



# Web Technologies and Programming

## Lecture 24

# Passing Data Between Pages

# Summary of Previous Lecture

- **Operators in PHP**

- Arithmetic Operators: +, -, \*, /, %, \*\*
- Assignment Operators: =
- String Operators: ., .=
- Increment/decrement Operators: ++, --
- Logical Operators: AND, OR, NOT, XOR, &&, ||, !
- Comparison Operators: >, <, <=, >=
- Equality Operators: ==, !=, ===

- **Conditional statements**

- **if statement** - executes some code if one condition is true
- **if...else statement** - executes some code if a condition is true and another code if that condition is false
- **if...elseif....else statement** - executes different codes for more than two conditions
- **switch statement** - selects one of many blocks of code to be executed

# Summary of Previous Lecture

- **Looping statements**
  - For Loop
  - While Loop
  - Do-While Loop
  - ForEach Loop
- **Arrays in PHP**
  - Associative arrays
  - Sorting arrays

# Today's Lecture Outline

- **Super Global variables**
- **Passing form data**
- **Passing data with sessions**

# 1. Passing Form Data

- Forms provide a mean of **submitting** information from the **client** to the **server**.
- We can **create** HTML forms using **<form>** tag
- **Method** and **action** are the most common **attributes** of **<form>**

# 1. Passing Form Data...

- **action**

- gives the URL of the application that is to receive and process the forms data

- **method**

- sets the **HTTP method** that the browser uses to **send** the form's data to the **server** for processing
    - most common methods are **POST** or **GET**



# 1. Passing Form Data...

- **When to Use GET?**
- You can use GET (**the default method**):
- If the **form submission is passive** (like a search engine query), **and without sensitive information.**

# 1. Passing Form Data...

- **When to Use GET?**
- When you use GET, the form data will be **visible in the page address:**
- ~~action\_page.php?firstname=Mickey&last  
name=Mouse~~

# 1. Passing Form Data...

- **Get Method:**

- all **Form Data is encoded** into the URL, appended the action URL as query string parameters
- **Information is visible** to everyone
- It has the **amount limit**
- **Get method should only** be used when the data is not sensitive
- **Get should not be used** when sending passwords or sensitive data

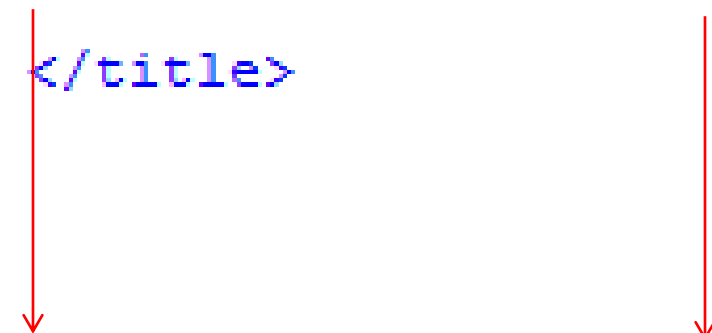
# 1. Passing Form Data...

```
<html>
<head>
    <title> Get Method </title>
</head>

<body>
    <form action="welcomeget.php" method="get">
        Name: <input type="text" name="name"><br>
        E-mail: <input type="text" name="email"><br>
        <input type="submit">
    </form>
</body>
</html>
```

URL where Information  
is to be submitted

Get Method



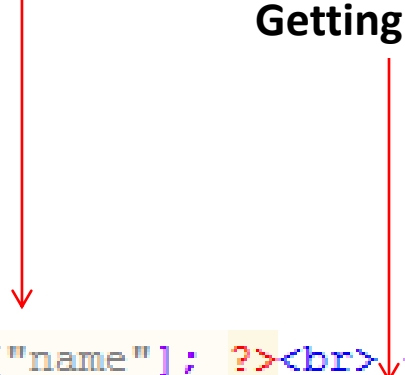
# 1. Passing Form Data...

Getting Name

Getting Email

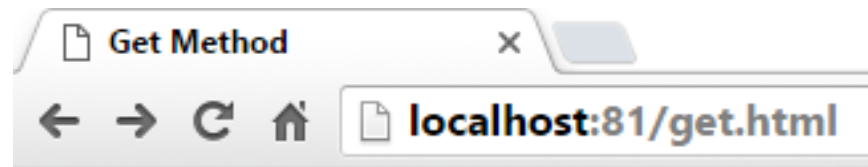
```
<html>
<head>
  <title> Welcome Get </title>
</head>

<body>
  <h1> Welcome <?php echo $_GET["name"]; ?><br></h1>
  <h3> Your email address is: <?php echo $_GET["email"]; ?> </h3>
</body>
</html>
```

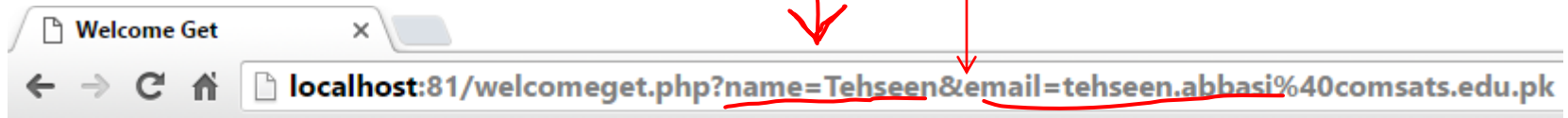


# 1. Passing Form Data...

Information to be Sent



URL contains all Data that was sent from previous page



Welcome Tehseen

Your email address is: tehseen.abbasi@comsats.edu.pk

# 1. Passing Form Data...

- **When to Use POST?**
- **You should use POST:**
- If the **form is updating data**, or includes sensitive information (password).
- **POST offers better security** because the submitted data is not visible in the page address.

# 1. Passing form data...

- **Post method:**

- Form Data appears within the **message body of the HTTP request**
- **Information sent will be invisible** to others
- **No limit on data amount**
- **When using sensitive data** such as passwords, use Post Method.



# 1. Passing Form Data...

URL where Information  
is to be submitted

Get Method

```
<html>
<head>
  <title> Post Method </title>
</head>

<body>
  <form action="welcomepost.php" method="post">
    Name: <input type="text" name="name"><br>
    E-mail: <input type="text" name="email"><br>
    <input type="submit">
  </form>
</body>
</html>
```

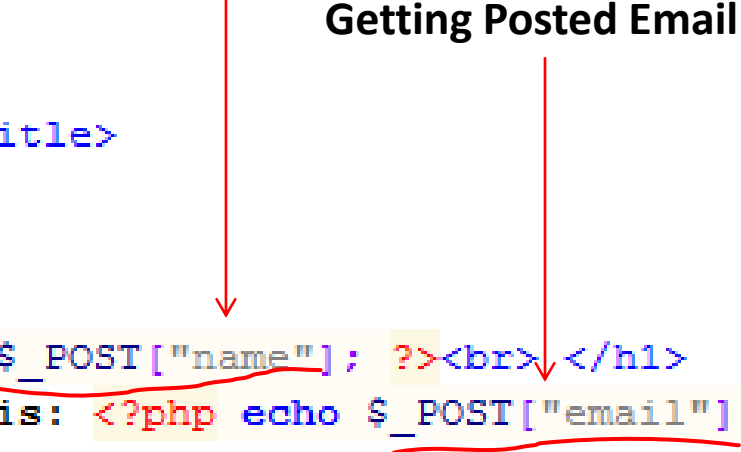
# 1. Passing Form Data...

Getting Posted Name

Getting Posted Email

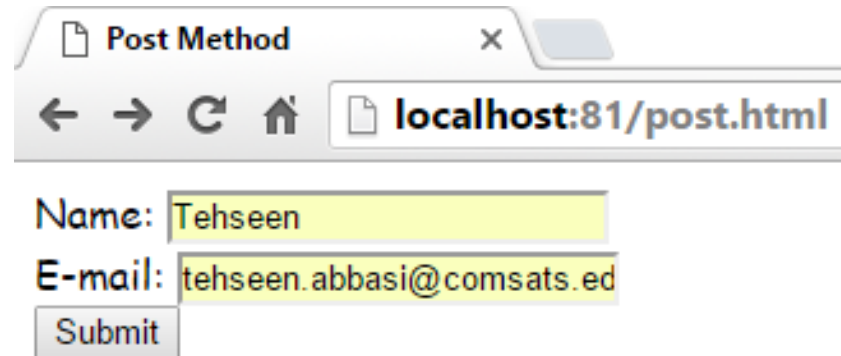
```
<html>
<head>
  <title> Welcome Post </title>
</head>

<body>
  <h1> Welcome <?php echo $_POST["name"]; ?><br></h1>
  <h3> Your email address is: <?php echo $_POST["email"]; ?> </h3>
</body>
</html>
```



# 1. Passing Form Data...

Information to be Sent



Post Method

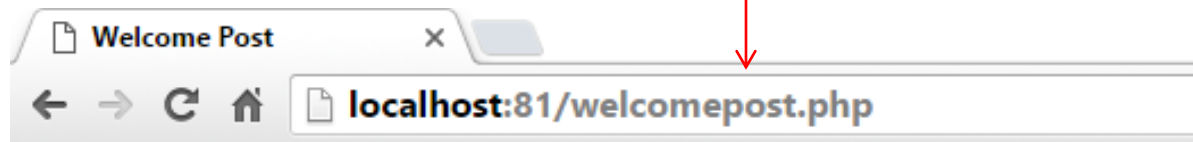
localhost:81/post.html

Name: Tehseen

E-mail: tehseen.abbasi@comsats.ed

Submit

URL contains no Data that was sent from previous page



Welcome Post

localhost:81/welcomepost.php

Welcome Tehseen

Your email address is: tehseen.abbasi@comsats.edu.pk

# 1. Compare GET vs. POST

## Compare GET vs. POST

The following table compares the two HTTP methods: GET and POST.

	<u>GET</u>	<u>POST</u>
BACK button/Reload	Harmless	Data will be re-submitted (the browser should alert the user that the data are about to be re-submitted)
Bookmarked	Can be bookmarked	Cannot be bookmarked
Cached	Can be cached	Not cached
Encoding type	application/x-www-form-urlencoded	application/x-www-form-urlencoded or multipart/form-data. Use multipart encoding for binary data
History	Parameters remain in browser history	Parameters are not saved in browser history
Restrictions on data length	Yes, when sending data, the GET method adds the data to the URL; and the length of a URL is limited (maximum URL length is 2048 characters)	No restrictions
Restrictions on data type	Only ASCII characters allowed	No restrictions. Binary data is also allowed
Security	GET is less secure compared to POST because data sent is part of the URL  Never use GET when sending passwords or other sensitive information!	POST is a little safer than GET because the parameters are not stored in browser history or in web server logs
Visibility	Data is visible to everyone in the URL	Data is not displayed in the URL

# 1.1 Super Global Variables

- Several predefined variables in PHP are "**superglobals**", which means that they are always **accessible, regardless of scope** - and you can access them from **any function, class or file** without having to do anything special.

# 1.1 Super Global Variables

- PHP **automatically** makes few variables **available** in your program
- These are **array variables** and can be accessed by **name**
- These variables are called **super-global** variables because they can be accessed without **regard to scope**

# 1.1 Super Global Variables...

- **\$\_GET:**

- contains all the query string variables that were attached to the URL

- **\$\_POST:**

- contains all the submitted form variables and their data

# 1.1 Super Global Variables...

- **\$\_GET:**

- `<html>`  
`<body>`  
`<a`  
`href="test_get.php?subject=PHP&web=W3schools`  
`.com">Test $GET</a>`  
`</body>`  
`</html>`

Result:

[Test \\$GET](#)

Result:

Study **PHP** at **W3schools.com**



# 1.1 Super Global Variables...

## – **\$\_POST:**

– <html>  
  <body>

```
<form method="post" action="<?php echo $_SERVER['PHP_SELF'];?>">  
  Name: <input type="text" name="fname">  
  <input type="submit">  
</form>
```

```
<?php  
if ($_SERVER["REQUEST_METHOD"] == "POST") {  
  // collect value of input field  
  $name = $_POST['fname'];  
  if (empty($name)) {  
    echo "Name is empty";  
  } else {  
    echo $name;  
  }  
}  
?>  
</body>  
</html>
```



The screenshot shows a web browser window with a light gray background. At the top, the word "Result:" is displayed in a dark gray font. Below it, the text "Name:" is followed by a text input field and a "Submit" button. The input field is empty, and the button is a small, rectangular button with the text "Submit" in a dark gray font.

# 1.1 Super Global Variables...

```
<body>
  <form action="welcomeget.php" method="get">
    Name: <input type="text" name="name"><br>
    E-mail: <input type="text" name="email"><br>
    <input type="submit">
  </form>
</body>
```

Get Method

localhost:81/get.html

Name:

E-mail:

Welcome Get

localhost:81/welcomeget.php?name=Tehseen&email=tehseen.abbasi%40comsats.edu.pk

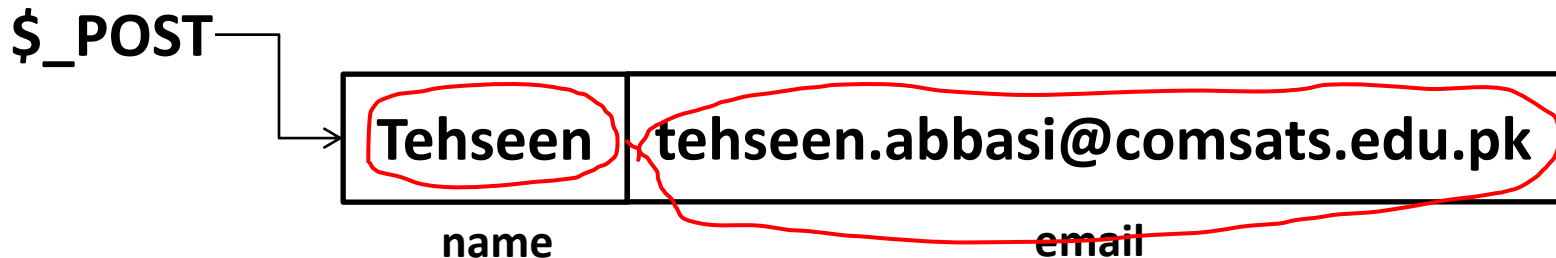
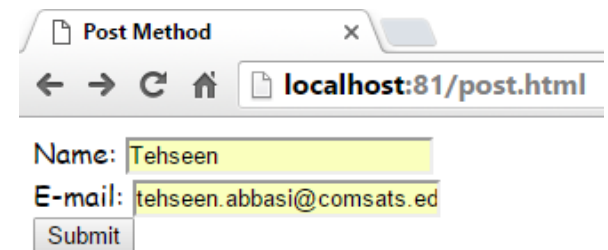
name      email

**\$\_GET** → 

Tehseen	tehseen.abbasi@comsats.edu.pk
---------	-------------------------------

# 1.1 Super Global Variables...

```
<body>  
  <form action="welcomepost.php" method="post">  
    Name: <input type="text" name="name"><br>  
    E-mail: <input type="text" name="email"><br>  
    <input type="submit">  
  </form>  
</body>
```



# 1.2 Accessing Form Data on Action Page



Get Method

localhost:81/get.html

Name:

E-mail:

```
<body>
  <h1> Welcome <?php echo $_GET["name"]; ?><br> </h1>
  <h3> Your email address is: <?php echo $_GET["email"]; ?> </h3>
</body>
```

## 1.2 Accessing Form Data on Action Page



Post Method

localhost:81/post.html

Name:

E-mail:

```
<body>
  <h1> Welcome <?php echo $_POST["name"]; ?><br> </h1>
  <h3> Your email address is: <?php echo $_POST["email"]; ?> </h3>
</body>
```

## 2. Passing Text Field Data

```
<html>
<head>
  <title> Post Method </title>
</head>
<body>
  <form action="welcomepost.php" method="post">
    Name: <input type="text" name="name"><br>
    E-mail: <input type="text" name="email"><br>
    <input type="submit">
  </form>
</body>
</html>
```

Post Method

Text Field

Text Field Name

## 2. Passing Text Field Data...

```
<html>
<head>
  <title> Welcome Post </title>
</head>

<body>
  <h1> Welcome <?php echo $_POST["name"]; ?><br> </h1>
  <h3> Your email address is: <?php echo $_POST["email"]; ?> </h3>
</body>
</html>
```

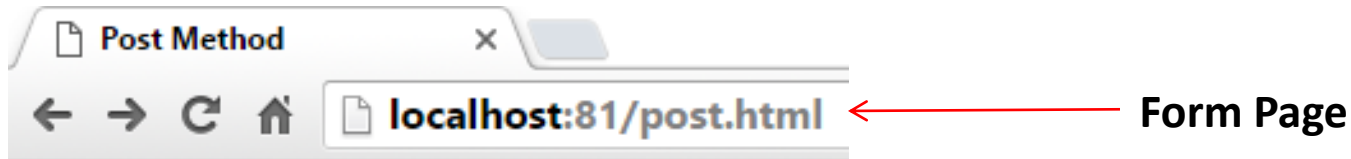


Display A Message



Data Received

## 2. Passing Text Field Data...



**Welcome Tehseen**

Your email address is: tehseen.abbasi@comsats.edu.pk



## 2. Passing Hidden Field Data...

```
<html>
<head>
  <title> Post Method </title>
</head>

<body>
  <form action="hiddenfieldaction.php" method="post">
    Name: <input type="text" name="name"/><br>
    E-mail: <input type="text" name="email"/><br>
    <input type="hidden" name="brum" value="3247"><br>
    <input type="submit">
  </form>
</body>
</html>
```

Hidden Field

Field Name

Hidden Value

## 2. Passing Hidden Field Data...

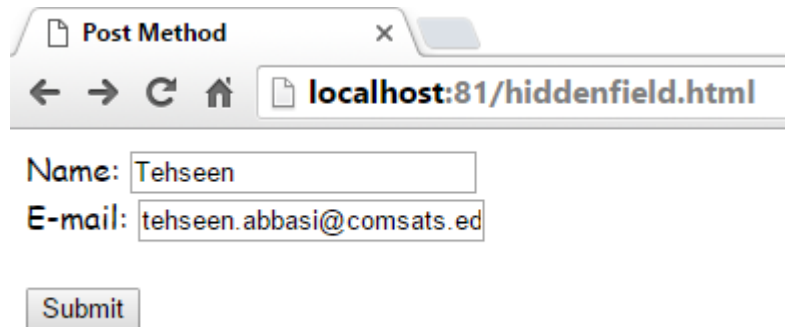
```
<html>
<head>
  <title> Welcome Post </title>
</head>

<body>
  <h1> Welcome <?php echo $_POST["name"]; ?><br> </h1>
  <h3> Your email address is: <?php echo $_POST["email"]; ?> </h3>
  <p> Your Ticket Number is: <?php echo $_POST["hnum"]; ?> </p>
</body>
</html>
```



Accessing Hidden Value

## 2. Passing Hidden Field Data...



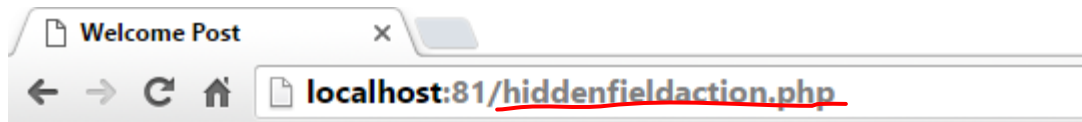
Post Method

localhost:81/hiddenfield.html

Name:

E-mail:

← No Third Entry



Welcome Post

localhost:81/hiddenfieldaction.php

Welcome Tehseen

Your email address is: tehseen.abbasi@comsats.edu.pk

Your Ticket Number is: 3247

← Hidden Field Data

## 2.3 Getting Value From Checkbox

```
<html>
<head>
  <title> Post Method </title>
</head>

<body>
  <form action="CheckBoxesAction.php" method="post">
    Which of The Following Languages Do You Know?<br>
    <input type="checkbox" name="php" value="PHP"/> PHP <br>
    <input type="checkbox" name="asp" value="ASP"/> ASP.NET <br>
    <input type="submit">
  </form>
</body>
</html>
```

CheckBox      Name      Value

## 2.3 Getting Value From Checkbox

```
<html>
<head>
    <title> Welcome Post </title>
</head>

<body>
    <h1> Welcome User! </h1>
    <h3> Your Selection Is: </h3>
    <p> <?php echo $_POST["php"];?> </p>
    <p> <?php echo $_POST["asp"];?> </p>
</body>
</html>
```

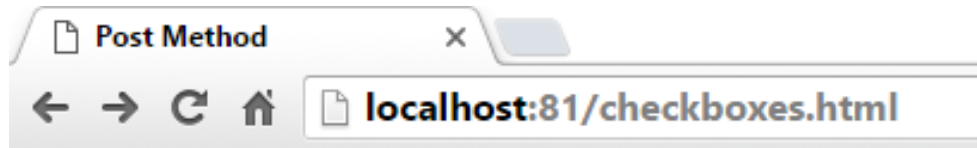
PHP Value



ASP Value



## 2.3 Getting Value From Checkbox...

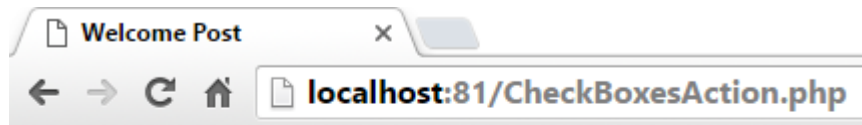


Which of The Following Languages Do You Know?

☒ PHP

☒ ASP.NET

Submit



**Welcome User!**

**Your Selection Is:**

PHP

ASP

## 2.3 Getting Value From Checkbox...

```
<h1> Welcome User! </h1>
```

```
<?php
```

```
    echo $_POST["php"];
```

```
?>
```

```
<p> <?php
```

```
    if($_POST["php"] == "PHP")
```

```
    {
```

```
        echo "You Know PHP!";
```

```
    }
```

```
    else{
```

```
        echo "You Don't Know PHP!";
```

```
    }
```

```
?>
```

```
</p>
```

```
<?php
```

```
    echo $_POST["asp"];
```

```
?>
```

```
<p> <?php
```

```
    if($_POST["asp"] == "ASP")
```

```
    {
```

```
        echo "You Know ASP.NET!";
```

```
    }
```

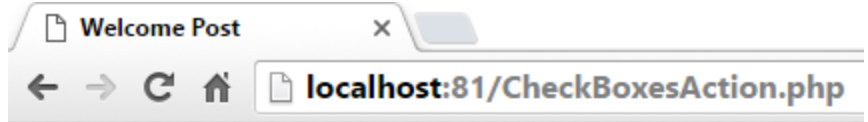
```
    else{
```

```
        echo "You Don't Know ASP.NET!";
```

```
    }
```

```
?>
```

```
</p>
```



Welcome User!

PHP

You Know PHP!

ASP

You Know ASP.NET!

Checking for Value of PHP

## 2.4 Getting Value From Radio Button

Same Name

```
<form action="RadioButtonsAction.php" method="post">
  What Is Your Nationality Type?<br>
  <input type="radio" name="nat" value="Single"/> Single <br>
  <input type="radio" name="nat"/> Dual <br>
  <input type="submit">
</form>
```

Value Set

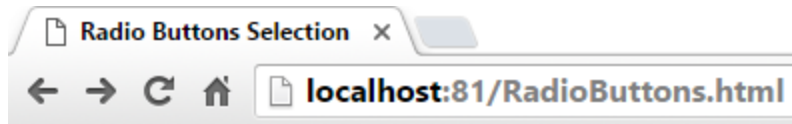
Value Not Set

Getting Value from Radio Button

```
<body>
  <h1> Welcome User! </h1>
  <p> Your Nationality Type is <?php echo $_POST["nat"] ?> </p>
</body>
```



## 2.4 Getting Value From Radio Button...

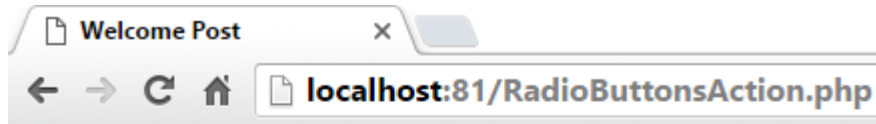


What Is Your Nationality Type?

☒ Single

☐ Dual

Submit



# Welcome User!

Your Nationality Type is Single

## 2.5 Getting Value From Select List

Name of List

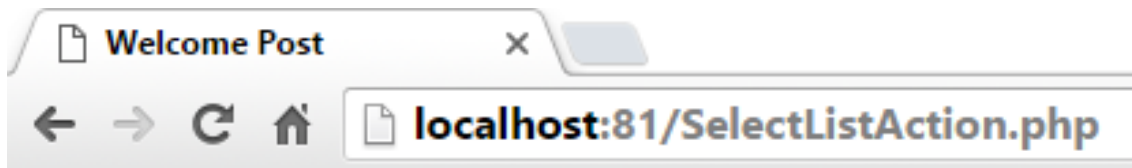
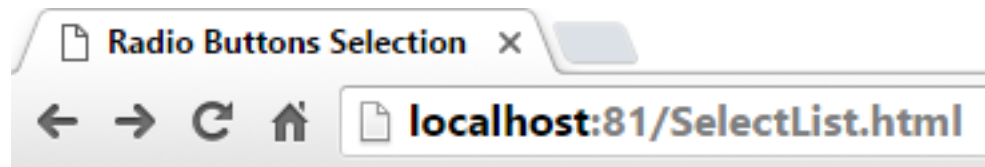
Option and Value

```
<form action="SelectListAction.php" method="post">
  Your Domicile: <br>
  <select name="dom">
    <option value="Punjab"> Punjab </option>
    <option value="Sindh"> Sindh </option>
    <option value="Balochistan"> Balochistan </option>
    <option value="KPK"> KPK </option>
  </select>
  <input type="submit">
</form>
```

Getting Value of List

```
<body>
  <h1> Welcome User! </h1>
  <p> You Have <?php echo $_POST["dom"] ?>'s Domicile </p>
</body>
```

## 2.5 Getting Value From Select List...



**Welcome User!**

You Have Punjab's Domicile

### 3. Passing Variables Using Sessions

- A **session** is basically a **temporary** set of variables that exists only until the **browser** has shut down
- **\$\_SESSION:**
  - represents data available to a **PHP script** that has previously been stored in **a session**

### 3. Passing Variables Using Sessions...



#### First Page

```
<?php
$_SESSION['name'] = 'Tehseen';
?>
```

#### 2<sup>nd</sup> Page

```
<?php
echo $_SESSION['name'];
$_SESSION['email'] =
'tehseen.abbasi@comsats.edu.pk';
?>
```

.....

#### n<sup>th</sup> page

```
<?php
echo $_SESSION['name'];
echo $_SESSION['email'];
?>
```

# 3. Passing Variables Using Sessions

- **session\_start()**
  - is used to start a session
- **\$\_SESSION['variable\_name']**
  - is used to store data in session variable
- **session\_destroy()**
  - is used to destroy a session
- **unset(\$\_SESSION['variable\_name'])**
  - is used to unset a specific variable

### 3. Passing Variables Using Sessions...

```
<?php
```

```
    session_start();
```

```
?>
```

Session Starts

```
<html>
```

```
<head>
```

```
    <title> Using Session </title>
```

```
</head>
```

```
<body>
```

Session Variable Created

```
<?php
```

```
    $_SESSION['name'] = 'Tehseen';
```

```
?>
```

Link to Next Page

```
    <h1> Welcome to The First Page </h1>
```

```
    <a href="Session2.php">Go To Next Page</a>
```

```
</body>
```

```
</html>
```

# 3. Passing Variables Using Sessions...

```
<?php
    session_start();
?>
<html>
<head>
    <title> Getting Session </title>
</head>

<body>
    <h1> This Is The Second Page</h2>
    <?php
        echo "The Value Received From Session Variable Is " . $_SESSION['name'];
    ?>
    <br>
    <a href="Session3.php"> Go To Third Page </a>
</body>
</html>
```

← Session Starts

Session Variable Created

Link Page

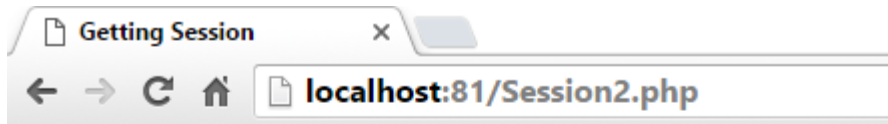


### 3. Passing variables using sessions...



Welcome to The First Page

[Go To Next Page](#)



This Is The Second Page

The Value Received From Session Variable Is Tehseen

[Go To Third Page](#)

Session Variable's Value



# 3. Passing variables using sessions...

```
<?php
    session_start();
    session_destroy();
?>
```

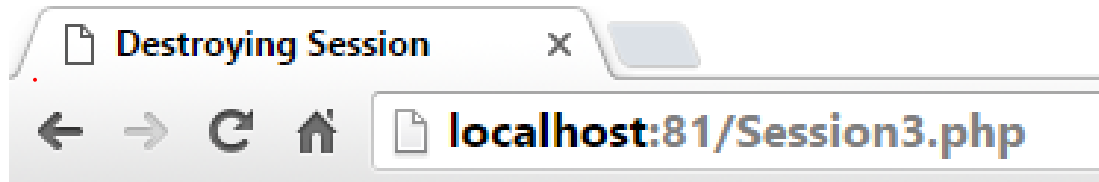
← Destroying Session

```
<html>
<head>
    <title> Destroying Session </title>
</head>

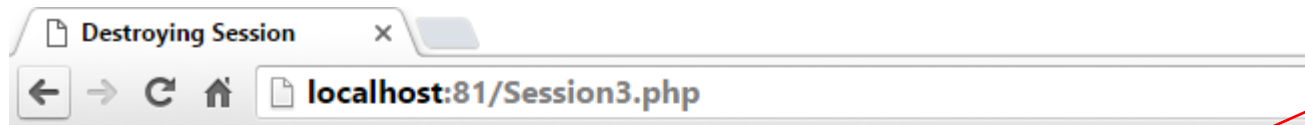
<body>
    <?php
        echo $_SESSION['name'];
    ?>
</body>
</html>
```

Accessing Session

### 3. Passing variables using sessions...



Tehseen ← Session Accessed



Session Destroyed

(!) Notice: Undefined index: name in C:\wamp\www\Session3.php on line 12				
Call Stack				
#	Time	Memory	Function	Location
1	0.0009	241464	{main}()	..\Session3.php:0

# Summary of Today's Lecture

- **Passing Form Data**
  - action
  - **method (POST or GET)**
    - When to Use GET?
    - When to Use POST?
    - Compare GET vs. POST
- **Super Global Variables**

# Summary of Today's Lecture

- **Passing data with forms**
  - Passing Text Field Data
  - Passing Hidden Field Data
  - Getting Value From Checkbox
  - Getting Value From Radio Button
  - Getting Value From Select List
- **Using session Variables**

**THANK YOU**

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