Web Development for Business

Review of use of php

Review of HTML Forms

Introduction to php Functions

Review of use of php: php tags

All php code must be written within php tags.

The opening php tag is… `<?php`

The closing php tag is… `?>`

For example,

```
<?php

… php code written in here …

?>
```

Review of use of php: print

To produce Web page output from within a php code segment we use the php print function. The print function takes a string as input – this must be written either within single quotes or double quotes.

For example,

```
<html>
Here is an example of the use of the print function.

<p>

<?php

print “Hello World”;

?>

</p>
</html>
```

Exercises…

Create a file exercises1.php that includes three paragraphs each of which has a single print statement which output:

- “This is an example of the use of the print function.”
- “Here is an example header” presented within an h1 tag
- A link to the university homepage

Review of use of php: variables

We can declare variables which host values. A php variable name must be prefixed by a $.

For example,

```
$var1;
$total;
$sum;
```

A variable may be assigned a value by using the assignment operator =.

For example,

```
$count = 0;
$firstName = “Dan”;
$sum = 10 + 40;
$newSum = $sum + 10;
```

Note that each php expression is terminated by a semi-colon.

Review of use of php: concatenation

We can combine text and variables by using the concatenation operator.

For example,

```
<html>
Here is an example of the use of the concatenation operator.

<p>

<?php
$total = 20;

print “The total is ” . $total;

?>

</p>
</html>
```

Exercises…

Create a file exercises2.php.

Declare the following variables:

- $testScore1=70, $testScore2=40, $testScore3=55, $testScore4=45, $testScore5=72

Create a variable with an appropriate name that will host the total of all the test scores and use an appropriate expression to assign it the correct value.

Create a variable with an appropriate name that will host the mean of all the test scores and use an appropriate expression to assign it the correct value

Assuming that we have the variable, $totalMarks=80, create variables with appropriate names that will host the percentage score for each test score, and use an appropriate expression to assign it the correct value.

Exercises…

Write print statements that print the following information.

Test score 1 is 70 which is 87.5%
…
Test score 5 is 72 which is 90%

The mean test score is 56.4

Review of HTML forms: form tag

Forms are created by using a form tag which encloses the form elements.

The form tag has three main attributes: name, action and method.

The name identifies the form, the action specifies where to submit the form (the url of the page that acts as the form handler) and the method specifies the HTTP method used when submitting the form.

For example,

```
<form name=“formName” action = “response.php” method = “post”>

…form elements in here…

</form>
```

Review of HTML forms: input tag

Each form typically uses a number of form elements. There are various types of form elements. Most are created using the input tag.

The input tag has a type attribute which specifies the type of element and a name attribute which identifies the element.

Examples:

```
<input type="text" name="firstname"> // A text box called firstname

<input type="radio" name=“digit" value=“one"> One
<input type="radio" name=“digit" value=“two"> Two

// A radio button called digit with values one and two.

<input name="submit" type="submit" value="calculate">
// A submit button for submitting a form to a form handler.
```

Exercises…

Create a file form1.html

Create a form named form1 which uses the form handler form1Response.php and the method POST.

The form contains:

- Two text inputs, the first of which requires the KUID of the user, and the second of which requires the age of the user
- One radio input, where the user selects their gender

Review of HTML forms: select tag

Drop-down lists are created by using the select tag.

Example:

```
<select name="lunch">
<option value="sandwich">Sandwich</option>
<option value="soup">Soup</option>
<option value="salad">Salad</option>
</select>
```

Exercises…

Add a drop-down list to the form in form1.html that lists the months of the year which will be used to input the month of birth of the user.

Review of HTML forms: textarea tag

Large text boxes may be created using the textarea tag.

Example:

```
<textarea name="bigInput" rows="10" cols="20“>
</textarea>
```

Review of HTML forms: creating a form handler

The input data is sent to the form handler via an array of variables:

`$_POST` if the HTTP method is POST

`$_GET` if the HTTP method is GET

Each variable is accessed from the array using the name of the input element.

The value of any of these variables may be assigned to locally defined variables.

Examples:

```
$input1 = $_POST[‘input1’];
$lunch =  $_GET[‘lunch’];
```

Form Example

```
<html>
<form name="exForm" action="exResponse.php" method="POST">
<p>ID:<input  type="text" name=“id"></p>
<p>Lunch:<select name="lunch">
<option value="sandwich">Sandwich</option>
<option value="soup">Soup</option>
<option value="salad">Salad</option>
</select></p>
<p>Comments:<textarea name="comments" rows="10" cols="20">
</textarea></p>

<input name="submit" type="submit" value="submit">
</form>
</html>
```

Example Form Handler

```
<html>
<?php
$id = $_POST[‘id'];
$lunch =  $_POST['lunch'];
$comment = $_POST['comment'];

print "<p>Your ID is ".$id."</p>";
print "<p>For lunch you had ".$lunch."</p>";
print "<p>Your comments are ".$comment."</p>";
?>

</html>
```

Exercises…

Create file form1Response.php (the form handler).

Write php code that reproduces the following output (but will use the user input).

```
KUID: k1500000
Age: 20
This student is female and was born in May.
```

Form Example

```
<html>
<form name="exForm" action="exResponse.php" method=“GET">
<input  type="text" name="input1">
<select name="lunch">
<option value="sandwich">Sandwich</option>
<option value="soup">Soup</option>
<option value="salad">Salad</option>
</select>
<textarea name="comments" rows="10" cols="20">
</textarea>

<input name="submit" type="submit" value="submit">
</form>
</html>
```

Example Form Handler

```
<html>
<?php
$inp1 = $_GET['input1'];
$lunch =  $_GET['lunch'];
$comment = $_GET['comment'];

print "<p>The input is ".$inp1."</p>";
print "<p>For lunch you had ".$lunch."</p>";
print "<p>Your comments are ".$comment."</p>";
?>

</html>
```

php Arrays…

Arrays are structures that are common to many programming languages. They enable the storage of a collection of values in a single named structure.

Example:

```
<?php
$newArr = array(); // Declaring a new array called $newArr

$newArr[] = 10;  // Assigning the value 10 to the array. This appears in position 0.

$newArr[] = 20;  // Assigning the value 20 to the array. This appears in position 1.

print “The first element of the array  is “ . $newArr[0];
print “The second element of the array is “ . $newArr[1];
?>
```

php for loops…

For loops are used when one wants to repeat some behaviour a certain number of times.
An example of their use is when manipulating the values in an array

Example:

```
<html>
<?php
$newArr = array(10,20,30);

for($init=0; $init < count($newArr); $init++){
print “<p>Element “ . ($init + 1) . “ is “ . $newArr[$init];
print “</p>”;
}
?>
</html>
```

Note: the builtin function `count` returns the number of elements in an array
the increment operator ++ increments a variable’s value by 1

php while loops…

While loops are used when one wants to repeat some behaviour as long as a stated condition is satisfied.

An example of their use is when manipulating the values in an array

Example:

```
<html>
<?php
$newArr = array(10,25,-15,30);
$total=0;
$init=0;
while($newArr[$init] > 0 ){
$total=$total+$newArr[$init];
$init++;
}
print “The total is “ . $total;
?>
</html>
```