

### **5COSC006W Server-side Web Development** **2020/2021 IN-CLASS TEST 01 (ONLINE)**

Student ID	
SURNAME	
First Names	
Signature	

**Module Leader:**

**Dr Francois ROUBERT**

**Release Date & Time:**

**Wednesday 03 March 2021 13.00**

**Submission Deadline:**

**Thursday 04 March 2021 13.00**

#### **Instructions to Candidates:**

Please read the instructions below before starting the paper

- Module specific information is provided below by the Module Leader.
- As you will have access to resources to complete your assessment any content you use from external source materials will need to be referenced correctly. Whenever you directly quote, paraphrase, summarise, or utilise someone else's ideas or work, you have a responsibility to give due credit to that person.  
Support can be found at: <https://www.westminster.ac.uk/current-students/studies/study-skills-and-training/research-skills/referencing-your-work>
- This is an individual piece of work so do not collude with others on your answers as this is an academic offence.
- Plagiarism detection software will be in use.
- Where the University believes that academic misconduct has taken place the University will investigate the case and apply academic penalties as published in [Section 10 Academic Misconduct regulations](#).
- Once completed please submit your paper via the Assignment content. In case of problems with submission, you will **have TWO opportunities** to upload your answers and the last uploaded attempt will be marked. Note that instructions on how to compile and submit your handwritten and/or typed solutions will have been sent to you separately.
- Work submitted after the deadline will not be marked and will automatically be given a mark of zero.

#### **Module-specific Instructions**

- There is no restriction on how long you can take to complete the test within the 24 hour timeframe provided.
- All the questions relate to the **PHP code** given on page 2, 3 and 4 and to the **sample data** given on page 5.
- Clearly write your answers under each question. Take as much space as you need under each question.
- Produce clear diagrams to illustrate your answers when required, using a high-quality drawing package such as draw.io, as available on <https://app.diagrams.net/>, or equivalent.
- Create your diagram, export it as PNG or JPEG, and copy and paste it in your answers document, under the question you are answering.
- Save your document as a PDF file before submitting it. Make sure you submit a PDF file.

```
01 <?php
02 session_start();
03 include ("db.php");
04 $words="A Lovely Page";
05
06 echo "<link rel=stylesheet type=text/css href=lovelysheet.css>";
07 echo "<title>".$words."</title>";
08
09 include ("headfile.html");
10 echo "<h2>".$words."</h2>";
11
12 $this="select itemId, itemName, itemPicName, itemPrice from item";
13 $dothis=mysqli_query($this) or die (mysqli_error($conn));
14
15 while ($them=mysqli_fetch_array($dothis))
16 {
17     echo "<p><a href=pagetwo.php?thenb=".$them['itemId']. ">";
18     echo $them['itemName'];
19     echo "</a>";
20     echo "<br>";
21     echo "<img src=images/".$them['itemPicName']. ">";
22     echo "<br>£".$them['itemPrice'];
23     echo "<br>";
24     echo "<hr>";
25 }
26
27 include ("footfile.html");
28 ?>
29
30
```

```

31 <?php
32 session_start();
33 include ("db.php");
34 $words="A Pretty Page";
35
36 echo "<link rel=stylesheet type=text/css href=lovelysheet.css>";
37 echo "<title>".$words"</title>";
38
39 include ("headfile.html");
40 echo "<h2>".$words."</h2>";
41
42 $thevalue=$_GET['thenb'];
43
44 $that="select * from item where itemId=".$thevalue;
45 $dothat=mysqli_query($that) or die (mysqli_error($conn));
46 $it=mysqli_fetch_array($dothat);
47
48 echo "<p><b>".$it['itemName']."</b>";
49 echo "<br><img src=images/".$it['itemPicName'].">";
50 echo "<br>".$it['itemDescrip'];
51 echo "<p>£ ".$it['itemPrice'];
52 echo "<p>Available: ".$it['itemStock'];
53
54 echo "<form action=pagethree.php method=post>";
55 echo "<p>select stuff: ";
56 echo "<select name=qu>";
57 for ($j=1; $j<=$it['itemStock']; $j++)
58 {
59     echo "<option value=".$j.">".$j."</option>";
60 }
61 echo "</select>";
62 echo "<input type=hidden name=nb value=".$thevalue.">";
63 echo "<input type=submit value='Add'>";
64 echo "</form>";
65
66 include ("footfile.html");
67 ?>
68
69
70

```

```

71 <?php
72 session_start();
73 include ("db.php");
74 $words="A Gorgeous Page";
75
76 echo "<link rel=stylesheet type=text/css href=lovelysheet.css>";
77 echo "<title>".$words"</title>";
78
79 include ("headfile.html");
80 echo "<h2>".$words."</h2>";
81
82 $to=0;
83 if (isset($_POST['nb']))
84 {
85     $newitemid=$_POST['nb'];
86     $thequ=$_POST['qu'];
87     $_SESSION['cart'][$newitemid]=$thequ;
88 }
89
90 if (isset($_POST['delnb']))
91 {
92     $delitemid=$_POST['delnb'];
93     unset($_SESSION['cart'][$delitemid]);
94 }
95
96 echo "<p><table border=1 cellpadding=5>";
97
98 if (isset($_SESSION['cart']))
99 {
100     foreach($_SESSION['cart'] as $key => $value)
101     {
102         $getit="select * from Item where itemId=".$key;
103         $runit=mysqli_query($conn) or die (mysqli_error($conn));
104         $recs=mysqli_fetch_array($runit);
105         echo "<tr>";
106         echo "<td>".$recs['itemName']."</td>";
107         echo "<td>£".number_format($recs['itemPrice'],2)."</td>";
108         echo "<td>".$value."</td>";
109         $subto=$recs['itemPrice'] * $value;
110         $to=$to+$subto;
111         echo "<td>£".number_format($subto,2)."</td>";
112
113         echo "<form action=pagethree.php method=post>";
114         echo "<td>";
115         echo "<input type=submit value='Remove'>";
116         echo "</td>";
117         echo "<input type=hidden name=delnb value=".$recs['itemId'].">";
118         echo "</form>";
119         echo "</tr>";
120     }
121 }
122 else
123 {
124     echo "<p>Empty basket";
125 }
126 echo "<tr><td colspan=4>Total: £.number_format($to,2).</td></tr>";
127 echo "</table>";
128
129 include ("footfile.html");

```

## Sample Data

For the purpose of this assessment, the table *item* was created in the MySQL database management system.

### *Item*

itemId	itemName	itemPicName	itemDescrip	itemPrice	itemStock
2166	Mini Speakers	speakers.jpg	Stylish USB speakers	36.99	25
2235	Camera Lens	camlens.jpg	Digital Camera Lens	72.99	12
2415	Phone Charger	charger.jpg	Light Portable Charger	28.75	36
2891	Fitness Tracker	tracker.jpg	Cool-looking Tracker	102.50	11
2995	Digital Watch	digiwatch.jpg	Stunning Digital Watch	143.99	10

**Question 1: Referring to the code from line 12 to line 25.**

1) (a) Explain how SQL is used here to retrieve and display the required content.

[06 Marks]

1) (b) Explain in detail what `$them` (line 15) is, how it gets created and what it contains. Support your answer with the use of the sample data provided on page 5.

[08 Marks]

1) (c) Compare and contrast the different ways in which `$them` is used from line 17 to line 24.

[06 Marks]

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**Question 2: Referring to the code from line 42 to line 52.**

2) (a) Explain how the `$theValue` is created on line 42, where its actual value comes from and how it is used on line 44. Produce a clear diagram to support your answer using the sample data provided on page 5.

[12 Marks]

2) (b) Explain what lines 48 and 49 do and how the display they produce appears on the screen.

[04 Marks]

2) (c) On line 50, should `prodDescrip` be used instead of `itemDescrip`? Explain.

[02 Marks]

2) (d) What is the advantage for the user of the display produced on line 52? Is it necessary to display it? Explain.

[02 Marks]

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**Question 3: Referring to the code from line 54 to line 64.**

3) (a) Explain in detail what this code creates and how it creates it. Produce a clear diagram to support your answer.

[12 Marks]

3) (b) Explain what `qu` (line 56) and `nb` (line 62) are and explain where and how they are used later in the code.

[08 Marks]

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**Question 4: Referring to the code from line 98 to line 125.**

4) (a) Explain how the IF ELSE statement is used here.

[04 Marks]

4) (b) Explain in detail how the FOREACH loop and the elements `$key` and `$value` are used from line 100 to line 111. Produce a clear diagram to support your answer using the sample data provided on page 5.

[12 Marks]

4) (c) Is line 108 correct? Should `$recs['itemStock']` be used instead of `$value`? Explain.

[04 Marks]

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**Question 5: Referring to the code from line 90 to line 94 and from line 113 to line 119.**

5) (a) Explain how a form is created on the code from line 113 to line 119, how it is used and what values it passes through. Carefully consider its action and method. Produce a diagram to support your answer.

[12 Marks]

5) (b) Compare and contrast `delnb` (lines 117, 90 and 92) and `$delitemid` (lines 92 and 93).

[08 Marks]

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