

PHP Login and Registration Script: User Login/registration system is one of the key components of any membership driven websites and the ability to build them is a must have skill for any web developer. In this post, let us see how to create a complete login and registration system using php and mysql database.

This tutorial is fairly simple and easy to understand, but it covers as much as required to build **advanced login/registration system** - right from data validation to maintaining php sessions for authenticated access.

MySQL Database for Login/Registration Module

Before entering into the coding part, first let us build the database required for this example.

```
CREATE DATABASE `testdb`;  
USE `testdb`;  
  
CREATE TABLE IF NOT EXISTS `users` (  
    `id` int(8) NOT NULL AUTO_INCREMENT,  
    `name` varchar(30) NOT NULL,  
    `email` varchar(60) NOT NULL,  
    `password` varchar(40) NOT NULL,  
    PRIMARY KEY (`id`),  
    UNIQUE KEY `email` (`email`)  
) ENGINE=MyISAM DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;
```

Run this sql file in phpmyadmin interface and create the database and table.

PHP Script for Login and Registration System

To build the login/registration system we need to create the following files.

- **index.php** - This is the home page of our application
- **register.php** - It contains the user sign up form
- **login.php** - It contains the login form
- **logout.php** - This contains the user logout script
- **dbconnect.php** - MySQL database connection script

System Flow for User Login Registration Module

These are the steps breakdown of the user registration/login module we are going to build.

1. The Home page (index.php) contains links for login and sign up process in top navigation menu.
2. For new users » click on signup link » user redirected to registration form » fill up the form and submit » validate the form input » registration succeed » notify user and redirect to login page.
3. For registered users » click on login link on index.php » user redirected to login page » user provide login credentials » authenticate user and redirect to index page.
4. For signed in users » show user's name and logout link on navigation bar.
5. User clicks on logout » delete user details from session variable and destroy session » redirect to Home page.

Note: This tutorial uses twitter bootstrap framework for css. I prefer to use this as it's readily available and you can easily integrate bootstrap with HTML. But if you prefer custom style sheet then you can simply attach one and replace all the class selectors used in the html tags with your own. However the program functionality remains the same and will not be disturbed.

Dbconnect.php

This is where we connect to the mysql database. Keeping database connectivity in a separate file is very handy. This way you can get access to database across multiple files by simply including the file once and access it anywhere.

```
<?php
//connect to mysql database
$con = mysqli_connect("localhost", "myusername", "mypassword", "testdb") or die("Error " .
    mysqli_error($con));
?>
```

Register.php

This php file contains the code for the user registration process. The access to this page will be restricted for signed in user. We do this by checking out the session variable.

```
<?php
session_start();

if(isset($_SESSION['usr_id'])) {
    header("Location: index.php");
}

include_once 'dbconnect.php';
```

```

//set validation error flag as false
$error = false;

//check if form is submitted
if (isset($_POST['signup'])) {
    $name = mysqli_real_escape_string($con, $_POST['name']);
    $email = mysqli_real_escape_string($con, $_POST['email']);
    $password = mysqli_real_escape_string($con, $_POST['password']);
    $cpassword = mysqli_real_escape_string($con, $_POST['cpassword']);

    //name can contain only alpha characters and space
    if (!preg_match("/^[a-zA-Z ]+$/",$name)) {
        $error = true;
        $name_error = "Name must contain only alphabets and space";
    }
    if(!filter_var($email,FILTER_VALIDATE_EMAIL)) {
        $error = true;
        $email_error = "Please Enter Valid Email ID";
    }
    if(strlen($password) < 6) {
        $error = true;
        $password_error = "Password must be minimum of 6 characters";
    }
    if($password != $cpassword) {
        $error = true;
        $cpassword_error = "Password and Confirm Password doesn't match";
    }
    if (!$error) {
        if(mysqli_query($con, "INSERT INTO users(name,email,password) VALUES('" . $name .
        "', '" . $email . "', '" . md5($password) . "')")) {
            $successmsg = "Successfully Registered! <a href='login.php'>Click here to Logi
n</a>";
        } else {
            $errmsg = "Error in registering...Please try again later!";
        }
    }
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>User Registration Script</title>
    <meta content="width=device-width, initial-scale=1.0" name="viewport" >

```

```

    <link rel="stylesheet" href="css/bootstrap.min.css" type="text/css" />
</head>
<body>

<nav class="navbar navbar-default" role="navigation">
    <div class="container-fluid">
        <!-- add header -->
        <div class="navbar-header">
            <button type="button" class="navbar-toggle" data-toggle="collapse" data-target
            ="#navbar1">
                <span class="sr-only">Toggle navigation</span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
            </button>
            <a class="navbar-brand" href="index.php">Koding Made Simple</a>
        </div>
        <!-- menu items -->
        <div class="collapse navbar-collapse" id="navbar1">
            <ul class="nav navbar-nav navbar-right">
                <li><a href="login.php">Login</a></li>
                <li class="active"><a href="register.php">Sign Up</a></li>
            </ul>
        </div>
    </div>
</nav>

<div class="container">
    <div class="row">
        <div class="col-md-4 col-md-offset-4 well">
            <form role="form" action="<?php echo $_SERVER['PHP_SELF']; ?>" method="post" n
            ame="signupform">
                <fieldset>
                    <legend>Sign Up</legend>

                    <div class="form-group">
                        <label for="name">Name</label>
                        <input type="text" name="name" placeholder="Enter Full Name" requi
                        red value="<?php if($error) echo $name; ?>" class="form-control" />
                        <span class="text-danger"><?php if (isset($name_error)) echo $name
                        _error; ?></span>
                    </div>

                    <div class="form-group">

```

```

        <label for="name">Email</label>
        <input type="text" name="email" placeholder="Email" required value
        ="<?php if($error) echo $email; ?>" class="form-control" />
        <span class="text-danger"><?php if (isset($email_error)) echo $ema
        il_error; ?></span>
    </div>

    <div class="form-group">
        <label for="name">Password</label>
        <input type="password" name="password" placeholder="Password" requ
        ired class="form-control" />
        <span class="text-danger"><?php if (isset($password_error)) echo
        $password_error; ?></span>
    </div>

    <div class="form-group">
        <label for="name">Confirm Password</label>
        <input type="password" name="cpassword" placeholder="Confirm Passw
        ord" required class="form-control" />
        <span class="text-danger"><?php if (isset($cpassword_error)) echo
        $cpassword_error; ?></span>
    </div>

    <div class="form-group">
        <input type="submit" name="signup" value="Sign Up" class="btn btn-
        primary" />
    </div>
</fieldset>
</form>
<span class="text-success"><?php if (isset($successmsg)) { echo $successmsg; }
?></span>
<span class="text-danger"><?php if (isset($errmsg)) { echo $errmsg; } ?></
span>
</div>
</div>
<div class="row">
    <div class="col-md-4 col-md-offset-4 text-center">
        Already Registered? <a href="login.php">Login Here</a>
    </div>
</div>
</div>
<script src="js/jquery-1.10.2.js"></script>
<script src="js/bootstrap.min.js"></script>

```

```
</body>  
</html>
```

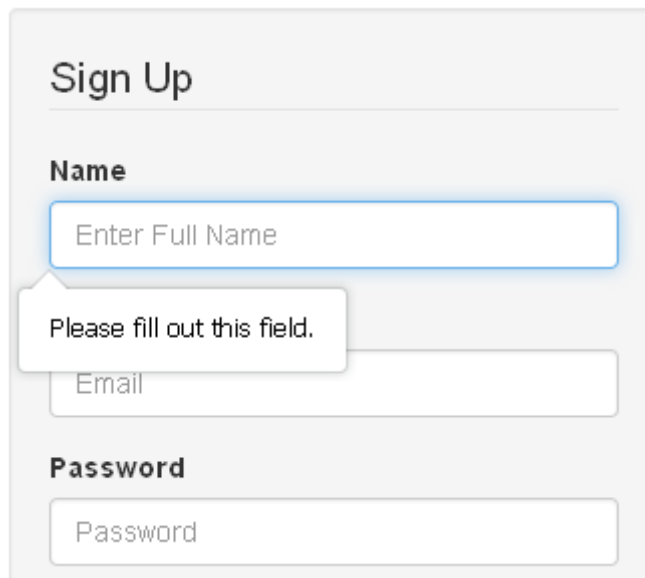
This is how the registration form looks like.

The image shows a registration form titled "Sign Up". It contains four input fields: "Name" with placeholder text "Enter Full Name", "Email" with placeholder text "Email", "Password" with placeholder text "Password", and "Confirm Password" with placeholder text "Confirm Password". Below these fields is a blue button labeled "Sign Up".

Already Registered? [Login Here](#)

www.kodingmadesimple.com

Registration form requires user to fill up name, email id and password and confirm password fields. All the fields are mandatory and user will be asked to provide the data if it is left blank like this.



Sign Up

Name

Please fill out this field.

Email

Password

Once the user fills out the details and submits the form for sign up, we sanitize the received data to avoid sql injection and validate the form input. If validation fails the user will be shown with the appropriate error message below each form input like this.

Sign Up

Name

Name must contain only alphabets and space

Email

Please Enter Valid Email ID

Password

Password must be minimum of 6 characters

Confirm Password

Sign Up

www.kodingmadesimple.com

Password

Confirm Password

Password and Confirm Password doesn't match

Sign Up

www.kodingmadesimple.com

If the validation succeeds the data will be stored in the database and user will be shown with the login link.

Login.php

This file contains the php code for user login process. The access to [login form](#) will be restricted for signed in users by checking if the php session is set or not.

```
<?php
session_start();

if(isset($_SESSION['usr_id'])!="") {
    header("Location: index.php");
}

include_once 'dbconnect.php';

//check if form is submitted
if (isset($_POST['login'])) {

    $email = mysqli_real_escape_string($con, $_POST['email']);
    $password = mysqli_real_escape_string($con, $_POST['password']);
    $result = mysqli_query($con, "SELECT * FROM users WHERE email = '" . $email . "' and password = '" . md5($password) . "'");

    if ($row = mysqli_fetch_array($result)) {
        $_SESSION['usr_id'] = $row['id'];
        $_SESSION['usr_name'] = $row['name'];
        header("Location: index.php");
    } else {
        $errorMsg = "Incorrect Email or Password!!!";
    }
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>PHP Login Script</title>
    <meta content="width=device-width, initial-scale=1.0" name="viewport" >
    <link rel="stylesheet" href="css/bootstrap.min.css" type="text/css" />
</head>
<body>

<nav class="navbar navbar-default" role="navigation">
    <div class="container-fluid">
```

```

<!-- add header -->
<div class="navbar-header">
    <button type="button" class="navbar-toggle" data-toggle="collapse" data-target
    ="#navbar1">
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
    </button>
    <a class="navbar-brand" href="index.php">Koding Made Simple</a>
</div>
<!-- menu items -->
<div class="collapse navbar-collapse" id="navbar1">
    <ul class="nav navbar-nav navbar-right">
        <li class="active"><a href="login.php">Login</a></li>
        <li><a href="register.php">Sign Up</a></li>
    </ul>
</div>
</div>
</nav>

<div class="container">
    <div class="row">
        <div class="col-md-4 col-md-offset-4 well">
            <form role="form" action="<?php echo $_SERVER['PHP_SELF']; ?>" method="post" n
            ame="loginform">
                <fieldset>
                    <legend>Login</legend>

                    <div class="form-group">
                        <label for="name">Email</label>
                        <input type="text" name="email" placeholder="Your Email" required
                        class="form-control" />
                    </div>

                    <div class="form-group">
                        <label for="name">Password</label>
                        <input type="password" name="password" placeholder="Your Password"
                        required class="form-control" />
                    </div>

                    <div class="form-group">
                        <input type="submit" name="login" value="Login" class="btn btn-pri
                        mary" />

```

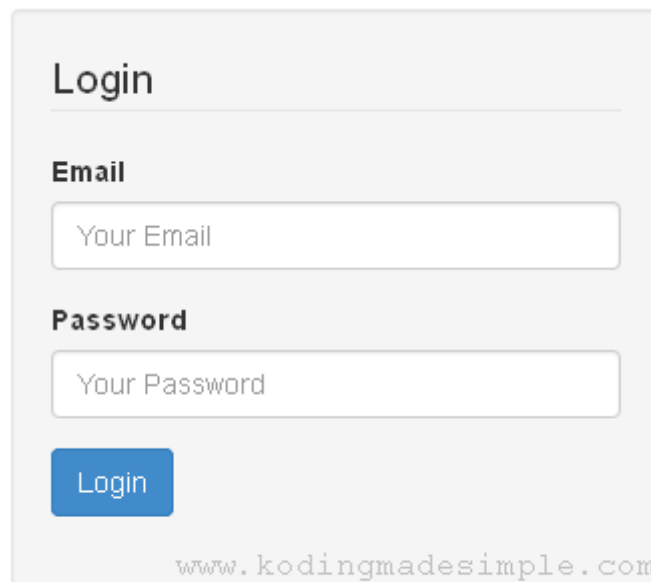
```

        </div>
    </fieldset>
</form>
    <span class="text-danger"><?php if (isset($errmsg)) { echo $errmsg; } ?></
span>
    </div>
</div>
<div class="row">
    <div class="col-md-4 col-md-offset-4 text-center">
        New User? <a href="register.php">Sign Up Here</a>
    </div>
</div>
</div>
</div>

<script src="js/jquery-1.10.2.js"></script>
<script src="js/bootstrap.min.js"></script>
</body>
</html>

```

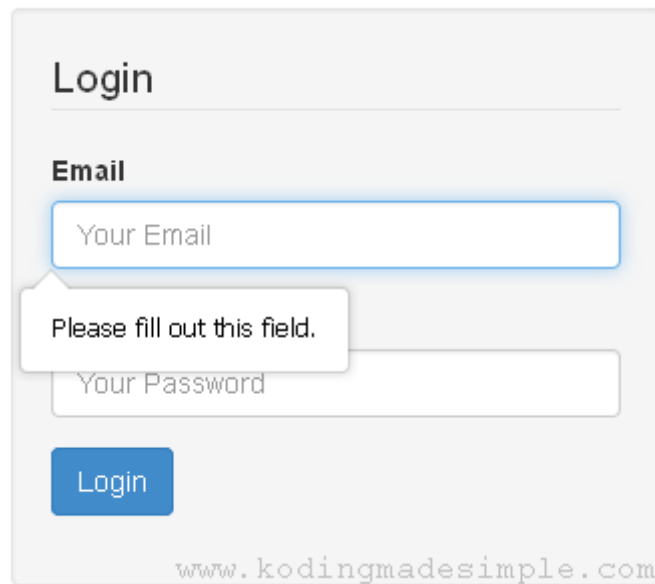
This file produces a login form similar to this.



The image shows a login form with a light gray background. At the top, the word "Login" is written in a bold, sans-serif font. Below it, there are two input fields. The first is labeled "Email" and contains the placeholder text "Your Email". The second is labeled "Password" and contains the placeholder text "Your Password". Below the password field is a blue button with the word "Login" in white. At the bottom of the form, the URL "www.kodingmadesimple.com" is displayed in a small, gray font.

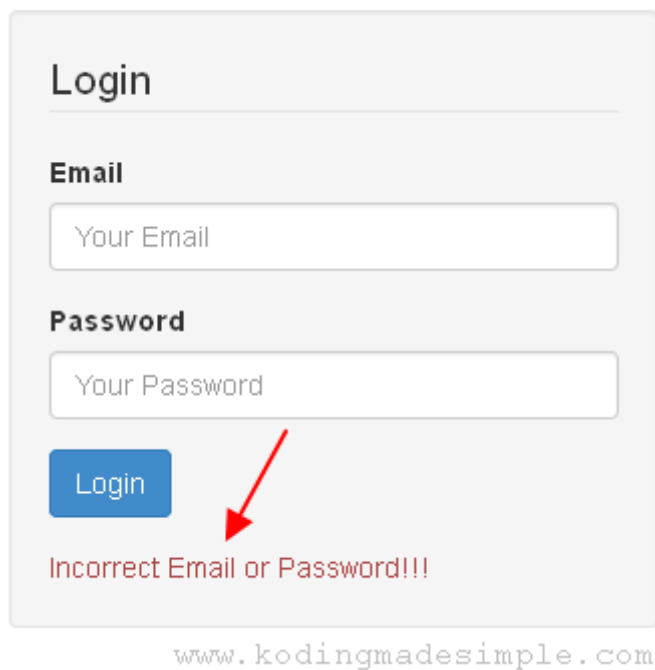
New User? [Sign Up Here](#)

Login form requires users to provide login credentials (email & password). Both the input fields are mandatory and notify user to fill out if left blank.



A login form titled "Login" with a horizontal line underneath. It contains two input fields: "Email" with the placeholder text "Your Email" and "Password" with the placeholder text "Your Password". A blue "Login" button is positioned below the password field. A white tooltip with a blue border points to the email field, containing the text "Please fill out this field." The URL "www.kodingmadesimple.com" is at the bottom.

Here too we sanitize the data and check for user authentication against database records. If it fails, we notify the user with error message like this,



A login form titled "Login" with a horizontal line underneath. It contains two input fields: "Email" with the placeholder text "Your Email" and "Password" with the placeholder text "Your Password". A blue "Login" button is positioned below the password field. A red arrow points to the text "Incorrect Email or Password!!!" displayed below the button. The URL "www.kodingmadesimple.com" is at the bottom.

If the user credentials are legitimate then we create session and store user's id and name in the session variable and redirect to index.php.

Index.php

This is the home page of our application and shows login and sign up menu links for visitors and for signed in members will show their name and logout link respectively.

```
<?php
session_start();
include_once 'dbconnect.php';
?>
<!DOCTYPE html>
<html>
<head>
    <title>Home | Koding Made Simple</title>
    <meta content="width=device-width, initial-scale=1.0" name="viewport" >
    <link rel="stylesheet" href="css/bootstrap.min.css" type="text/css" />
</head>
<body>

<nav class="navbar navbar-default" role="navigation">
    <div class="container-fluid">
        <div class="navbar-header">
            <button type="button" class="navbar-toggle" data-toggle="collapse" data-target
            ="#navbar1">

                <span class="sr-only">Toggle navigation</span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
            </button>
            <a class="navbar-brand" href="index.php">Koding Made Simple</a>
        </div>
        <div class="collapse navbar-collapse" id="navbar1">
            <ul class="nav navbar-nav navbar-right">
                <?php if (isset($_SESSION['usr_id'])) { ?>
                <li><p class="navbar-text">Signed in as <?php echo $_SESSION['usr_name'];
                ?></p></li>

                <li><a href="logout.php">Log Out</a></li>
                <?php } else { ?>
                <li><a href="login.php">Login</a></li>
                <li><a href="register.php">Sign Up</a></li>
                <?php } ?>
            </ul>
        </div>
    </div>
</div>
```

```
</nav>

<script src="js/jquery-1.10.2.js"></script>
<script src="js/bootstrap.min.js"></script>
</body>
</html>
```

Logout.php

This file will be fired up when the user clicks on the logout link. The user logout process is fairly simple. It destroy the session and unset the user data from the session.

```
<?php
session_start();

if(isset($_SESSION['usr_id'])) {
    session_destroy();
    unset($_SESSION['usr_id']);
    unset($_SESSION['usr_name']);
    header("Location: index.php");
} else {
    header("Location: index.php");
}
?>
```

Once you created all the above files, run the app and you will see the home page like this,



index.php - Home Page

Now click on the sign up link and you will be redirected to the user registration form,

Sign Up

Name

Nona Williams

Email

nonawilliams@gmail.com

Password

••••••••••••••••

Confirm Password

••••••••~••••••••

Sign Up

Already Registered? [Login Here](#)

Now enter the form details and submit the sign up button. If everything goes right then you will be registered and notified with a message like this,

Sign Up

Name

Email

Password

Confirm Password

Successfully Registered! [Click here to Login](#)

Already Registered? [Login Here](#)

www.kodingmadesimple.com

Now go to the login form through the login link.

Login

Email

Password

Login

www.kodingmadesimple.com

New User? [Sign Up Here](#)

Provide the login credentials and you will be signed in and redirected to the index page.



index.php as signed-in user

Click on logout to sign out the session and you will be taken back to the index page again.



After Log out