IT3505 – Web Application Development II

PART 2 - Structured Question Paper
4th June, 2017
(ONE HOUR)

To be completed by the candidate
BIT Examination Index No:

Important Instructions:

- The duration of the paper is **1 (one) hour**.

- The medium of instruction and questions is English.

- This paper has **2 questions** and **9 pages**.

- **Answer all questions.** All questions **do not** carry similar marks.

- **Write your answers** in English using the space provided **in this question paper**.

- Do not tear off any part of this answer book.

- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.

- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (✗), (e.g. ✗) the numbers of the questions answered.

	Question numbers		
To be completed by the candidate by marking a cross (✗).	1	2	
To be completed by the examiners:			

1) (a) Identify the syntax errors in the following JavaScript function, which is coded to output the text "Hello World" in a popup box when executed. Rewrite the code by removing all syntax errors to produce the expected output.

```
function f1 {
    /* This function displays the text Hello world when executed
    alert("Hello world)
```

(10 Marks)

ANSWER IN THIS BOX

function f1 {   //missing () after f1

/* This function displays the text Hello world when executed // in correct comment

    alert("Hello world)   // closing ""

                          // closing }

function f1() {

// This function displays the text Hello world when executed

    alert("Hello world")
}

The parts b) and c) of this questions are based on the following HTML code.

```html
<!DOCTYPE html>
<html lang="en">
<head>
<title>Record Data </title>
</head>
<body>
 <form action="#" method="POST">
   Index number:<br>
   <input type="text" name="index">
   <br>
   Name:<br>
   <input type="text" name="name">
   <br>
    <input type="radio" name="gender" value="1" checked> Male<br>
   <input type="radio" name="gender" value="2"> Female<br>
   <input type="submit" name="submit" value="Submit">
</form>
<div id ="message" name="message">
</div>
</body>
</html>
```

(b) Write a PHP script that can be embedded in this HTML file to append the data entered by users to a file named "data.csv" at the server. The data file should be in the csv format and the data entered at a time should be in a single line.

(20 Marks)

ANSWER IN THIS BOX

```php
<?php
if (isset($_POST["index"])){

    $f = fopen("data.csv","a");
   fwrite($f, $_POST["index"].",".$_POST["name"].",".$_POST["gender"]."\n");

   fclose($f);

}
```

(c) Write a PHP script to print the message "Index number should not be left blank" in the div section when the user has submitted the form without filling the index number.

(20 marks)

ANSWER IN THIS BOX

```php
<?php
if (isset($_POST["submit"])){

  if ($_POST["index"] ==""){

    echo "Index number should not be blank";

  }

}
```

2) (a) Explain the main task of the following JavaScript?

```
$(document).ready(function(){
   $("div")
        .mouseover(function(){ $(this).css("color","blue") })
        .mouseout(function(){ $(this).css("color","black") })
   })
```

(10 Marks)

ANSWER IN THIS BOX

Add a function to all div sections to change the colour of it to blue when the mouse move over to the div and to change the colour to black when the mouse move away from it.

The remaining parts of this question are based on the following MySQL database table "**student**" in a database named '**school**' and the incomplete PHP script coded to manage data in the table. Consider 'id' as the primary key of this table.

id	name	sex	class
95001	Saman	m	2A
95002	Kamala	f	2D

```php
<?php

class Student{
  private $link;

  function __construct(){
     $this->link =
         new mysqli('localhost','root','root123','school');
  }

  public function addStudent($id,$name,$sex,$class){

  }

  public function editStudent($id,$name,$sex,$class){

  }

  public function deleteStudent($id){

  }

}


$student = new Student();
?>
```

(b) Explain what would happen when the following statement in the script is executed.

```
$student = new Student();
```

(10 Marks)

ANSWER IN THIS BOX

A new instance of the student class is created and it is assigned to the variable $student. When creating the instance the constructor function of the Student is executed which opens a link to school database and this link is stored in the private variable $link in the class Student.

(c) The functions with names addStudent, editStudent and deleteStudent are intended to add, edit and delete records from the table respectively. Fill the body of these functions to carry out the intended functionality.

(30 Marks)

ANSWER IN THIS BOX

```php
public function addStudent($id,$name,$sex,$class){
    $sql = "insert into student(id,name,sex,class)
values('$id','$name','$sex','$class')";
    $this->link->query($sql);
}

public function editStudent($id,$name,$sex,$class){
     $sql = "update student set
name='$name',sex='$sex',class='$class' where id='$id'";
    $this->link->query($sql);

}

public function deleteStudent($id){
    $sql = "delete from student where id='$id'";
    $this->link->query($sql);
}
```

****