SQL

Tuesday, November 12, 2019 2:53 PM

With SQL we use a structured language to Create, Read, Update and Destroy Database.

"CRUD"

✹ CREATE

- To create a table with SQL we use Create Table but

```
CREATE TABLE products (
id Int NOT NULL,
name STRING,
price MONEY,
PRIMARY KEY (id)
);
```

SQL CREATE TABLE Statement (w3schools.com)

✹ UPDATE

- When your Table has been created we would need to insert our data to our data.

We would use

```
INSERT INTO products

VALUES (1,"pen",1.20);
```

- One is for the ID , pen is a string of the name and 1.20 is for the datatype money.

Also if you we need to know what column should have a data or not. We would use this SQL Structure

```
INSERT INTO products (id , name )
VALUES (1,"pen");
```

SQL INSERT INTO Statement (w3schools.com)

- The output would be for the id and name but not price.

```
UPDATE products
SET price = 0.80
WHERE id=2
```

- This will update id for price to be 0.80

SQL UPDATE Statement (w3schools.com)

- We can also update our data with specification on what id and column you want to update.

```
ALTER TABLE products
ADD stock INT
```

- We added stock as our new column

SQL ALTER TABLE Statement (w3schools.com)

- We can also update by adding a new columns with data on them

READ

SQL WHERE Clause (w3schools.com)

When you want to read data on your table use

SELETE * FROM 'products';
- **This would help you read your bale and give you all the data from the table**

SELECTE name, price FROM 'products';
- **Both if you want to read the columns to the user that you want you would use this SQL Structure. It would only select name the name and the price.**

SETECT * FROM products WHERE id=1
- **Also If you only want a particular column to be displayed and read on your table. We would need to use**

DELETE

SQL DELETE Statement (w3schools.com)

DELETE FROM products
WHERE id = 2
This will delete all the data from id =2.

RELATIONSHIPS WITH SQL

We have our Customers , Products and Orders tables.

Customers	This has a table of people that are ordering
Products	This has a table of products that are being ordered
Order	This are the customers' orders

The Structure to create a relation between all the tables using the primary key and a foreign key.

CREATE TABLE	Orders	(
id INT	NOT	Null,
order_number	INT	,
customer_id	INT	,
product_id	INT	,
FOREIGN KEY	(customer_id)	REFERENCES customers (id),
FOREIGN KEY	(product_id)	REFERENCES product (id),
)		

The order table has

INSERT INTO orders
Values (1,4362,2,1)

Id	Oder_number	Customer_id key	Product_id key
1	4362	2	1
2	3254	1	1

- **We are joining order table with customers and products tables**

```
SETECT orders.order_number, customers.first_name,  customers.last_name, customers.address
FROM orders
INNER JOIN customers ON orders.customer_id = customers.id
```

```
SETECT orders.order_number, products.first_name,  products.last_name, products.address
FROM orders
INNER JOIN product ON    orders.products_id = products.id
```