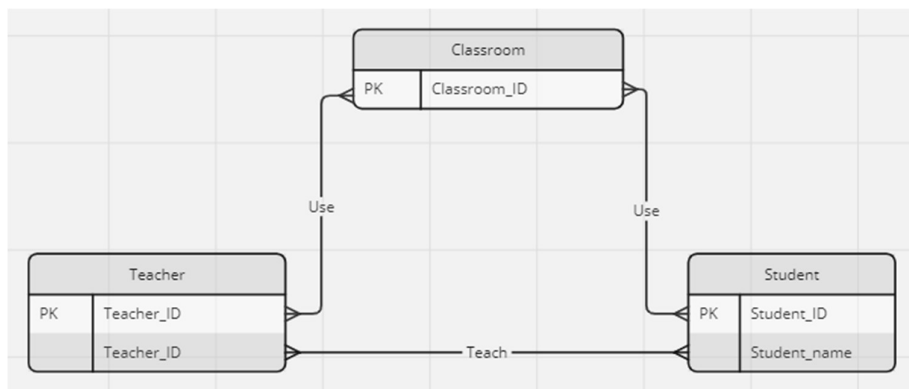


## Class Project

### 1) ยกตัวอย่าง Business Logic ใน ER Diagram

- ความสัมพันธ์แบบ 1:1 ตอบ 1 ลูกค้ายี่ มี 1 Username
- ความสัมพันธ์แบบ 1:M ตอบ 1 ลิขสิทธิ์ สามารถใช้ได้หลายครั้ง
- ความสัมพันธ์แบบ M:N ตอบ ลูกค้าหลายคนสามารถซื้อได้หลายชิ้น

2)



### 3) Query Database

- เอา Cust\_ID, Fname, Post\_Code ถ้า Cust\_ID >= 100

```
SELECT customer.Customer_ID, customer.Fname, customer.Post_code FROM customer WHERE customer.Customer_ID >= 100;
```

☐ Profiling [\[ Edit inline \]](#) [\[ Edit \]](#) [\[ Explain SQL \]](#) [\[ Create PHP code \]](#) [\[ Refresh \]](#)

1 > >> ☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	Customer_ID	Fname	Post_code
<input type="checkbox"/> Edit Copy Delete	100	Elisha	10540
<input type="checkbox"/> Edit Copy Delete	101	Samara	50000
<input type="checkbox"/> Edit Copy Delete	102	Nadia	10540
<input type="checkbox"/> Edit Copy Delete	103	Melita	52000
<input type="checkbox"/> Edit Copy Delete	104	Evita	57000
<input type="checkbox"/> Edit Copy Delete	105	Aundrea	52000
<input type="checkbox"/> Edit Copy Delete	106	Irvin	52000
<input type="checkbox"/> Edit Copy Delete	107	Kellee	20000
<input type="checkbox"/> Edit Copy Delete	108	Ronny	50000
<input type="checkbox"/> Edit Copy Delete	109	Ocie	10520
<input type="checkbox"/> Edit Copy Delete	110	Reva	57000
<input type="checkbox"/> Edit Copy Delete	111	Marica	10540
<input type="checkbox"/> Edit Copy Delete	112	Vanetta	81000
<input type="checkbox"/> Edit Copy Delete	113	Audrea	57000
<input type="checkbox"/> Edit Copy Delete	114	Neda	60000
<input type="checkbox"/> Edit Copy Delete	115	Dell	20000
<input type="checkbox"/> Edit Copy Delete	116	Sharee	60000
<input type="checkbox"/> Edit Copy Delete	117	Joaquina	31000
<input type="checkbox"/> Edit Copy Delete	118	Carlyn	60000

☒ Console [\[ Edit \]](#) [\[ Copy \]](#) [\[ Delete \]](#)

b. เอา Fname, Lname, sum(Amount) มากสุด 10 อันดับแรก

Showing rows 0 - 9 (10 total, Query took 0.0030 seconds.) [Amount: 147.00... - 123.00...]

```
SELECT customer.Fname, customer.Lname, ordering.Amount FROM customer LEFT JOIN ordering ON customer.Customer_ID = ordering.Customer_ID GROUP BY customer.Customer_ID ORDER BY ordering.Amount DESC LIMIT 10;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Extra options

Fname	Lname	Amount
Rogelio	Kirby	147.00
Guillaume	Edwards	142.00
Dianne	Sen	135.00
Princess	Kane	133.00
Eboni	Jarvis	132.00
Melany	Mcmahon	131.00
Mack	Morse	129.00
Jessika	Merritt	127.00
Wallace	Dillard	126.00
Fern	Head	123.00

Query results operations

c. เอา Cust\_ID, ยอดราคาสั่งซื้อรวม มากสุด 10 อันดับแรก

Showing rows 0 - 9 (10 total, Query took 0.0034 seconds.)

```
SELECT ordering.Customer_ID, ordering.Amount*product.Price AS Total_Amount FROM ordering LEFT JOIN product ON ordering.Product_ID = product.Product_ID GROUP BY ordering.Customer_ID ORDER BY Total_Amount DESC LIMIT 10;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Extra options

Customer_ID	Total_Amount
66	218926.4100
3	212031.0900
2	150408.0000
60	147399.8400
50	95190.7600
56	85308.5100
41	77815.3800
6	72386.4000
53	71231.1600
19	69671.7000