

* Assignment - 4 *

Roll no. 43212

• Aim:-

Design login application using PHP and add essence of AJAX in it.

• Theory:

1). What is PHP?

→ PHP stood for "Personal Home Page", but it now stand for recursive acronym "PHP: Hypertext Processor". PHP is a widely-used open-source scripting language. PHP scripts execute on the server.

PHP is a general-purpose scripting language especially suited to web development.

2). What is AJAX?

AJAX stands for Aynchronous Javascript And XML.

AJAX is not a programming language.

AJAX just was a combination of:

- A browser built-in XMLHttpRequest Object (to request data from a web server).
- JavaScript and HTML DOM (to display or use the data).

It is a set of web development techniques using many web technologies on the client-side to create asynchronous web application. with AJAX, web apps can send and receive data

Roll no 43212

a server asynchronously without interfering with display and behaviour of the existing page.

3) Advantage of HTTP:

→ i) Easy and simple to learn

ii) Extremely flexible.

iii) Easy integration and compatibility.

iv) Efficient performance.

v) Cost-efficient.

vi) Gives web developer more control.

vii) It helps in reusing an equivalent code and no get to write lengthy code and sophisticated structure for event of web application.

viii) It helps in managing code easily.

4) Advantage of AJAX?

i) User-friendly

ii) Boosts performance of a web page.

iii) Increases speed.

- iv) Interactive & responsive.
- v) Asynchronous calls.
- vi) Not required to completely reload page.
- vii) Usage of server resource is less.

• PHP validation for various fields:-

We used PHP to validate and verify the login credentials of the user

<? PHP

```
mysql_connect("server", "root", "gen") or die;
mysql_connect_db("generator") or die("not found");
```

```
$username = $_POST["username"];
```

```
$password = $_POST["password"];
```

```
$sql = "select * from users where
        username = '$username' AND
        password = '$password'";
```

```
$result = mysql_query($sql) or die(mysql_err);
$numrows = mysql_num_rows($result);
```

```
if ($numrows > 0)
```

```
{ echo "welcome"; }
```

```
else
```

```
{ echo "invalid credentials"; }
```

Roll no. 43212

The above function is written in PHP file. It connects to MySQL database and runs a select query in the database and returns the number of rows.

If no. of row is greater than 0, that means the given credentials exist in DB and the user is authentic and can be let in.

• How I used AJAX in my application?

→ I used AJAX in my application to give user an idea about the available unique username in the database.

Using AJAX, I sent query to database, each time when user types in the username field, AJAX fetches all the ~~string~~ usernames from the database that are having the typed data as their substring.

Such usernames are displayed on screen and user can see, which username he should use/avoid.

* Conclusion:

I implemented a login form that uses PHP to validate the credentials and AJAX to check the credentials without reloading page.