(PRODUCT_ID) AS PRODUCT_COUNT
FROM PRODUCTS AS P
JOIN CATEGORIES AS C ON P.CATEGORY_ID = C.CATEGORY_ID
GROUP BY C.CATEGORY_NAME;
```

CATEGORY_NAME	PRODUCT_COUNT
Consoles	2
Video Games	2
Accessories	2
Merchandise	2

QUERY : 7 > LIST PRODUCTS WITH THEIR STOCK AVAILABILITY, MARKING "LOW STOCK" FOR QUANTITIES LESS THAN 50

```
SELECT PRODUCT_NAME, STOCK_QUANTITY,
CASE
 WHEN STOCK_QUANTITY < 50 THEN "LOW STOCK"
    ELSE "IN STOCK"
END AS STOCK_STATUS
FROM PRODUCTS;
```

PRODUCT_NAME	STOCK_QUANTITY	STOCK_STATUS
PlayStation 5	99	IN STOCK
Xbox Series X	120	IN STOCK
The Last of Us Part II	300	IN STOCK
Call of Duty: Modern Warfare	150	IN STOCK
Gaming Headset	250	IN STOCK
Gaming Mouse	200	IN STOCK
T-shirt - Gamer Edition	400	IN STOCK
Gaming Mug	350	IN STOCK
Power Joystick	20	LOW STOCK

QUERY : 8 > LIST CUSTOMERS WHO HAVE PLACED MORE THAN ONE ORDER

```
SELECT C.CUSTOMER_NAME, COUNT(O.ORDER_ID) AS ORDER_COUNT
FROM CUSTOMERS AS C
JOIN ORDERS AS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
GROUP BY C.CUSTOMER_NAME
HAVING COUNT(O.ORDER_ID) > 1;
```

CUSTOMER_NAME	ORDER_COUNT
MICHAEL	2

QUERY : 9 > UPDATE STOCK QUANTITY WHEN AN ORDER IS PLACED

UPDATE PRODUCTS SET STOCK_QUANTITY = STOCK_QUANTITY - 1 WHERE PRODUCT_ID = 1;

Product_id	Product_Name	Category_ID	Price	Stock_Quantity
1	PlayStation 5	1	499.99	98
2	Xbox Series X	1	499.99	120
3	The Last of Us Part II	2	59.99	300
4	Call of Duty: Modern Warfare	2	39.99	150
5	Gaming Headset	3	89.99	250
6	Gaming Mouse	3	49.99	200
7	T-shirt - Gamer Edition	4	19.99	400
8	Gaming Mug	4	14.99	350
9	Power Joystick	0	999.99	20

QUERY : 10 > GET TOTAL SALES FOR EACH PRODUCT

```
SELECT P.PRODUCT_NAME, SUM(OD.QUANTITY) AS TOTAL_SOLD
FROM ORDER_DETAILS OD
JOIN PRODUCTS P ON OD.PRODUCT_ID = P.PRODUCT_ID
GROUP BY P.PRODUCT_NAME;
```

PRODUCT_NAME	TOTAL_SOLD
PlayStation 5	1
Gaming Headset	1
The Last of Us Part II	2
T-shirt - Gamer Edition	2

QUERY : 11 > GET CUSTOMERS WHO PURCHASED A SPECIFIC PRODUCT

```sql
SELECT DISTINCT C.CUSTOMER_NAME, C.EMAIL, P.PRODUCT_NAME
FROM CUSTOMERS AS C
JOIN ORDERS AS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
JOIN ORDER_DETAILS OD ON O.ORDER_ID = OD.ORDER_ID
JOIN PRODUCTS AS P ON OD.PRODUCT_ID = P.PRODUCT_ID
WHERE OD.PRODUCT_ID = 1;
```

CUSTOMER_NAME	EMAIL	PRODUCT_NAME
TREVOR	trevorthegangster@gmail.com	PlayStation 5

```sql
DELIMITER $$
CREATE PROCEDURE GET_TOTAL_SALES(IN PROD_ID INT)
BEGIN
    SELECT
        P.PRODUCT_NAME,
        SUM(OD.QUANTITY) AS TOTAL_UNITS_SOLD,
        SUM(OD.TOTAL) AS TOTAL_SALES_AMOUNT
    FROM ORDER_DETAILS AS OD
    JOIN PRODUCTS AS P ON OD.PRODUCT_ID = P.PRODUCT_ID
    WHERE P.PRODUCT_ID = PROD_ID
    GROUP BY P.PRODUCT_NAME;
END $$

DELIMITER ;
-- TO CALL TOTAL SALES STORED PROCEDURE --
CALL GET_TOTAL_SALES(1);
```

PRODUCT_ NAME	TOTAL_UNITS _SOLD	TOTAL_SALES_ AMOUNT
PlayStation 5	1	499.99

END