

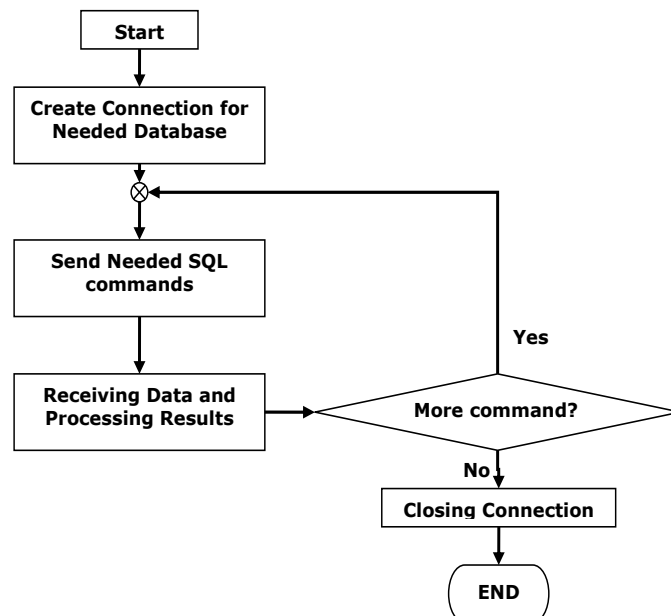
School of Information and Computer Technology
Sirindhorn International Institute of Technology
Thammasat University
ITS351 Database Programming Laboratory

Laboratory #10: PHP & Form Processing III

Objective: - To learn how to retrieve data from PHP
- To learn how to update data from PHP

1 Updating data from MySQL to PHP

A flow chart illustrating the use of PHP together with a database to make a client/server web application is shown as followed:



From the figure, we firstly have to establish a connection to the MySQL Server. After that, through the established connection, you can issue as many MySQL statements as needed to the MySQL server. In the end, the database connection is closed to free the used resource. The detail of each step in this work flow is described next.

The UPDATE statement is used to delete existing records in a table.

Syntax

```
UPDATE table_name  
SET column1=value, column2=value2,...  
WHERE some_column=some_value
```

Note: Notice the WHERE clause in the UPDATE syntax. The WHERE clause specifies which record or records that should be updated. If you omit the WHERE clause, all records will be updated!

1.1 Updating the existing record

The UPDATE query is very similar to the DELETE Query in the previous lab. We need to choose a table, tell MySQL to perform the updating, and provide the requirements that a record must have for it to be updated.

```
<?php
    $q="UPDATE product SET p_price=20 where p_id=1";
    if(!$mysqli->query($q)){
        echo "UPDATE failed. Error: ".$mysqli->error ;
    }
?>
```

1.2 Editing MYSQL data via form using PHP

Now we are going to edit a row in the database. In this example, we setup a product table which contains: ID and Name. We will be retrieving the data, making changes, and then updating the row in the database.

We are going to need to create three files in order to edit the data.

- viewinfo.php – We will retrieve all products data from the Database.
- editinfo.php – We will get the selected product that we need to edit data and put it into a form for modification.
- updateinfo.php – We will send the changes from editinfo.php to this form and update the database.

First create viewinfo.php (Extend from previous example)

```
<?php
    $q="select * from product";
    if($result=$mysqli->query($q)){
        echo '<table border="1">';
        echo '<tr><th>ID</th><th>Name</th><th>Price</th><th>Edit</th></tr>';
        while($row=$result->fetch_array()){
            echo "<tr>";
            echo "<td>".$row['p_id']. "</td>";
            echo "<td>".$row['p_name']. "</td>";
            echo "<td>".$row['p_price']. "</td>";
            echo "<td><a href='editinfo.php?id="
                . $row['p_id']. "'> Edit</a></td>";
            echo "</tr>";
        }
        echo '</table>';
        $result->free();
    }else{
        echo "Retrieval failed: ".$mysqli->error ;
    }
?>
```

Output result will be

ID	Name	Price	Edit
1	Pencil	10	Edit
2	Eraser	5	Edit
3	Mouse	600	Edit
4	Printer	4000	Edit

``
 When mouse over this link
`../editinfo.php?id=3`
`echo "<td>".$row['p_price']."</td>";`
`echo "<td>".$row['p_name']."</td>";`

Since we are only editing 1 row by selecting row with ID=3, we need to build the HTML form and populate the data (from selecting ID) into the field. Now I will start with the HTML for the form. Note that we must use "\$_GET" to receive ID.

Second create editinfo.php

```
<?php
    $p_id = $_GET['id'];
    $mysqli = new mysqli('localhost','root','root','staff');
    if($mysqli->connect_errno){
        echo $mysqli->connect_errno." : ".$mysqli->connect_error;
    }

    $q="SELECT * FROM product where p_id=$p_id";
    $result = $mysqli->query($q);
    echo "<form action='updateinfo.php' method='post'>";
    while($row=$result->fetch_array()){
        echo "Product ID: <input type='text' name='id'
        value='".$row['p_id']."' Disabled><br>";
        echo "<input type='hidden' name='p_id' value='".$row['p_id']."'>";
        echo "Product Name: <input type='text' name='p_name'
        value='".$row['p_name']."'><br>";
        echo "Product Price: <input type='text' name='p_price'
        value='".$row['p_price']."'><br>";
        echo "<input type='submit' value='submit'>";
    }
    $mysqli->close();
?>
```

Output result will be

Product ID: `echo "Product ID: <input type='text' name='id' value='".$row['p_id']."' Disabled>
";`
 Product Name: `echo "<input type='hidden' name='p_id' value='".$row['p_id']."'>";`
 Product Price: `echo "Product Price: <input type='text' name='p_price' value='".$row['p_price']."'>
";`
 `<form action='updateinfo.php' method='post'>`

We use the input tag for this form. Pay attention to the different values if you are not familiar with them.

- `type="text"` –just means we are using a text field
- `value=""` –this is what the box will display by default.
- `name="p_id"` –this is what the variable will be named. This is what we will send to `updateinfo.php`

Now we have the fields' setup. You will notice that the input box for id is disabled. This is because we do not want the user to be able to change their ID.

The important things to note in the HTML above are the form action and method. Action is where we will be sending the data. We want to pass all the changes to `updateinfo.php` and then `updateinfo.php` will update the database. The method is the method that we will be using to transmit the variables. You can use either GET or POST variables. GET variables will be displayed in the url, for this example we do not want that, we can use the post method.

The next step is to create the `updateinfo.php` file and actually update some data. We will start by capturing the data. Then build the update query and execute.

Third create `updateinfo.php`

```
<?php
    $p_id = $_POST['p_id'];
    $p_name = $_POST['p_name'];
    $p_price = $_POST['p_price'];
    $mysqli = new mysqli('localhost','root','root','staff');
    if($mysqli->connect_errno){
        echo $mysqli->connect_errno." : ".$mysqli->connect_error;
    }

    $q="UPDATE product SET p_name='$p_name', p_price='$p_price'
    where p_id=$p_id";

    if(!$mysqli->query($q)){
        echo "UPDATE failed. Error: ".$mysqli->error ;
    }
    $mysqli->close();
    //redirect
    header("Location: viewinfo.php");
?>
```

That is all you need to allow a user to update the information. Note that we must use `"$_POST"` to receive ID.

Now we are going to edit a row with dynamic combo box in the database. In this example, we extend the previous example to have product type, which is `p_type`. Master data of `"p_type"` is collected in `"product_type"` table. Then the choice names in the combo box for `"Product Type"` must be the actual data in the table `product_type` and the choice values must be from `"p_type_id"` column.

Modify editinfo.php

```

<?php
    $p_id = $_GET['id'];

    $mysqli = new mysqli('localhost','root','root','staff');
    if($mysqli->connect_errno){
        echo $mysqli->connect_errno." : ".$mysqli->connect_error;
    }

    $q="SELECT * FROM product where p_id=$p_id";

    $result = $mysqli->query($q);
    echo "<form action='updateinfo.php' method='post'>";
    while($row=$result->fetch_array()){
        echo "Product ID: <input type='text' name='id'
        value=".$row['p_id']."' Disabled><br>";
        echo "<input type='hidden' name='p_id' value=".$row['p_id']."'>";
        echo "Product Name: <input type='text' name='p_name'
        value=".$row['p_name']."'><br>";
        echo "Product Price: <input type='text' name='p_price'
        value=".$row['p_price']."'><br>";
        echo "Product Type: <select name='p_type'>";
        $q="select p_type_id, p_type_name from product_type;";
        if($result2=$mysqli->query($q)){
            while($row2=$result2->fetch_array()){
                echo "<option value='.$row2[0].' ";
                if ($row2[0] == $row['p_type'])
                    echo " SELECTED ";
                echo ">".$row2[1]."</option>";
            }
        }else{
            echo 'Query error: '.$mysqli->error;
        }
        echo "</select><br>";
        echo "<input type='submit' value='submit'>";
    }
    $mysqli->close();
?>

```

Output result will be

Product ID:

Product Name:

Product Price:

Product Type:

The next step is to modify the updateinfo.php file and update product type of the data. We will start by capturing the data. Then build the update query and execute.

Modify updateinfo.php

```

<?php
    $p_id = $_POST['p_id'];
    $p_name = $_POST['p_name'];
    $p_price = $_POST['p_price'];
    $p_type = $_POST['p_type'];

    $mysqli = new mysqli('localhost','root','root','staff');
    if($mysqli->connect_errno){
        echo $mysqli->connect_errno." : ".$mysqli->connect_error;
    }

    $q="UPDATE product SET p_name='$p_name', p_price='$p_price'
    ,p_type='$p_type' where p_id=$p_id";

    if(!$mysqli->query($q)){
        echo "UPDATE failed. Error: ".$mysqli->error ;
    }
    $mysqli->close();
    //redirect
    header("Location: viewinfo.php");
?>

```

Worksheet


1. Import database named "STAFF" from given resource file in database folder. The following figure shows the structure of STAFF database. Note that all fields must set to allow NULL value except primary key.

USERGROUP Table

Field	Type	Length Values	Extra	Primary Key
USERGROUP_ID	INT		Auto_increment	Yes
USERGROUP_CODE	VARCHAR	50		
USERGROUP_NAME	VARCHAR	50		
USERGROUP_REMARK	VARCHAR	255		
USERGROUP_URL	VARCHAR	50		

USER Table

Field	Type	Length Values	Extra	Primary Key
USER_ID	INT		Auto_increment	Yes
USER_TITLE	INT			
USER_FNAME	VARCHAR	50		
USER_LNAME	VARCHAR	50		
USER_GENDER	INT			
USER_EMAIL	VARCHAR	50		
USER_NAME	VARCHAR	25		
USER_PASSWD	VARCHAR	25		
USER_GROUPID	INT			
DISABLE	INT			

2. From the given homepage for user management project with HTML and CSS Styles, please create a set of pages to allow user edit data in "USERGROUP" table. Write PHP code to receive the selected record that user want to edit and create HTML form to allow user modify the user group details. Then update all changes in the "USERGROUP" table. Note that you must allow user click  for editing. After finish the process, please return to "group.php" to view data.

group.php (worksheet 1)

ITS331 System

User Profile | Add User | User Group | Add User Group

User Group

Group Code	Group Name	Remark	URL	Edit	Del
1	Admin	Administrator	admin_view.php		
2	Staff	Staff	staff_view.php		
3	Member	Member	member_view.php		

Total 3 records

Adapted from "For Women-Female" theme from wordpress.com

ITS331 System

User Profile | Add User | User Group | Add User Group

Add User Group

Group Code

Group Name

Remark

URL

Adapted from "For Women-Female" theme from wordpress.com

group.php (worksheet 2)

ITS331 SYSTEM

User Profile | Add User | User Group | Add User Group

User Group

Group Code	Group Name	Remark	URL	Edit	Del
1	Admin	Administrator	admin_view.php		
2	Staff	Staff	staff_view.php		
3	Member	Member	member_view.php		

Total 3 records

Adapted from BlueFreedom theme from wordpress.com

ITS331 SYSTEM

User Profile | Add User | User Group | Add User Group

Add User Group

Group Code

Group Name

Remark

URL

Adapted from BlueFreedom theme from wordpress.com

group.php (worksheet 3)

ITS331 SYSTEM

User Profile

Add User

User Group

Add User Group

User Group

Group Code	Group Name	Remark	URL	Edit	Del
1	Admin	Administrator	admin_view.php		
2	Staff	Staff	staff_view.php		
3	Member	Member	member_view.php		

Total 3 records

Theme adapted from http://5digits.org/home

ITS331 SYSTEM

User Profile

Add User

User Group

Add User Group

Add User Group

Group Code


Group Name

Remark

URL

Theme adapted from http://5digits.org/home

Exercise

Write PHP code to receive the selected record that user want to edit and create HTML form to allow user modify the user details. Then update all changes in the "USER" table. Note that you must allow user click  for editing. After finish the process, please return to "user.php" to view data.

Hint:

For <select> Tag, we use "SELECTED" to set selection in the option Tag.

For radio button, we use "CHECKED" to set selection in the radio button set.

For check box, we use "CHECKED" to set selection in the check box set.

user.php (Worksheet 1)

ITS331 System
User Profile | Add User | User Group | Add User Group

User Profile

Title	Name	Email	User Group	Disabled	Edit	Del
Mr.	John Doe (Male)	jd@mail.com	Admin	<input type="checkbox"/>		
Mrs.	Jane Doe (Female)	email	Staff	<input type="checkbox"/>		
Ms.	Jane Smith (Female)	email	Member	<input type="checkbox"/>		
Mr.	John Smith (Male)	js@mail.com	Member	<input type="checkbox"/>		

Total 4 records

Adapted from "For Women-Female" theme from wordpress.com

ITS331 System
User Profile | Add User | User Group | Add User Group

User Profile

Title: Mr.

First name: John

Last name: Doe

Gender: ☒ Male ☐ Female

Email: jd@mail.com

Account Profile

Username: john_doe

Password: ****

User group: Admin

Disabled: ☐

Submit

Adapted from "For Women-Female" theme from wordpress.com

user.php (Worksheet 2)

ITS331 SYSTEM
User Profile | Add User | User Group | Add User Group

User Profile

Title	Name	Email	User Group	Disabled	Edit	Del
Mr.	John Doe (Male)	jd@mail.com	Admin	<input type="checkbox"/>		
Mrs.	Jane Doe (Female)	email	Staff	<input type="checkbox"/>		
Ms.	Jane Smith (Female)	email	Member	<input type="checkbox"/>		
Mr.	John Smith (Male)	js@mail.com	Member	<input type="checkbox"/>		

Total 4 records

Adapted from BlueFreedom theme from wordpress.com

ITS331 SYSTEM
User Profile | Add User | User Group | Add User Group

User Profile

Title: Mr.

First name: John

Last name: Doe

Gender: ☒ Male ☐ Female

Email: jd@mail.com

Account Profile

Username: john_doe

Password: ****

User group: Admin

Disabled: ☐

Submit

Adapted from BlueFreedom theme from wordpress.com

user.php (Worksheet 3)

ITS331 SYSTEM

User Profile

Add User

User Group

Add User Group

User Profile

Title	Name	Email	User Group	Disabled	Edit	Del
Mr.	John Doe (Male)	jd@mail.com	Admin	<input type="checkbox"/>		
Mrs.	Jane Doe (Female)	email	Staff	<input type="checkbox"/>		
Ms.	Jane Smith (Female)	email	Member	<input type="checkbox"/>		
Mr.	John Smith (Male)	js@mail.com	Member	<input checked="" type="checkbox"/>		

Total 4 records

Theme adapted from <http://5digits.org/home>

ITS331 SYSTEM

User Profile

Add User

User Group

Add User Group

User Profile

Title

Mr. ▾

First name

John

Last name

Doe

Gender

☒ Male
 ☐ Female

Email

jd@mail.com

Account Profile

Username

john_doe

Password

••••

User group

Admin ▾

Disabled

☐

Submit

Theme adapted from <http://5digits.org/home>