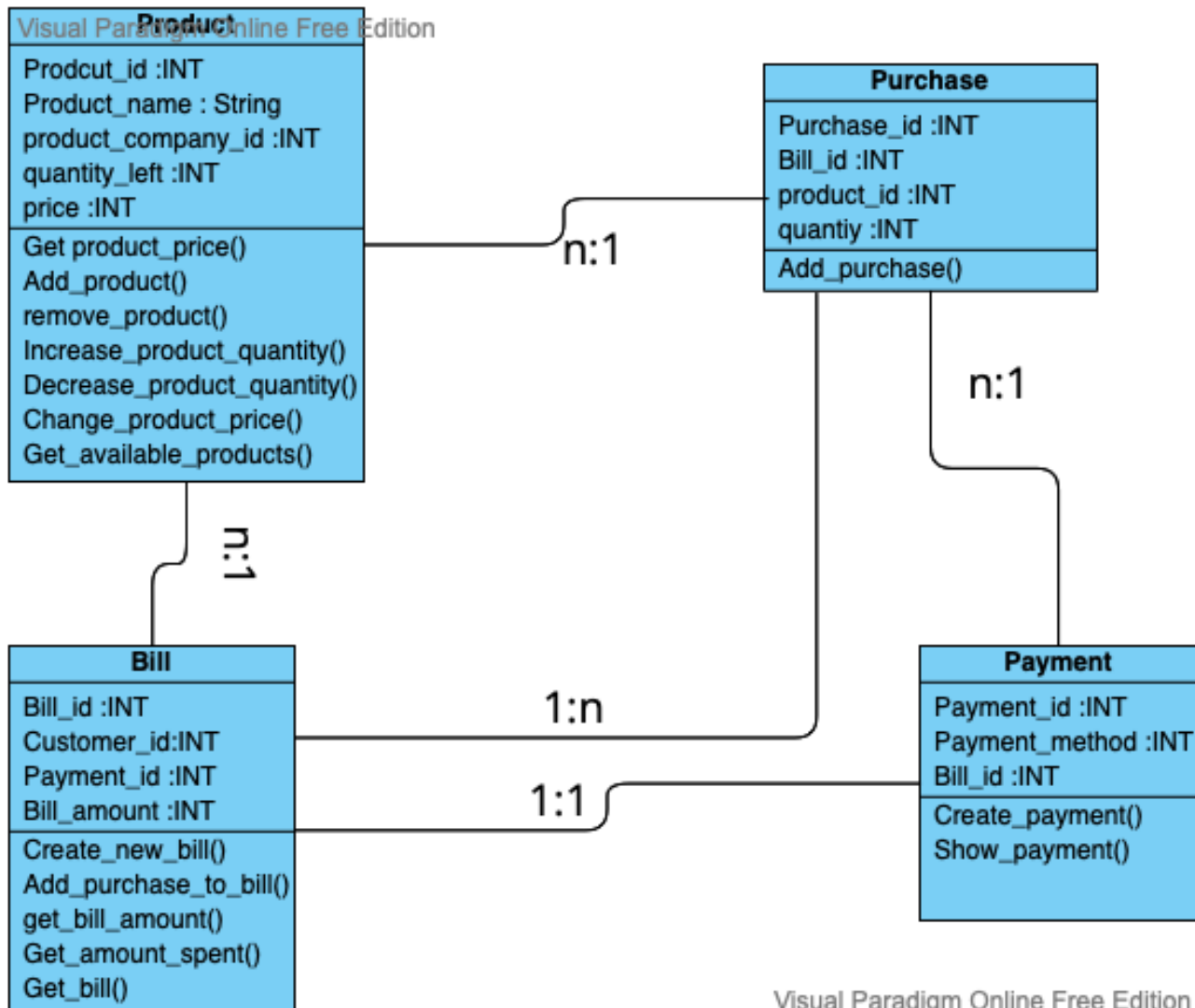
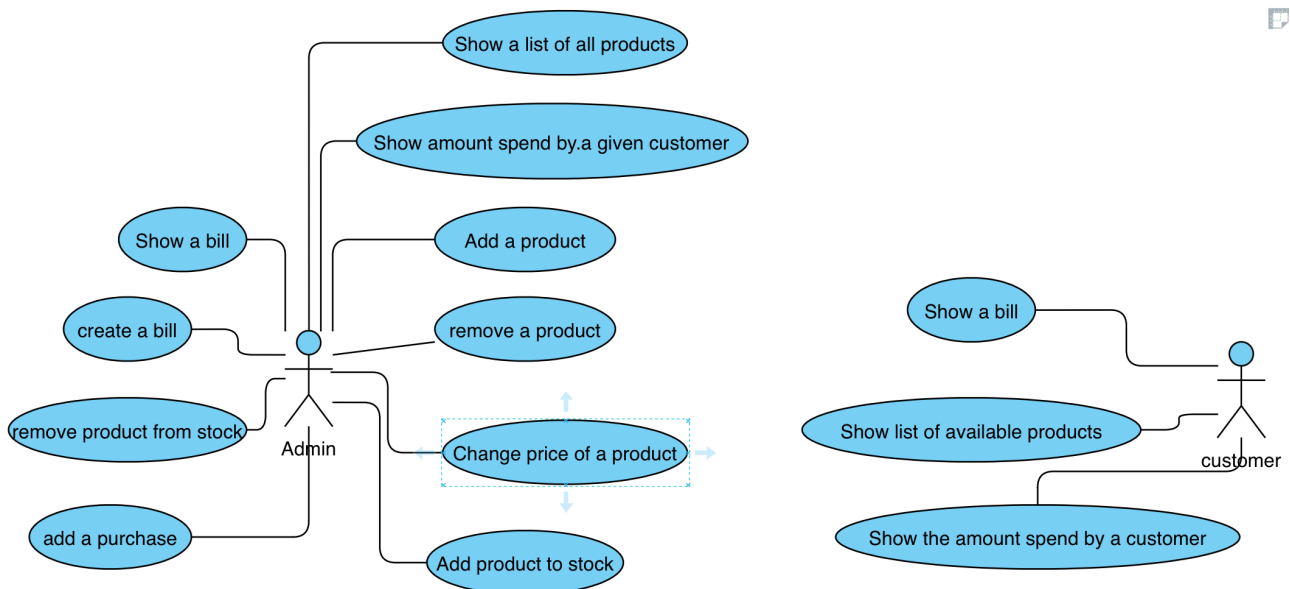
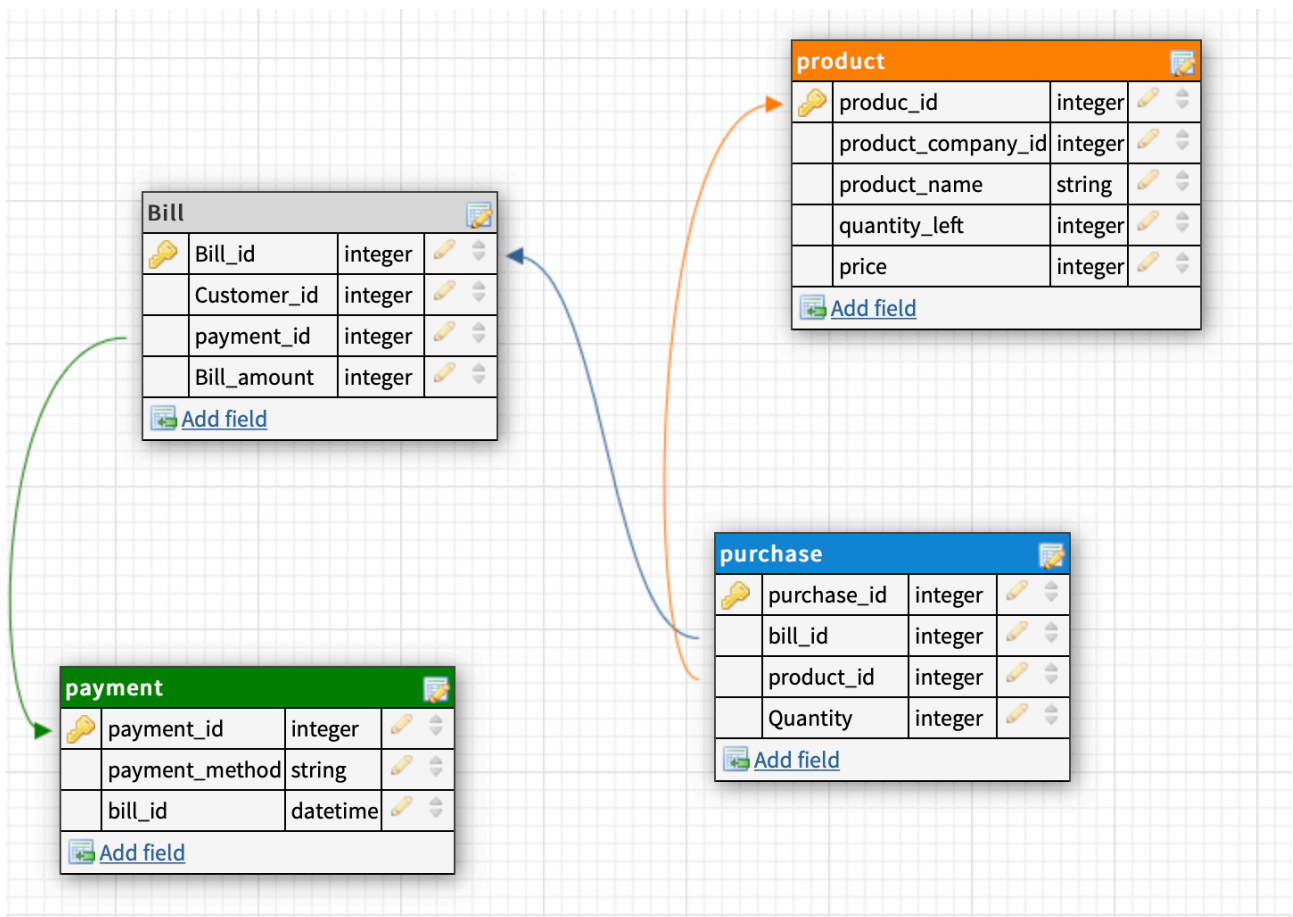


# Shopping Mall Database

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UML class diagram



OR mapping  
Use case diagram

## Add product operation

```
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
```

```
1
Enter product name
Noodles
Enter product company_id
11
Enter product price
300
Enter quantity of the product
400
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	100
11	T-shirt-1	6	3	800
13	Ching	2	400	200

```
12 rows in set (0.00 sec)
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	100
11	T-shirt-1	6	3	800
13	Ching	2	400	200
14	Noodles	11	400	300

```
13 rows in set (0.01 sec)
```

## Change Product Price

1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit

3

Enter the product id

10

Enter the new price of the product

200

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	100
11	T-shirt-1	6	3	800
13	Ching	2	400	200
14	Noodles	11	400	300

13 rows in set (0.01 sec)

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	400	200
14	Noodles	11	400	300

13 rows in set (0.00 sec)

## Remove a product

```
-----
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
```

```
2
Enter product id
14
-----
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	400	200
14	Noodles	11	400	300

```
13 rows in set (0.00 sec)
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	400	200

```
12 rows in set (0.00 sec)
```

## Increase quantity of a product

```
-----
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
4
Enter the product id
13
Enter the new quantity of the product to be added
30
-----
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	400	200

```
12 rows in set (0.00 sec)
```

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	430	200

```
12 rows in set (0.00 sec)
```

## Decrease Quantity of product

1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit

5

Enter the product id

13

Enter the new quantity of the product to be removed

20

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	44	200

12 rows in set (0.00 sec)

```
mysql> select * from product;
```

product_id	product_name	product_company_id	quantity_left	price
1	Apple	1	49	120
2	Mango	1	0	500
3	Banana	1	10	30
4	Kiwi	2	5	600
5	Orange	2	40	100
6	Grapes	2	20	110
7	Water Bottle	3	40	120
8	Moisturizer	4	80	300
9	Water Bottle-1	5	20	400
10	Water Bottle-2	5	10	200
11	T-shirt-1	6	3	800
13	Ching	2	39	200

12 rows in set (0.00 sec)

## Add purchase

- ```
-----
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
```

```
7
Enter the product id
```

```
7
Enter the quantity
```

```
30
Enter the bill id
```

```
1
```

```
mysql> select * from purchase;
```

| purchase_id | bill_id | product_id | quantity |
|-------------|---------|------------|----------|
| 1           | 1       | 1          | 2        |
| 2           | 1       | 3          | 4        |
| 3           | 1       | 7          | 1        |
| 4           | 2       | 5          | 3        |
| 5           | 3       | 6          | 3        |
| 6           | 4       | 8          | 2        |
| 7           | 1       | 1          | 1        |
| 8           | 2       | 1          | 3        |

```
8 rows in set (0.00 sec)
```

```
mysql> select * from purchase;
```

| purchase_id | bill_id | product_id | quantity |
|-------------|---------|------------|----------|
| 1           | 1       | 1          | 2        |
| 2           | 1       | 3          | 4        |
| 3           | 1       | 7          | 1        |
| 4           | 2       | 5          | 3        |
| 5           | 3       | 6          | 3        |
| 6           | 4       | 8          | 2        |
| 7           | 1       | 1          | 1        |
| 8           | 2       | 1          | 3        |
| 9           | 1       | 7          | 30       |



## Get price of a product

```
mysql> select * from product;
```

| product_id | product_name   | product_company_id | quantity_left | price |
|------------|----------------|--------------------|---------------|-------|
| 1          | Apple          | 1                  | 49            | 120   |
| 2          | Mango          | 1                  | 0             | 500   |
| 3          | Banana         | 1                  | 10            | 30    |
| 4          | Kiwi           | 2                  | 5             | 600   |
| 5          | Orange         | 2                  | 40            | 100   |
| 6          | Grapes         | 2                  | 20            | 110   |
| 7          | Water Bottle   | 3                  | 40            | 120   |
| 8          | Moisturizer    | 4                  | 80            | 300   |
| 9          | Water Bottle-1 | 5                  | 20            | 400   |
| 10         | Water Bottle-2 | 5                  | 10            | 200   |
| 11         | T-shirt-1      | 6                  | 3             | 800   |
| 13         | Ching          | 2                  | 39            | 200   |

```
12 rows in set (0.00 sec)
```

1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit

8

Enter the product id

1

120

## Show amount spent by a given customer

```
mysql> select * from bill;
```

| bill_id | customer_id | payment_id | bill_amount |
|---------|-------------|------------|-------------|
| 1       | 1           | 1          | 1040        |
| 2       | 2           | 2          | 300         |
| 3       | 3           | 3          | 330         |
| 4       | 4           | 3          | 600         |
| 5       | 5           | 6          | 0           |
| 6       | 12          | 10         | 0           |

```
6 rows in set (0.00 sec)
```

```
-----
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
9
Enter customer id
1
total amount spent by 1 is 1040
-----
```

## List of all products

```
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
10
Apple
Banana
Kiwi
Orange
Grapes
Water Bottle
Moisturizer
Water Bottle-1
Water Bottle-2
T-shirt-1
Ching
```

## Show a bill

```
1. Add a product
2. Remove a product
3. Change price of a product
4. Increase quantity of product
5. Decrease quantity of a product
6. Create a bill
7. Add a purchase
8. Get price of a product
9. Show amount spent by a given customer
10. Show list of all available products
11. Show a bill
12. Exit
11
Enter bill id
2
product id , quantity
5 3
1 3
```