

Creating Databases

Finally!!!!

Database Server

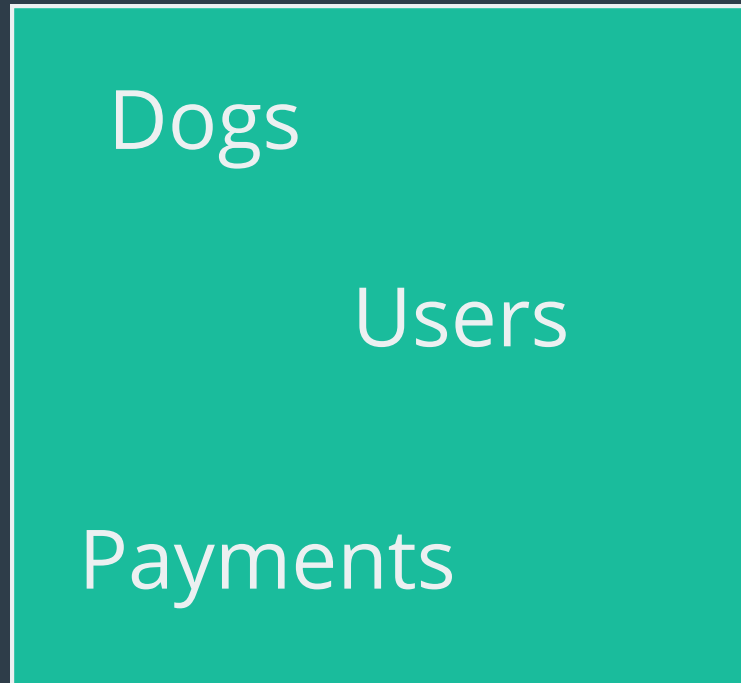
Dog Walker
Database

Soap Shop
Database

Practice
Database

News Site
Database

Dog Walker Database



Soap Shop Database



```
show databases;
```

```
CREATE DATABASE <name>;
```

```
CREATE DATABASE soap_store;
```

```
CREATE DATABASE DogApp;
```

```
CREATE DATABASE My App;
```

```
DROP DATABASE <name>;
```

```
DROP DATABASE soap_store;
```

I Can Create Databases...

Now What?

Time To Use Them!


```
USE <database name>;
```

```
SELECT database ( ) ;
```

Tables!

The True Heart of SQL

A database is just a
bunch of tables

In a relational database, at least

Tables Hold The Data!

"a collection of related data
held in a structured format
within a database"

Quick Example Using Cats

The Cat's Table!



The Cats Table!

Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	10
Sam	Munchkin	5

Columns (headers)

Name	Breed	Age
------	-------	-----

Rows (the actual data)

Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	10
Sam	Munchkin	5

Databases are made
up of lots of tables.

Sometimes it gets crazy.

[CLICK THIS LINK FOR PROOF!](#)

Tables Pt. 2

Data Types

The Importance of Data Types

Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	ten
Sam	Munchkin	I am yung cat

Calculate "cat age"

Age * 7

Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	ten
Sam	Munchkin	I am yung cat

$$1 * 7 = 7$$

$$3 * 7 = 21$$

$$'ten' * 7 = ???$$

$$'I am yung cat' * 7 = \text{😡}$$

NOT

GOOD

Must Be
Text



Must Be
Text



Must Be
Number



Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	ten
Sam	Munchkin	I am yung cat

In reality, there are **A LOT** of
different MySQL data types

Numeric Types

- INT
- SMALLINT
- TINYINT
- MEDIUMINT
- BIGINT
- DECIMAL
- NUMERIC
- FLOAT
- DOUBLE
- BIT

String Types

- CHAR
- VARCHAR
- BINARY
- VARBINARY
- BLOB
- TINYBLOB
- MEDIUMBLOB
- LONGBLOB
- TEXT
- TINYTEXT
- MEDIUMTEXT
- LONGTEXT
- ENUM

Date Types

- DATE
- DATETIME
- TIMESTAMP
- TIME
- YEAR



It's Crazy.

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INT

A Whole Number

with a max (signed) value of 2147483647

12

-9999

0

3145677

42

varchar

A Variable-Length String

'coffee!!'

'-9999'

'aAbbb akljsd'

'L'

'The quick brown fox jumps over the lazy brown dog'

Must Be
Text



varchar(100)

Must Be
Text



varchar(100)

Must Be
Number



int

Name	Breed	Age
Blue	Scottish Fold	1
Rocket	Persian	3
Monty	Tabby	ten
Sam	Munchkin	I am yung cat

Super Short Activity

Draw a Tweets Table

At a minimum the columns must include:

- A username (max 15 chars)
- The tweet content (max 140 chars)
- Number of favorites

Make sure to specify correct MySQL datatypes!

Username
(max 15
chars)



varchar(15)

Content
(max 140
chars)



varchar(140)

Favorites



int

username	content	favorites
'coolguy'	'my first tweet!'	1
guitar_queen	'I love music :) '	10
'lonely_heart'	'still looking 4 love'	0

Creating Tables

Finally!

```
CREATE TABLE tablename  
(  
    column_name data_type,  
    column_name data_type  
);
```

```
CREATE TABLE cats
(
    name VARCHAR(100),
    age INT
);
```

How Do You Know It
Worked?

```
SHOW TABLES;
```

```
SHOW COLUMNS FROM <tablename>;
```

Or...

```
DESC <tablename>;
```


Deleting Tables

```
DROP TABLE <tablename>;
```

Time For Another Activity!

Creating Your Own Table!

Create a *pastries* table

- It should include 2 columns: name and quantity. Name is 50 characters max.
- Inspect your table/columns in the CLI
- Delete your table!