

# MySQL

The Basics of CRUD

Create

Read

Update

Delete

# Create

This Should Be Review

*INSERT INTO*

```
INSERT INTO cats (name, age)  
VALUES ('Taco', 14);
```

Create

Read

Update

Delete

Let's start with a clean slate...

```
DROP TABLE cats;
```



```
CREATE TABLE cats
(
    cat_id INT AUTO_INCREMENT,
    name VARCHAR(100),
    breed VARCHAR(100),
    age INT,
    PRIMARY KEY (cat_id)
);
```

```
INSERT INTO cats(name, breed, age)
VALUES ('Ringo', 'Tabby', 4),
       ('Cindy', 'Maine Coon', 10),
       ('Dumbledore', 'Maine Coon', 11),
       ('Egg', 'Persian', 4),
       ('Misty', 'Tabby', 13),
       ('George Michael', 'Ragdoll', 9),
       ('Jackson', 'Sphynx', 7);
```

# Read

How do we retrieve and search data?

SELECT

# Remember This?

```
SELECT * FROM cats;
```

```
SELECT * FROM cats;
```



"Give Me All Columns"

**SELECT** Expression  
What columns do you want?

```
SELECT name FROM cats;
```



```
SELECT age FROM cats;
```

```
SELECT name, age FROM cats;
```

# The **WHERE** clause

## Let's Get Specific

We'll use **WHERE** all the time

Not just to SELECT...

```
SELECT * FROM cats WHERE age=4;
```

```
SELECT * FROM cats WHERE name='Egg';
```

# Rapid Fire Exercises

Write the SQL that selects the following:

+-----+	
cat_id	
+-----+	
	1
	2
	3
	4
	5
	6
	7
+-----+	



Write the SQL that selects the following:

name	breed
Ringo	Tabby
Cindy	Maine Coon
Dumbledore	Maine Coon
Egg	Persian
Misty	Tabby
George Michael	Ragdoll
Jackson	Sphynx

Write the SQL that selects the following:  
(Just the Tabby cats)

name	age
Ringo	4
Misty	13

Write the SQL that selects the following:

cat\_id is same as age

cat_id		age	
	4		4
	7		7

# Aliases

Easier to read results

```
SELECT cat_id AS id, name FROM cats;
```



+-----+-----+-----+-----+			
+-----+-----+-----+-----+			
id		name	
+-----+-----+-----+-----+			
1		Ringo	
2		Cindy	
3		Dumbledore	
4		Egg	
5		Misty	
6		George Michael	
7		Jackson	
+-----+-----+-----+-----+			

# Update

How do we alter existing data?

```
UPDATE cats SET breed='Shorthair'  
WHERE breed='Tabby';
```



```
UPDATE cats SET age=14  
WHERE name='Misty';
```

A Good Rule of  
Try SELECTing before you UPDATE



Thumb



# Your Turn!

Relatively Painless UPDATE exercises

Change Jackson's name to "Jack"

Change Ringo's breed to  
"British Shorthair"

Update both Maine Coons'  
ages to be 12

# Delete

Time to learn to...delete things

```
DELETE FROM cats WHERE name='Egg';
```



```
DELETE FROM cats;
```

Always run SELECT first to double check...

# Your Turn!

Get Some Practice With DELETE

DELETE all 4 year old cats

DELETE cats whose age is  
the same as their cat\_id

DELETE all cats 🐱