

## Chapter 7

# How to work with form data

Murach's PHP and MySQL (3rd Ed.)

C7\_Slide1

### Text input: the HTML for three types of fields

```
<input type="text" name="user_name" value="rharris">
<input type="password" name="password">
<input type="hidden" name="action" value="login">
```

### The text and password fields in the browser

User Name:

Password:

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### Objectives

#### Applied

1. Use text boxes, password boxes, radio buttons, check boxes, drop-down lists, list boxes, and text areas to get input from the user.
2. Use hidden fields to pass data to the web application when a form is submitted.
3. Use the htmlspecialchars and nl2br functions to display user entries the way you want them displayed.
4. Use echo statements to display data in a web page.

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### The URL when using the GET method

```
process_data.php?user_name=rharris&password=s3cr3t72&action=login
```

### The PHP for the GET method

```
<?php
$user_name = filter_input(INPUT_GET, 'user_name');
$password = filter_input(INPUT_GET, 'password');
$action = filter_input(INPUT_GET, 'action');
?>
```

### The URL when using the POST method

```
process_data.php
```

### The PHP for the POST method

```
<?php
$user_name = filter_input(INPUT_POST, 'user_name');
$password = filter_input(INPUT_POST, 'password');
$action = filter_input(INPUT_POST, 'action');
?>
```

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### Objectives (continued)

#### Knowledge

1. Describe the way a PHP application gets data from text boxes, password boxes, hidden fields, radio buttons, check boxes, drop-down lists, list boxes, and text areas.
2. Describe the use of the htmlspecialchars and nl2br functions.
3. Describe the use of the echo and print statements.

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### The HTML for three radio buttons in a group

```
<input type="radio" name="card_type" value="visa" checked>
Visa<br>
<input type="radio" name="card_type" value="mastercard">
MasterCard<br>
<input type="radio" name="card_type" value="discover">
Discover
```

### The radio buttons in the browser

Visa

MasterCard

Discover

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**PHP to access a radio button group**

```
<?php
    $card_type = filter_input(INPUT_POST, 'card_type');
?>
```

**PHP to add a default value for a group with no default button**

```
<?php
    $card_type = filter_input(INPUT_POST, 'card_type');
    if ($card_type == NULL) {
        $card_type = 'unknown';
    }
?>
```

**PHP that accesses the array and its values**

```
<?php
    $toppings = filter_input(INPUT_POST, 'top',
        FILTER_SANITIZE_SPECIAL_CHARS, FILTER_REQUIRE_ARRAY);
    if ($toppings != NULL) {
        $top1 = $toppings[0];           // $top1 is pep
        $top2 = $toppings[1];           // $top2 is olv
        $top3 = $toppings[2];           // $top3 is not set - error
    }
?>
```

**The HTML for three check boxes**

```
<input type="checkbox" name="pep" checked> Pepperoni<br>
<input type="checkbox" name="msh"> Mushrooms<br>
<input type="checkbox" name="olv"> Olives
```

**The check boxes in the browser**

<input checked="" type="checkbox"/> Pepperoni
<input type="checkbox"/> Mushrooms
<input type="checkbox"/> Olives

**The PHP to access the check box data**

```
<?php
    $pepperoni = isset($_POST['pep']);
    $mushrooms = isset($_POST['msh']);
    $olives = isset($_POST['olv']);
?>
```

**PHP that uses a loop to process the array**

```
<?php
    $toppings = filter_input(INPUT_POST, 'top',
        FILTER_SANITIZE_SPECIAL_CHARS, FILTER_REQUIRE_ARRAY);
    if ($toppings != NULL) {
        foreach($toppings as $key => $value) {
            echo $key. ' = ' . $value . '<br>';
        }
    } else {
        echo 'No toppings selected.';
    }
?>
```

**The message displayed by the browser**

```
0=pep
1=olv
```

**Three related check boxes in an array**

```
<input type="checkbox" name="top[]" value="pep"> Pepperoni<br>
<input type="checkbox" name="top[]" value="msh"> Mushrooms<br>
<input type="checkbox" name="top[]" value="olv"> Olives
```

**The check boxes in the browser**

<input checked="" type="checkbox"/> Pepperoni
<input type="checkbox"/> Mushrooms
<input checked="" type="checkbox"/> Olives

**The HTML for a drop-down list**

```
<select name="card_type">
    <option value="visa">Visa</option>
    <option value="mastercard">MasterCard</option>
    <option value="discover">Discover</option>
</select>
```

**The drop-down list in a browser**

Visa
Visa
MasterCard
Discover

**The HTML to set a default option**

```
<option value="mastercard" selected>MasterCard</option>
```

**The PHP to access the drop-down list data**

```
<?php
    $card_type = filter_input(INPUT_POST, 'card_type');
?>
```



**A list box that doesn't allow multiple selections**

```
<select name="card_type" size="3">
  <option value="visa">Visa</option>
  <option value="mastercard">MasterCard</option>
  <option value="discover">Discover</option>
</select>
```

**The list box in a browser**

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**The HTML for a text area**

```
<textarea name="comment" rows="4" cols="50">Welcome  
to PHP and MySQL!</textarea>
```

**A text area in the browser**

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**A list box that allows multiple selections**

```
<select name="top[]" size="3" multiple>
  <option value="pep" selected>Pepperoni</option>
  <option value="msh">Mushrooms</option>
  <option value="olv">Olives</option>
</select>
```

**The list box in a browser**

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**The URL when using the GET method**

When the user includes spaces in the text area  
process\_data.php?comment=Welcome+to+PHP+and+MySQL!

When the user presses the Enter or Return key  
process\_data.php?comment=Welcome+to%0D%0A+PHP+and+MySQL!

When the user doesn't enter any text  
process\_data.php?comment=

**The PHP to get the data from the text area**

```
<?php
$comment = filter_input(INPUT_POST, 'comment');
?>
```

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**PHP for a list box that allows multiple selections**

```
<?php
$toppings = filter_input(INPUT_POST, 'top',
  FILTER_SANITIZE_SPECIAL_CHARS, FILTER_REQUIRE_ARRAY);
if ($toppings !== NULL) {
  foreach ($toppings as $key => $value) {
    echo $key. ' = ' . $value . '<br>'; // 0 = pep, 1 = msh
  }
} else {
  echo 'No toppings selected.';
}
?>
```

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**Syntax of the htmlspecialchars() function**

```
htmlspecialchars($string[, $quote_style[, $charset[,  
$double_encode]]])
```

**Common HTML character entities**

Character	Character entity
&	&amp;
<	&lt;
>	&gt;
"	&quot;
,	&#039;
Non-breaking space	&nbsp;

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### An example that uses special characters

#### The text entered by the user

```
Welcome to <i>PHP</i> and MySQL!
```

#### PHP that converts special characters to character entities

```
<?php
    $comment = $_POST['comment'];
    $comment = htmlspecialchars($comment);
?>
<p><?php echo $comment; ?></p>
```

#### The data displayed in the browser

```
Welcome to <i>PHP</i> and MySQL!
```



### The text entered into the text area

```
Welcome to
PHP and MySQL!
```

### Converting line break characters to line break tags

```
<?php
    $comment = filter_input(INPUT_POST, 'comment');
    $comment = nl2br($comment, false); // use <br> tags,
    not <br /> tags
?>
<p><?php echo $comment; ?></p>
```

#### The data displayed in the browser

```
Welcome to
PHP and MySQL!
```



### A double-encoded less than character entity (&lt;)

&lt;

### A statement that prevents double encoding

```
$comment = htmlspecialchars($comment, ENT_COMPAT,
    'ISO-8859-1', false);
```



### The echo statement

#### Syntax

```
echo $var1
echo($var1)
echo $var1 [, $var2 ...]
```

#### Examples

```
echo 'Welcome to PHP and MySQL!';
echo 'Name: ' . $name;
echo('Name: ' . $name);
echo 'Cost: $', $cost;
```



### Syntax of the nl2br() function

```
nl2br($string[, $is_xhtml])
```



### The print statement

#### Syntax

```
echo $var1
echo($var1)
echo $var1 [, $var2 ...]
```

#### Examples

```
print 'Welcome to PHP and MySQL!';
print 'Name: ' . $name;
print('Name: ' . $name);
```

#### Using print in an expression

```
<?php
    ($age >= 18) ? print("Can vote.") : print('Cannot vote.');
?>
```

