



inserting a new record using INSERT

Simple Record Insertion

We are still using the *employee* table from the *mycompanyhr* database. For simple insertion, all the information will be keyed-in using the textbox. The user will plainly insert the data without any validation process, or automated input. Later in this chapter, we will discuss on how to do validation, and automation on the input.

We will not be using all the fields in the table *employee*, instead we will only choose EMPNO, FIRSTNAME, LASTNAME, WORKDEPT and PHONENO. For this simple insert exercise, you need to create the following form. The form has been arranged neatly in a table.

Filename: ***forminsert.php***

```
<html>
<head><title>Insert Process</title></head>
<body>
<strong>Insert a new Employee </strong><br>
<form name="insert" action="insertrecord.php" method="get">

<table border="0">
  <tr>
    <td width="40%">Employee no</td>
    <td width="60%"><input name="EMPNO" type="text"></td>
  </tr>
  <tr>
    <td>Firstname</td>
    <td><input name="FIRSTNAME" type="text"></td>
  </tr>
  <tr>
    <td>Lastname</td>
    <td><input name="LASTNAME" type="text"></td>
  </tr>
  <tr>
    <td>Work department</td>
    <td><input name="WORKDEPT" type="text" maxlength="3"></td>
  </tr>
  <tr>
    <td>Phone ext no</td>
    <td><input name="PHONENO" type="text" maxlength="4"></td>
  </tr>
  <tr>
    <td>&nbsp;</td>
    <td><input name="save" type="submit" value="Save Record"></td>
  </tr>
</table>
</form>
</body>
</html>
```

Observe closely on Work department and Phone extension number input there is an additional `<input>` properties which is the *maxlength*. This properties will restrict only the defined length of characters can be entered by the user. For example in `<input name="WORKDEPT" type="text" maxlength="3">`. The maximum number of characters is only three. This is because all the department code consist of three characters only.

General format of SQL insert command:

```
INSERT INTO table_name (field_list)
VALUES (values to be inserted in the respective fields)
```

Example:

```
INSERT INTO employee
(EMPNO, FIRSTNAME, LASTNAME, WORKDEPT, PHONENO)
values ('000345', 'Khirulnizam', 'Abd Rahman', 'C01', '3017')
```

The target file for the form is *insertrecord.php* as defined in form's action.

```
<?php
include "connection.php";

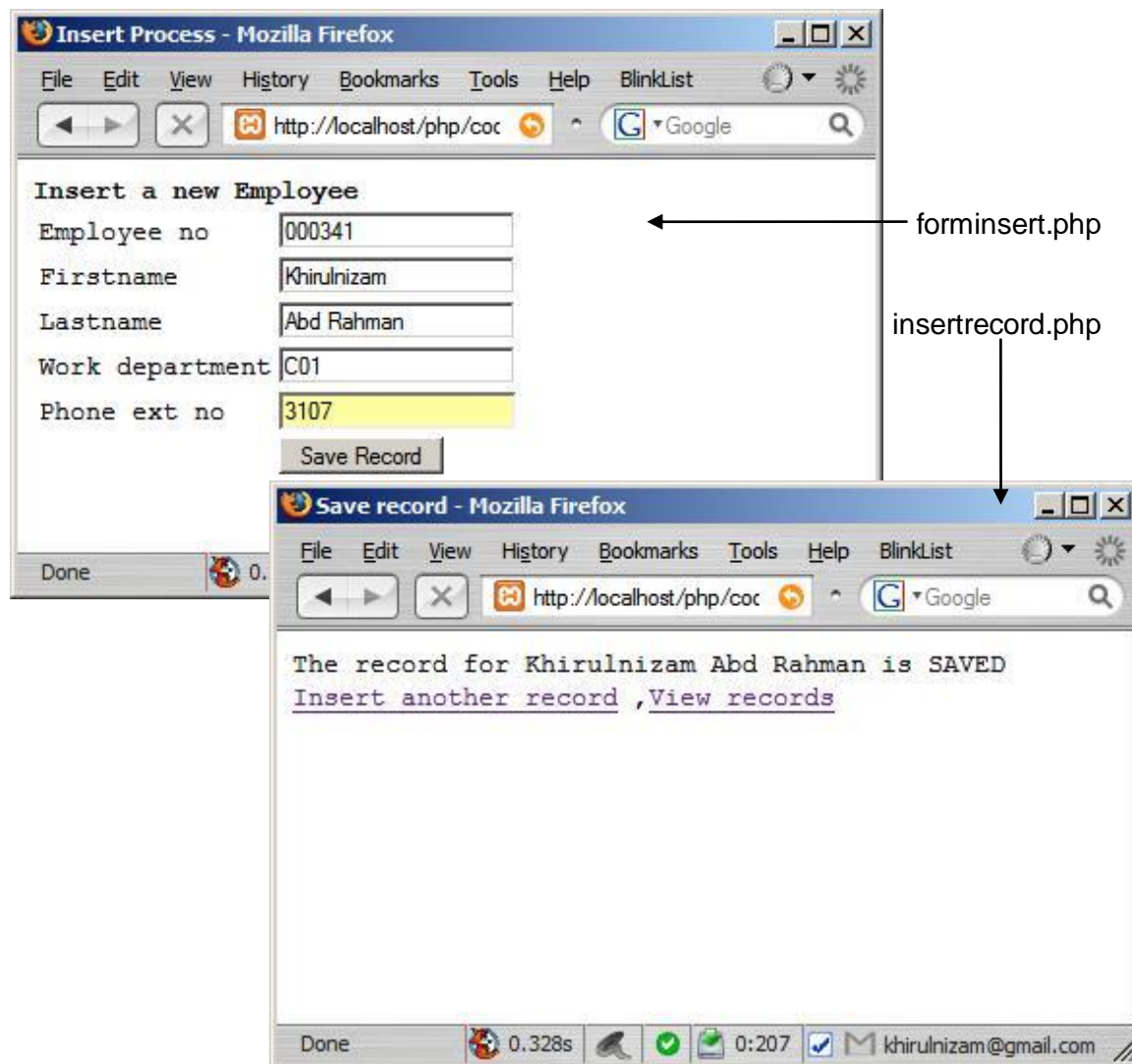
$EMPNO=$_GET['EMPNO'];
$FIRSTNAME=$_GET['FIRSTNAME'];
$LASTNAME=$_GET['LASTNAME'];
$WORKDEPT=$_GET['WORKDEPT'];
$PHONENO=$_GET['PHONENO'];

$sql="insert into employee
(EMPNO, FIRSTNAME, LASTNAME, WORKDEPT, PHONENO)
values ('$EMPNO', '$FIRSTNAME', '$LASTNAME',
'$WORKDEPT', '$PHONENO')";

$rs=mysqli_query($db, $sql);
?>

<html>
<head>
<title>Save record</title>
</head>
<body>
<?php
if($rs==true){
    echo "The record for $FIRSTNAME $LASTNAME is SAVED<br>";
    echo "<a href='forminsert.php'>Insert another record</a> ,";
    echo "<a href='listing.php'>View reords</a>";
}
else{
    echo "The record CANNOT be SAVED<br>";
}
?>
</body>
</html>
```

These are the screen shots of the simple insert application.



However, the simple form in the previous exercise doesn't help the user much in inserting a new record. The data entry clerk need to look for the last employee number in order to insert the new employee number. Since the EMPNO is a primary key, inserting a new record with a duplicate EMPNO will not permit the insertion of the new record. The data entry clerk also need to follow the EMPNO specification, which is must be 6 digits, and padded with zero in front of the employee number.

Users will be having problem in entering the work department of the new employee. They need to refer what is the code for each department as specified in the *department* table. This will incur another problem of entering wrong department code, or assigning the employee to a department that does not exist.

Advance Insert Application Exercise

This exercise is to facilitate users with more functions in the form interface. The objective of this exercise is to avoid user from entering false data such as wrong employee number, or entering a department code that doesn't exist in the *department* table.

```
<html>
<head>
<title>Advanced Insert Process</title>
</head>
<body>
<strong>Insert a new Employee </strong><br>
<form name="insert" action="insertrecord.php" method="get">

<table border="0">
  <tr>
    <?php
      //this script will determine the EMPNO automatically
      include "connection.php";
      $sql="select EMPNO from employee order by EMPNO asc";
      $rs=mysqli_query($db,$sql);
      $numrecords=mysqli_num_rows($rs);
      if($numrecords==0){
        //if no record exist
        $EMPNO="000001";
      }
      else{//thera are records already
        while($record=mysqli_fetch_array($rs)){
          $EMPNO=$record['EMPNO'];
        }
        $EMPNO++;//increase one from the last EMPNO
        $EMPNO=sprintf("%06d", $EMPNO );
        //this to make sure the new EMPNO is zero padded infront,
        //to make sure consistency from the previous EMPNO
      }
    ?>
    <td width="40%">Employee no</td>
    <td width="60%"><input name="EMPNO" type="text" readonly
      value="<? echo $EMPNO?>"></td>
  </tr>
  <tr>
    <td>Firstname</td>
    <td><input name="FIRSTNAME" type="text"></td>
  </tr>
  <tr>
    <td>Lastname</td>
    <td><input name="LASTNAME" type="text"></td>
  </tr>
  <tr>
    <td>Work department</td>
    <td>
      <?php
        //this script is to generate option list
```

```

        //of department code and name
        $sql="select DEPTNO, DEPTNAME from department";
        $rs=mysqli_query($db,$sql);

        ?>
        <select name="WORKDEPT">
            <option value=''>-select department-</option>
            <?php
                while ($record=mysqli_fetch_array($rs)){
                    $deptno=$record['DEPTNO'];
                    $deptname=$record['DEPTNAME'];
                    echo "<option value='".$deptno.">
                        $deptno - $deptname
                    </option>\n";
                }
            ?>
        </select>

        </td>
    </tr>
    <tr>
        <td>Phone ext no</td>
        <td><input name="PHONENO" type="text" maxlength="4"></td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td><input name="save" type="submit" value="Save Record"></td>
    </tr>
</table>
</form>
</body>
</html>

```

The code will create a web form like this;

