

Database queries

Tuesday, November 1, 2016 5:07 PM

SELECT _____ FROM _____

UPDATE _____

DELETE FROM _____

INSERT INTO _____ VALUES _____

Add a purchase

```
{ INSERT INTO purchases (customer_id, cookie_id, quantity)
  VALUES (1, 2, 1)
```

Get purchases that Damien has made

```
SELECT * FROM purchases WHERE customer_id = 4
```

... but I also want the name of the cookie

Bad way

1. SELECT * FROM purchases WHERE customer_id = 4
2. for each one: SELECT * FROM cookies WHERE id = <Cookie ID >
- 3.
- 4.
- 5.

Combined way

JOIN Combines two tables together

What if we made a new table?

```
SELECT * FROM { purchases JOIN cookies
                 ON purchases.cookie_id = cookies.id }
```

Temporary new table.

```
ON purchases.cookie_id = cookies.id
```

```
where customer_id = 4.
```

GROUP BY

Bad way

1. Get all of someone's purchases (SELECT * ...)
2. Add them up one by one

Good way is by collating the data

↑ Summarizing it in a way that reduces it

```
SELECT customer_id, SUM(quantity) FROM purchases
                    ↑
                    AVERAGE()
                    MIN()
                    MAX()
GROUP BY customer_id
```

Super-example

```
SELECT customers.name, customers.age, customers.cash,
       SUM(purchases.quantity) FROM purchases
       JOIN customers ON customer_id = purchases.customer_id
GROUP BY purchases.customer_id
```

<u>name</u>	<u>age</u>	<u>cash</u>	<u>SUM</u> (purchases.quantity)
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