

Lesson 3: Creating database and tables

- 1- create a new Database
- 2- show database
- 3- delete database
- 4- how to use the created database
- 5- see what database we are currently using

introducing about tables

- 1- data type in a database
- 2- creating table
- 3- show tables
- 4- deleting tables
- 5- data type activity


```
show databases;
```

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

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

Use a database we currently created

Time To Use Them!

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

What database we are currently using

```
SELECT database();
```

Tables

Tables!
The True Heart of SQL

A database is just a
bunch of tables

A database is just a bunch of **tables**

In a relational database, at least

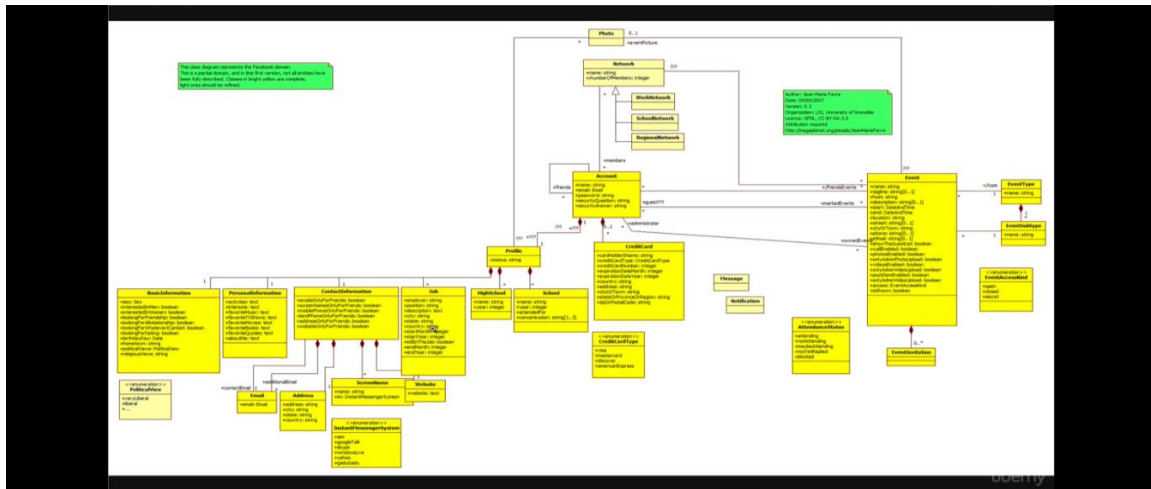
The Cats Table!

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

Columns (headers)

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

Facebook database tables



Data types

Tables Pt. 2

Data Types

b

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

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

Date Types

- DATE
- DATETIME
- TIMESTAMP
- TIME
- YEAR

INT

A Whole Number

with a max value of 4294967295

12

-9999

0

3145677

42

varchar

A Variable-Length String

Between 1 and 255 characters

'coffee!!'

'aAbbb aklsd'

'-9999'

'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

Creating Tables

Finally!


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

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

```
mysql>
mysql>
mysql> CREATE DATABASE cat_app
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> use cat_app;
Database changed
mysql>
mysql>
mysql>
mysql> CREATE TABLE cats (
-> name VARCHAR(100),
-> age INT
-> );
Query OK, 0 rows affected (0.04 sec)

mysql> █
```

udemy

How do we know it worked ?

How Do You Know It
Worked?

SHOW TABLES;

```
mysql>
mysql>
mysql>
mysql> CREATE TABLE cats (
  -> name VARCHAR(100),
  -> age INT
  -> );
Query OK, 0 rows affected (0.04 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_cat_app |
+-----+
| cats              |
+-----+
1 row in set (0.00 sec)

mysql>
```

SHOW COLUMNS FROM <tablename>;

Or...

DESC <tablename>;

```
mysql> SHOW TABLES;
+-----+
| Tables_in_cat_app |
+-----+
| cats              |
+-----+
1 row in set (0.00 sec)

mysql> SHOW COLUMNS FROM cats;
+----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| name  | varchar(100)  | YES  |     | NULL    |       |
| age   | int(11)       | YES  |     | NULL    |       |
+----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Delete tables

Deleting Tables

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

```
mysql> DESC cats;
+----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| name  | varchar(100)  | YES  |     | NULL    |       |
| age   | int(11)       | YES  |     | NULL    |       |
+----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> DROP TABLE cats;
Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
Empty set (0.00 sec)

mysql> DESC cats;
ERROR 1146 (42S02): Table 'cat_app.cats' doesn't exist
mysql>
```

```
mysql> DESC cats;
+----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| name  | varchar(100)  | YES  |     | NULL    |       |
| age   | int(11)       | YES  |     | NULL    |       |
+----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> DROP TABLE cats;
Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
Empty set (0.00 sec)

mysql> DESC cats;
ERROR 1146 (42S02): Table 'cat_app.cats' doesn't exist
mysql>
```

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!

```
+-----+
1 row in set (0.00 sec)

mysql> CREATE TABLE pastries(name VARCHAR(50) quantity INT);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to
your MySQL server version for the right syntax to use near 'quantity INT)' at line 1
mysql> CREATE TABLE pastries(name VARCHAR(50), quantity INT);
Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_cat_app |
+-----+
| pastries           |
+-----+
1 row in set (0.00 sec)

mysql> DESC pastries;
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```