## Computer Science (Episode 20)

## Episode 20 (Sales System IV)



Tanuki, now we are talking about the other two SQL statements, UPDATE and DELETE.

These two are never used by the user accessing them. Granting these rights to users would destroy the database. Be very careful when setting up these rights. These two instructions are for use by the database administrator.

An administrator would need to remove products that are no longer for sale or change the price. There would also be a situation where he/she would need to delete user information that has been accessed in the past.

An administrator can log in to the database server and use the UPDATE and DELETE commands directly, but here we will assume that a database management program is created and operated with PHP. The first one is UPDATE.

We're going to change it so that the user "Tokyo Taro" with customer number "GKII", who accessed the site, has purchased two products from "A002", and five products from "A002".



Kitsune, you can't just rewrite a customer's purchase data without their permission.

Tanuki, that's hypothetical. Of course, if you do this, I'll never use your online store again. In this case, change the script in rtest03.php in episode 19 from add to update as follows. Save the modified rtest03.php as rtest031.php. The save location is the "/var/www/html" directory as before.

## Update records on the table (Update statement)

rtest031.php

```
<HTML>
<HEAD>
    <TITLE> Update database and notify customers</TITLE>
</HEAD>
<BODY>
<?php
$userCode = $_GET['userCode'];
$shoSu = $_GET['shoSu'];
$conid1 = mysqli_connect("localhost","ftpuser","ftpuser","cdfox");
  //$conid1 = mysqli_connect('localhost', 'user', 'pass', 'shop');
      // Check the connection status
 if (mysqli_connect_errno()) {
           die("Unable to connect to database." . mysqli_connect_error() . "¥n");
 }
      echo " Database connection succeeded.¥n";
  $query = "update cduser set kazu = '$shoSu' where ucode = '$userCode';";
      // Execute the query.
  if (mysqli_query($conid1, $query)) {
        echo " Update succeeded.¥n";
 }
    // Close the connection
mysqli_close($conid1);
?>
<BR>
    Updated 1 customer record to the cduser table!<BR>
</BODY>
</HTML>
```

Tanuki, make sure the purchase quantity [kazu] is changed from 2 to 5 as shown on the right.

<b>Database changed</b> MariaDB [ <sub>cdfox</sub> ]> select	* from cduser;
ucode   uname	rireki   kazu
+ GK11   東京 太郎 +	A002   5
1 row in set (0.00 sec)	
MariaDB [ cdfox ]> exit <b>Bye</b> pi@raspberrypi:~ \$	

I'll check, but I think I'm missing something in the program. As it is, the value of \$shoSu in rtest031.php is 0, I think.

Yes, it's great that you noticed that the value of \$shoSu is 0, though.

You'll have to change the rtest021.php program slightly, since rtest031.php also runs rtest01.html, which then calls rtest021.php, which then gets to rtest031.php. The result of all of this is the management system, which is what we're going to do. It's time for the tanuki to show some application skills. You can't keep relying on me to do it for you. Next is DELETE (deletion of records). This also starts with rtest01.html, so I'll leave it to you to change this part.

Suppose that a request is made by a user, Taro Tokyo, with customer number "GK11", to delete his purchase history in the customer list.

Subject to "GK11", change the script in rtest03.php from add to delete as follows to delete the corresponding record.

Save the modified rtest03.php as rtest032.php. The destination directory is "/var/www/html" as before.

## Deleting records on a table (Delete statement) rtest032.php

<html></html>
<head></head>
<title> Delete records and notify customers</title>
<body></body>
php</td
<pre>\$userCode = \$_GET['userCode'];</pre>
<pre>\$conid1 = mysqli_connect("localhost","ftpuser","ftpuser","cdfox");</pre>
if (mysqli_connect_errno()) {
die("Unable to connect to database:" . mysqli_connect_error() . " $ar$ ");
}
echo " Database connection succeeded.¥n";
<pre>\$query = "delete from cduser where ucode = '\$userCode';";</pre>
// Execute the query.
if (mysqli_query(\$conid1, \$query)) {
echo " One case was deleted.¥n";
}
mysqli_close(\$conid1);
?>
We have deleted your record from the cduser table! 

[Browser view]

 $\leftarrow \rightarrow \mathbb{C}$  ① 保護されていない通信 www.cdfox.jp/rtest03 Database connection succeeded. One case was deleted. We have deleted your record from the cduser table!



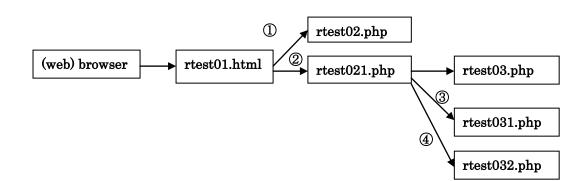
I checked the database and the cduser table shows "empty" (empty) and there doesn't seem to be anything in there.

Database MariaDB [ cdfox Supty set (0.00	]> select * from cduser; sec)
MariaDB [ cdfox	]>

Of course.

Since there was only one user record for "Tokyo Taro" in the cduser table, deleting it would be "empty".

The following is a summary of the sequence of events so far, i.e., the order in which they occurred.



That completes our study of the basic SQL instructions Select, Insert, Update, and Delete. But there is still something I need to learn. Something, that is, with the mail server. When Tanuki also made a purchase at an online store, he received an email that said, "Your order has been accepted. You have probably experienced an e-mail sent to you saying, "The product you

purchased is xxxx. In the next article (Episode 21), I will explain how it works.

Yes, there is. I've always thought that store admins have a tough job being on the computer all the time, because when I make a purchase, I get an email immediately.

I can't wait to see if you can show us how it works!

Translated at DeepL