Lesson 12
User Login and Authentication

There are many ways to use login and authentication scripts. You may only want authenticated or registered users into your site. You may only want certain users in certain areas.

The first step is to create a users table. You already have the scripts to do this in lesson 9. Instead of copying them all into my folder for this lesson, I’m going to use a relative path to point to the script.

<FORM METHOD="POST" ACTION="../lesson9/do_showfielddef.php">

Step 1: Name and Number

Table Name:
auth_user2

Number of Fields:
4

Go to Step 2

Define fields for auth_user2

<table>
<thead>
<tr>
<th>FIELD NAME</th>
<th>FIELD TYPE</th>
<th>FIELD LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>f_name</td>
<td>varchar</td>
<td>50</td>
</tr>
<tr>
<td>l_name</td>
<td>varchar</td>
<td>50</td>
</tr>
<tr>
<td>username</td>
<td>varchar</td>
<td>25</td>
</tr>
<tr>
<td>password</td>
<td>varchar</td>
<td>100</td>
</tr>
</tbody>
</table>

Create Table

Note that the password field length is 100 this is to allow for a hash type to hold the password. The hash is a digital summary of a string so more characters are needed.
Now to create a form and script to add users to the table that was just created.

**Adding a Record to auth~users**

**First Name:**  
wendy

**Last Name:**  
plourde

**Username:**  
wplourde

**Password:**  
test

Add User

**Added to auth_users:**

**First Name:**  
wendy

**Last Name:**  
plourde

**Username:**  
wplourde

**Password:**  
test

Add Another

The only difference between this script and the one in lesson 9 is the used of the `password()` function. The `password()` function inserts a hash of the password and not the text value of the password making it more secure.

```sql
$sql = "INSERT INTO $table_name (f_name, l_name, username, password) VALUES ('$_POST[f_name]', '$_POST[l_name]', '$_POST[username]', password('$_POST[password]'))";  
```

Note that this line is wrapped and should be all on the same line in your code.
Now to create a Login Form:

Login to Authorized Area

Username: wploarde

Password: ****

Login

Now the script:

```php
//check for required fields
if (!$_POST['username'] || !$_POST['password']) {
    header("Location: show_login.html");
    exit;
}

//setup name of database and table to use
$db_name = "testDB";
$table_name = "auth_users";

//connect to server and select database
$connection = @mysql_connect("localhost","root","" ) or die("mysql_error()");
$db = @mysql_select_db($db_name,$connection) or die("mysql_error()");

//build and issue the query
$sql = "SELECT * FROM $table_name WHERE username = " . "$_POST[username]" . " AND password = " . "$_POST[password]" . "";
$result = @mysql_query($sql,$connection) or die("mysql_error()");

//get the number of rows in the result set
$num = mysql_num_rows($result);

//print a message or redirect elsewhere, based on result
if ($num != 0) {
    $msg = "<p>Congratulations, you're authorized!</p>";
} else {
    echo "<p>You Are Not Authorized to Use This Site!</p>";
    echo '<br /><a href="show_login.html">Try Again</a>';
    exit;
}
```

On line 18 the query is selecting everything from the table and comparing username and password. Both have to be true to let the user in.

On line 22 the number of rows is counted and on line 25 we are checking to see if a row was returned. If one was returned then we have a match and you see the message if not you will see a link to return back to the login page.