Saarthak Srivastav
FYIT 87.

Date:
Page:

Web Programming-II

Assignment - 2

Q.1) Illustrate how to integrate web forms and databases in PHP? Explain with example.

→ Requirements - XAMP server (Web server)
HTML, PHP, MySQL.

HTML form: First we create an HTML form that need to take user input from keyboard. It stores information of a user on a web server using interactive controls. It contains info like username, password, contact number, email id etc. The elements used in HTML form are checkbox, radio buttons, submit button etc.

SYNTAX : <form> Form elements.. </form>

Or

To pass the value to next page, we use the page name with the following syntax, We can use either GET or POST method to send data to server.

<form action = other_page.php method = POST/GET> form elements .. </form>

Database Connection : The collection of related data is called a database. In PHP, we connect to database using local host XAMPP web server.

SYNTAX : <?php

```
$servername = "localhost";
$username = "username";
$password = "password";
$dbname = "database_name";
// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
// check connection.
if ($conn->connect_error) {
    die("connection failed: ". $conn->connect_error;
}
```

Now to collect the form data submitted through HTML form . PHP $_REQUEST method is a PHP super global variable which is used to collect data

Syntax : <?PHP

```
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // collect value of input field.
    $data = $_REQUEST['val1'];
    if (empty($data)) {
        echo "data is empty";
    } else {
        echo $data;
    }
}
?>
// closing connection.
$conn->close();
?>.
```

Date:
Page:

Q.2) How to work with authentication among users ?

→ In order to gain acces, users must prove to the website or webpage that they are who they say they are

To put it simple, users authentication has three tasks :-

1. Manage the connection between the human (user) and the website's server (computer)
2. Verify user's identities.
3. Approve (or decline) the authentication so the system can move to authorizing the user.

The process is fairly simple; users input their credentials on the website's login form That information is then sent to the authentication server where the information is compared with all the users and grant them access to their accounts. ~~If a match~~ When a match is found, the system will authenticate users and grant them access to their accounts. If a match is not found, users will be prompted to re-enter their credentials and try again

Q.3) Explain session with example.

→ A PHP session is easily started by making a call to the session_start() function. This function first checks if a session is started and if none is started then it starts one.

It is recommended to put the call to session_start() at the begginning of the page.
session variables are storked in ass ou the array called $_SESSion []. These variables can be accessed during lifetime of a session.
Counter variable is wed to increment the session each time (no of times visited the page).
isset() function to check if session variable is set or not.

test.php

```
<?php
    session_start();
    if(isset($_session['counter'])){
      $_SESSION['counter']+=1;
    }else{
      $_SESSION['COUNTER']=1;
    }
    $msg="You have visited the page";
    $_SESSION['counter'];
    $mesg='in the current session';
?>
<html>
    <head><title>Setting up a PHP session
    </title></head>
<body><?php echo($msg); ?>
    </body></html>
```

Output :- You have visited the page 1 in the current session

Date:
Page:

Q.4) Explain cookies with example.

→ A cookie is often used to identify a user.
A cookie is a small file that the server embeds on the user's computer.
A cookie is created with the setcookie() function

Syntax :- setcookie(name, value, expire, path, domain, secure, httponly);

The following example creates cookie named "user" with value "Saarthak". The cookie will expire after 30 days (86400 x 30). The "/" means that cookie is available in entire website.

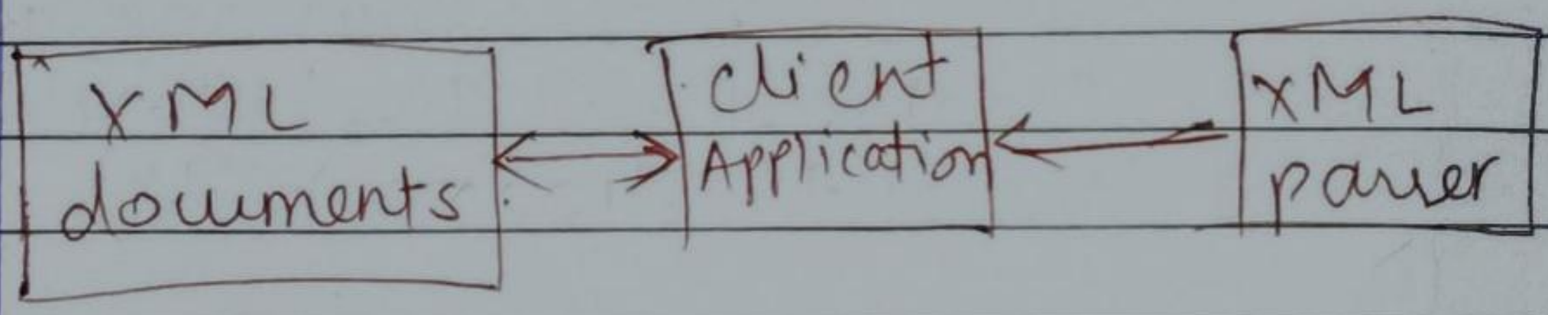
Code :-

```
<? php
    $ cookie_name = "user";
    $ cookie_value = "Saarthak";
setcookie($cookie_name, $cookie_value,
        time() + (86400 x 30), "/")
  ?>
<html>
<body>
<?php
 if (!isset ($_COOKIE [$cookie_name]))
 {
   echo "Cookie named". $cookie_name." is not set!"
 }
else
   { echo "Cookie". $cookie_name." is set! <br>
echo "value is :- $_cookie [$cookie_name]
```

Output : Cookie 'usr' is set!
Value i's : Saurthak.

Q.5) What is XML Parsing? Explain its usage with example.

→ XML passer is a software library or a package that provides interface for client applications to work with XML documents.
Modern day browsers have built-in XML parser.
Following diagram shows how XML parser interacts with XML document.



The goal of parser is to transform XML into a readable code

Some commonly used parsers are listed below :-

* MSXML : (Microsoft Core XML services). It's is a standard set of XML tools from Microsoft that includes a parser.

Date:
Page:

* System.XML.XMLDocument product :-
  This class is part of .NET library which contains number of different classes related to working with XML
* Java builtin Parser :- The Java library has its own parser.
  The library is designed such that you can replace built in parser with an external implementation such as Xerces from Apache or Saxon.
* Saxon :- Saxon offers tools for passing tranforming and querying XML
* Xerces :- Xerces is implemented in Java and is developed by the famous open source Apache Software Foundation