

Lesson 6- CRUD challenge section

- 1- crud exercise create solution
- 2- crud exercise read solution
- 3- crud exercise update solution
- 4- crud exercise delete solution

Extreme Crud exercises

create

1

Create a new database
`shirts_db`

2

Create a new table
`shirts`

3

Cannot Be NULL
Primary Key



shirt_id	article	color	shirt_size	last_worn
1	t-shirt	white	S	10
2	t-shirt	green	S	200
3	polo shirt	black	M	10
4	tank top	blue	S	50
5	t-shirt	pink	S	0
6	polo shirt	red	M	5
7	tank top	white	S	200
8	tank top	blue	M	15

4

```
('t-shirt', 'white', 'S', 10),
('t-shirt', 'green', 'S', 200),
('polo shirt', 'black', 'M', 10),
('tank top', 'blue', 'S', 50),
('t-shirt', 'pink', 'S', 0),
('polo shirt', 'red', 'M', 5),
('tank top', 'white', 'S', 200),
('tank top', 'blue', 'M', 15)
```

Read

5

Add A New Shirt

Purple polo shirt, size M last worn 50 days ago

6

SELECT all shirts

But Only Print Out Article and Color

Update

7

SELECT all medium shirts

Print Out Everything But shirt_id

8

Update all polo shirts

Change their size to L

9

Update the shirt last worn

15 days ago

Change last_worn to 0

Update multiple fields at once

10

Update all white shirts

Change size to 'XS' and color to 'off white'

Delete

11

Delete all old shirts

Last worn 200 days ago

12

Delete all tank tops

Your tastes have changed...

13

Delete all shirts

Catastrophe!

14

Drop the entire shirts table

Catastrophe Again!

Extreme CRUD exercise solution

Select/create statement

1

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

mysql> SHOW databases;
+-----+
| Database |
+-----+
| information_schema |
| c9 |
| cat_app |
| mysql |
| performance_schema |
| phpmyadmin |
| shirts_db |
+-----+
7 rows in set (0.00 sec)
```

```
mysql> use shirts_db;
Database changed
mysql> SELECT database();
+-----+
| database() |
+-----+
| shirts_db |
+-----+
1 row in set (0.00 sec)
```

2

```
CREATE TABLE shirts
(
  shirt_id INT NOT NULL AUTO_INCREMENT,
  article VARCHAR(100),
  color VARCHAR(100),
  shirt_size VARCHAR(100),
  last_worn INT,
  PRIMARY KEY(shirt_id)
);
```

3

```
mysql>
+-----+-----+-----+-----+-----+
| last_worn | int(11) | YES | NULL |
+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql>
mysql> INSERT INTO shirts(article, color, shirt_size, last_worn) VALUES
-> ('t-shirt', 'white', 'S', 10),
-> ('t-shirt', 'green', 'S', 200),
-> ('polo shirt', 'black', 'M', 10),
-> ('tank top', 'blue', 'S', 50),
-> ('t-shirt', 'pink', 'S', 0),
-> ('polo shirt', 'red', 'M', 5),
-> ('tank top', 'white', 'S', 200),
-> ('tank top', 'blue', 'M', 15);
Query OK, 8 rows affected (0.00 sec)
Records: 8 Duplicates: 0 Warnings: 0
```

4

```

+-----+
| 1 | t-shirt | white | S | 10 |
| 2 | t-shirt | green | S | 200 |
| 3 | polo shirt | black | M | 10 |
| 4 | tank top | blue | S | 50 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | M | 5 |
| 7 | tank top | white | S | 200 |
| 8 | tank top | blue | M | 15 |
+-----+
8 rows in set (0.00 sec)

mysql> INSERT INTO shirts(color, article, shirt_size, last_worn) VALUES('purple', 'polo shirt'
, 'M', 50);
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM shirts;

```

Read/select

5

```

mysql> SELECT * FROM shirts;

+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 1 | t-shirt | white | S | 10 |
| 2 | t-shirt | green | S | 200 |
| 3 | polo shirt | black | M | 10 |
| 4 | tank top | blue | S | 50 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | M | 5 |
| 7 | tank top | white | S | 200 |
| 8 | tank top | blue | M | 15 |
| 9 | polo shirt | purple | M | 50 |
+-----+
9 rows in set (0.00 sec)

mysql> SELECT article, color FROM shirts;

```

```

mysql> SELECT article, color FROM shirts;

+-----+
| article | color |
+-----+
| t-shirt | white |
| t-shirt | green |
| polo shirt | black |
| tank top | blue |
| t-shirt | pink |
| polo shirt | red |
| tank top | white |
| tank top | blue |
| polo shirt | purple |
+-----+
9 rows in set (0.00 sec)

```

6

```

+-----+
| tank top | white |
| tank top | blue |
| polo shirt | purple |
+-----+
9 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE shirt_size='M';

+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 3 | polo shirt | black | M | 10 |
| 6 | polo shirt | red | M | 5 |
| 8 | tank top | blue | M | 15 |
| 9 | polo shirt | purple | M | 50 |
+-----+
4 rows in set (0.00 sec)

```

```

+-----+
| 6 | polo shirt | red | M | 5 |
| 8 | tank top | blue | M | 15 |
| 9 | polo shirt | purple | M | 50 |
+-----+
4 rows in set (0.00 sec)

mysql> SELECT article, color, shirt_size, last_worn FROM shirts WHERE shirt_size='M';

+-----+
| article | color | shirt_size | last_worn |
+-----+
| polo shirt | black | M | 10 |
| polo shirt | red | M | 5 |
| tank top | blue | M | 15 |
| polo shirt | purple | M | 50 |
+-----+
4 rows in set (0.00 sec)

```

Update solution

7

```
| polo shirt | black | M | 10 |
| polo shirt | red | M | 5 |
| tank top | blue | M | 15 |
| polo shirt | purple | M | 50 |
+-----+
4 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE article='polo shirt';
+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 3 | polo shirt | black | M | 10 |
| 6 | polo shirt | red | M | 5 |
| 9 | polo shirt | purple | M | 50 |
+-----+
3 rows in set (0.00 sec)
```

8

```
3 rows in set (0.00 sec)

mysql> UPDATE shirts SET shirt_size='L' WHERE article='polo shirt';
Query OK, 3 rows affected (0.03 sec)
Rows matched: 3 Changed: 3 Warnings: 0

mysql> SELECT * FROM shirts WHERE article='polo shirt';
+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 3 | polo shirt | black | L | 10 |
| 6 | polo shirt | red | L | 5 |
| 9 | polo shirt | purple | L | 50 |
+-----+
3 rows in set (0.00 sec)
```

9

```
| 4 | tank top | blue | S | 50 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 7 | tank top | white | S | 200 |
| 8 | tank top | blue | M | 15 |
| 9 | polo shirt | purple | L | 50 |
+-----+
9 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE last_worn=15;
+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 8 | tank top | blue | M | 15 |
+-----+
1 row in set (0.00 sec)
```

```
| 8 | tank top | blue | M | 15 |
| 9 | polo shirt | purple | L | 50 |
+-----+
9 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE last_worn=15;
+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 8 | tank top | blue | M | 15 |
+-----+
1 row in set (0.00 sec)

mysql> UPDATE shirts SET last_worn=0 WHERE last_worn=15;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE shirts SET last_worn=0 WHERE last_worn=15;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT * FROM shirts WHERE last_worn=15;
Empty set (0.00 sec)

mysql> SELECT * FROM shirts WHERE last_worn=0;
+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+
| 5 | t-shirt | pink | S | 0 |
| 8 | tank top | blue | M | 0 |
+-----+
2 rows in set (0.00 sec)
```

update multiple fields at once

10

```

      8 | tank top | blue | M | 0 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE color="white"l
-> ;
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 'l' at line 1
mysql> SELECT * FROM shirts WHERE color="white";
+-----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+-----+-----+-----+-----+
| 1 | t-shirt | white | S | 10 |
| 7 | tank top | white | S | 200 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

```

mysql> SELECT * FROM shirts WHERE color="white"l
-> ;
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 'l' at line 1
mysql> SELECT * FROM shirts WHERE color="white";
+-----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+-----+-----+-----+-----+
| 1 | t-shirt | white | S | 10 |
| 7 | tank top | white | S | 200 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> UPDATE shirts SET color='off white', shirt_size='XS' WHERE color='white';
Query OK, 2 rows affected (0.08 sec)
Rows matched: 2 Changed: 2 Warnings: 0

```

```

mysql> UPDATE shirts SET color='off white', shirt_size='XS' WHERE color='white';
Query OK, 2 rows affected (0.08 sec)
Rows matched: 2 Changed: 2 Warnings: 0

mysql> SELECT * FROM shirts WHERE color="white";
Empty set (0.00 sec)

mysql> SELECT * FROM shirts WHERE color="off white";
+-----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+-----+-----+-----+-----+
| 1 | t-shirt | off white | XS | 10 |
| 7 | tank top | off white | XS | 200 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

delete

11

```

      5 | t-shirt | pink | S | 0 |
      6 | polo shirt | red | L | 5 |
      7 | tank top | off white | XS | 200 |
      8 | tank top | blue | M | 0 |
      9 | polo shirt | purple | L | 50 |
+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE last_worn=200;
+-----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+-----+-----+-----+-----+
| 2 | t-shirt | green | S | 200 |
| 7 | tank top | off white | XS | 200 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

```

mysql> DELETE FROM shirts WHERE last_worn=200;
Query OK, 2 rows affected (0.00 sec)

mysql> SELECT * FROM shirts;
+-----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+-----+-----+-----+-----+-----+
| 1 | t-shirt | off white | XS | 10 |
| 3 | polo shirt | black | L | 10 |
| 4 | tank top | blue | S | 50 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 8 | tank top | blue | M | 0 |
| 9 | polo shirt | purple | L | 50 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

12

```

+----+-----+-----+-----+-----+
| 4 | tank top | blue | S | 50 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 8 | tank top | blue | M | 0 |
| 9 | polo shirt | purple | L | 50 |
+----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE article='tank top';
+----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+----+-----+-----+-----+-----+
| 4 | tank top | blue | S | 50 |
| 8 | tank top | blue | M | 0 |
+----+-----+-----+-----+
2 rows in set (0.00 sec)

```

```

7 rows in set (0.00 sec)

mysql> SELECT * FROM shirts WHERE article='tank top';
+----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+----+-----+-----+-----+-----+
| 4 | tank top | blue | S | 50 |
| 8 | tank top | blue | M | 0 |
+----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> DELETE FROM shirts WHERE article='tank top';
Query OK, 2 rows affected (0.01 sec)

mysql> SELECT * FROM shirts WHERE article='tank top';
Empty set (0.00 sec)

mysql> SELECT * FROM shirts WHERE article='tank top';

```

```

Query OK, 2 rows affected (0.01 sec)

mysql> SELECT * FROM shirts WHERE article='tank top';
Empty set (0.00 sec)

mysql> SELECT * FROM shirts;
+----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+----+-----+-----+-----+-----+
| 1 | t-shirt | off white | XS | 10 |
| 3 | polo shirt | black | L | 10 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 9 | polo shirt | purple | L | 50 |
+----+-----+-----+-----+
5 rows in set (0.00 sec)

```

13

```

5 rows in set (0.00 sec)

mysql> SELECT * FROM shirts;
+----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+----+-----+-----+-----+-----+
| 1 | t-shirt | off white | XS | 10 |
| 3 | polo shirt | black | L | 10 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 9 | polo shirt | purple | L | 50 |
+----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> DELETE FROM shirts;
Query OK, 5 rows affected (0.01 sec)

```

```

+----+-----+-----+-----+-----+
| shirt_id | article | color | shirt_size | last_worn |
+----+-----+-----+-----+-----+
| 1 | t-shirt | off white | XS | 10 |
| 3 | polo shirt | black | L | 10 |
| 5 | t-shirt | pink | S | 0 |
| 6 | polo shirt | red | L | 5 |
| 9 | polo shirt | purple | L | 50 |
+----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> DELETE FROM shirts;
Query OK, 5 rows affected (0.01 sec)

mysql> SELECT * FROM shirts;
Empty set (0.00 sec)

```

14

6	polo shirt	red	L	5
9	polo shirt	purple	L	50

5 rows in set (0.00 sec)

```
mysql> DELETE FROM shirts;
Query OK, 5 rows affected (0.01 sec)
```

```
mysql> SELECT * FROM shirts;
Empty set (0.00 sec)
```

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

```
mysql> show tables;
Empty set (0.00 sec)
```