

Internship Projects Homework 4: PHP / MySql Integration

References

See the files MySqlConnection.php, MySqlQuery.php, and MySqlPretty.php as examples:

http://10.10.0.20/~j_kazarian/php/phpExamples.zip

Assignment in General

Start with the three pages from Homework 3, namely the form, the splash page, and the validate page.

Write an additional web page that inserts correct data into a MySql database.

After insertion, display all of the values in an HTML Table.

Details

[HTML Form and Splash Page](#)

This should work the same as in Homework 3.

[Validate Page](#)

The validate page changes. Add a form with four hidden fields and a submit button at the bottom of the confirmation page. This will call the insert page.

[Insert Page](#)

The insert page does several things:

- Connects to MySql.
- Inserts a row into the table.
- Queries the entire table.
- Prints the table as an HTML form.

Specific Requirements

[Form With Hidden Fields](#)

On the validate page, add a form with hidden fields to the confirmation message, for example:

```
<INPUT TYPE=HIDDEN NAME=Anun VALUE="<?php echo $_POST[Anun] ?>">
```

and a SUBMIT button to transfer the data from the validate page to the insert page. Remember, since this form is part of the confirmation message, the “invisible” form will not appear unless all data is correct.

[Insert Page](#)

Add another PHP page that performs MySql database operations. First, connect to the database. Second, insert the data from the validate page into a table. Finally, query the resulting table and print its entire contents.

Format the output as an HTML table, for example:

```
<TABLE>
<TR>
<TH><!-- first column name --></TH>
<TH><!-- second column name --></TH>
<!-- repeat for all columns -->
```

```
</TR>

<TR>
<TD><!-- first row value for this column --></TD>
<!-- repeat for all columns -->
</TR>

<TR>
<TD><!-- second row value for this column --></TD>
<!-- repeat for all columns -->
</TD>

<!-- repeat for all remaining rows -->
</TABLE>
```

Hints

Hard code the column names. One PHP foreach statement will be useful for the <TD> row values.

Use the MySQL command line interface to create the data table.

Build the project in stages: first, verify passing of data from the validate to the insert page. Second, connect to the database. Third, insert the data and use “ugly printing.” Finally, render the MySQL data as an HTML table.

The PHP `print_r` function is useful for debugging.

MySQLConnect.php

```
<HTML>
<HEAD>
<TITLE>PHP - MySQL Connection Test</TITLE>
<STYLE>
BODY {
    font-family: sans-serif;
}
</STYLE>
</HEAD>
<BODY>
<P>Starting connect ...
<?php
// "localhost" - change to actual server name or IP address
// "ara" - change to actual user name
// "password" - change to actual password
// Note having a password in a PHP source file is a security risk
$connection = @mysql_connect("10.10.0.20", "ara", "password");
?>
finished mysql_connect() call.</P>
<?php
if ($connection)
{
    ?>
    <P>Connection was successful.</P>
    <?php
}
else
{
    ?>
    <P>Connection failed for the following reason:
    <?php
    echo mysql_error();
}
?>
</P>
<P>End of MySQLConnect.php</P>
</BODY>
</HTML>
```

MySqlQuery.php

```
<HTML>
<HEAD>
<TITLE>PHP - MySql Query Example</TITLE>
<STYLE>
BODY {
    font-family: sans-serif;
}
</STYLE>
</HEAD>
<BODY>
<?php
$connection = @mysql_connect("10.10.0.20", "ara", "password");

if ($connection)
{
    // "php" - actual MySql database schema name
    $foundDb = @mysql_select_db ("ara", $connection);
}
else
{
    ?>
    <P>Could not connect to MySql database.</P>
    <?php
}

if ($foundDb)
{
    // "SELECT * FROM Addresses" - change to desired SQL statement
    // See PHP manual for examples
    $resultSet = @mysql_query("SELECT * FROM Addresses", $connection);
    $rowsFetched = @mysql_num_rows($resultSet);
    if ($rowsFetched)
    {
        ?>
        <P>Query succeeded. Data fetched is:</P>
        <?php
        for ($i = 0; $i < $rowsFetched; $i++)
        {
            $row = @mysql_fetch_array($resultSet, MYSQL_ASSOC);
            echo "<P>";
            print_r($row);
            echo "</P>";
        }
    }
    else
    {
        ?>
        <P>The query did not return a row.</P>
        <?php
    }
}
else
{
    ?>
    <P>Requested database was not found.</P>
    <?php
}
?>
<P>End of MySqlQuery.php</P>
</BODY>
</HTML>
```

MySqlPretty.php

```
<HTML>
<HEAD>
<TITLE>PHP - MySQL Query with Pretty Output</TITLE>
<STYLE>
BODY {
    font-family: sans-serif;
}
</STYLE>
</HEAD>
<BODY>
<?php
$connection = @mysql_connect("10.10.0.20", "ara", "password");

if ($connection)
{
    $resultSet = @mysql_query("SELECT * FROM ara.Addresses", $connection);
    $rowsFetched = @mysql_num_rows($resultSet);
    if ($rowsFetched)
    {
        echo "<P>Query succeeded. Data fetched is:</P>";
        echo "<DL>";
        for ($i = 0; $i < $rowsFetched; $i++)
        {
            $row = @mysql_fetch_array($resultSet, MYSQL_ASSOC);
            //The PHP foreach statement allows traversing an
            //associative array.
            //To traverse = to visit every node
            foreach ($row as $j => $column)
            {
                echo "<DT>$j";
                echo "<DD>$column";
            }
            echo "<HR>";
        }
        echo "</DL>";
    }
    else
    {
        ?>
        <P>The query did not return a row.</P>
        <?php
    }
}
else
{
    ?>
    <P>Could not connect to database.</P>
    <?php
}
?>
<P>End of MySqlPretty.php</P>
</BODY>
</HTML>
```