

Final Question Solution Summer 2018

Desktop and Web Programming with Lab

By Himel specially for Jahidul Islam

Ans. to the question no. 01

Login Form:

```
1. <html>
2. <head>
3.     <title>Login</title>
4. </head>
5. <body>
6.     <h1>Login Form</h1>
7.     <table>
8.         <form action="#" method="POST">
9.             <tr>
10.                 <td>Username</td>
11.                 <td><input type="text" name="Username" placeholder="Username"></td>
12.             </tr>
13.             <tr>
14.                 <td>Password</td>
15.                 <td><input type="password" name="password" placeholder="Password"></td>
16.             </tr>
17.             <tr>
18.                 <td></td>
19.                 <td><input type="submit" name="login" value="Login Now"></td>
20.             </tr>
21.         </form>
22.     </table>
23.     <a href="registration.php">Register a new account</a><br>
24.     <a href="forget.php">Forget Account Password?</a>
25. </body>
26. </html>
```

Registration Form:

```
1. <html>
2. <head>
3.     <title>Registration</title>
4. </head>
5.
6. <body>
7.     <h1>Guardian Registration Form</h1>
8.     <table>
9.         <form action="reg.php" method="POST">
10.             <tr>
11.                 <td>First Name</td>
12.                 <td><input type="text" name="fname" placeholder="First Name"></td>
```

```

13.         </tr>
14.     <tr>
15.         <td>Last Name</td>
16.         <td><input type="text" name="lname" placeholder="Last Name"></td>
17.     </tr>
18.     <tr>
19.         <td>Student ID</td>
20.         <td><input type="text" name="stid" placeholder="000-00-0000"></td>
21.     </tr>
22.     <tr>
23.         <td>Relation</td>
24.         <td>
25.             <select name="relation">
26.                 <option value="father">Father</option>
27.                 <option value="mother">Mother</option>
28.                 <option value="brother">Brother</option>
29.             </select>
30.         </td>
31.     </tr>
32.     <tr>
33.         <td>Type</td>
34.         <td>
35.             <select name="relation">
36.                 <option value="father">Father or Mother</option>
37.                 <option value="brother">Local Guardian</option>
38.             </select>
39.         </td>
40.     </tr>
41.     <tr>
42.         <td>Username</td>
43.         <td><input type="text" name="Username" placeholder="Username"></td>
44.     </tr>
45.     <tr>
46.         <td>Password</td>
47.         <td><input type="password" name="password" placeholder="Password"></td>
48.     </tr>
49.     <tr>
50.         <td>Confirm Password</td>
51.         <td><input type="password" name="cpassword" placeholder="Password Again"></td>
52.     </tr>
53.     <tr>
54.         <td></td>
55.         <td><input type="submit" name="login" value="Register Now"></td>
56.     </tr>
57. </form>
58. </table>
59. <a href="login.html">Already Have an account? </a><br>
60. <a href="forget.php">Forget Account Password? </a>
61. </body>
62. </html>

```

Ans. to the question no. 02

Assigning Advisor Form:

```
1. <html>
2. <head>
3.     <title>Assign Advisors</title>
4. </head>
5. <body>
6.     <h1>Assign Advisor for student</h1>
7.     <table>
8.         <form action="#">
9.             <tr>
10.                <td>Batch: */td>
11.                <td>
12.                    <select name="batch">
13.                        <option value="18th">Batch 14</option>
14.                        <option value="18th">Batch 15</option>
15.                        <option value="18th">Batch 16</option>
16.                        <option value="18th">Batch 17</option>
17.                        <option value="18th">Batch 18</option>
18.                        <option value="18th">Batch 19</option>
19.                        <option value="18th">Batch 20</option>
20.                        <option value="18th">Batch 21</option>
21.                        <option value="18th">Batch 22</option>
22.                        <option value="18th">Batch 23</option>
23.                    </select><br>
24.                    <small><a href="#">View Selected Batch Student List</a></small>
25.                </td>
26.            </tr>
27.            <tr>
28.                <td>Students */td>
29.                <td>
30.                    <select name="studentSelection">
31.                        <option value="all">All Student</option>
32.                        <option value="remaining">Remaining All Students</option>
33.                        <option value="single">Single Student</option>
34.                    </select>
35.
36.                </td>
37.            </tr>
38.            <tr>
39.                <td>Student ID */td>
40.                <td>
41.                    <input type="text" name="sid" placeholder="000-00-000"><br>
42.                    <small>Optional! Only require if you select single student</small>
43.                </td>
44.            </tr>
45.            <tr>
46.                <td>Advisor ID */td>
47.                <td>
```

```

48.         <input type="text" name="aid" placeholder="000-00-000"><br>
49.         <small><a href="#">View Advisor info by this id</a></small>
50.     </td>
51. </tr>
52. <tr>
53.     <td></td>
54.     <td>
55.         <input type="submit" name="assignadvisor" value="Assign Advisor"><br>
56.     </td>
57. </tr>
58. </form>
59. </table>
60. </body>
61. </html>

```

Advisor Info Page:

```

1. <html>
2. <head>
3.     <title>Advisor Information</title>
4.     <style>
5.     body{
6.         width: 800px;
7.         margin: auto;
8.     }
9.     .left{
10.        float:left;
11.        max-width: 80%;
12.    }
13.    .right{
14.        float:right;
15.        max-width: 20%;
16.        padding-top: 50px;
17.    }
18.    .profile-pic{
19.        max-width: 150px;
20.        max-height: 150px;
21.    }
22. </style>
23. </head>
24. <body>
25.     <div class="left">
26.         <h1>Advisor Names: John Doe</h1>
27.         <h4>Advisor for : Kabir Mullah</h4>
28.         <hr>

```

```

29.      <p><u>Advisor Information</u></p>

30.      <table>
31.          <tr>
32.              <td>Employee ID</td>
33.              <td>71000323</td>
34.          </tr>
35.          <tr>
36.              <td>Designation</td>
37.              <td>Lecturer (Senior Scale)</td>
38.          </tr>
39.          <tr>
40.              <td>Department</td>
41.              <td>Department of Software Engineering</td>
42.          </tr>
43.          <tr>
44.              <td>Faculty</td>
45.              <td>Faculty of Science and Information Technology</td>
46.          </tr>
47.          <tr>
48.              <td>Webpage</td>
49.              <td>http://faculty.daffodilvarsity.edu.bd/profile/swe/johndoe.html</td>
50.          </tr>
51.          <tr>
52.              <td>E-mail</td>
53.              <td>johndoe@diu.edu.bd</td>
54.          </tr>
55.          <tr>
56.              <td>Cell-Phone</td>
57.              <td>01000 00 00 00</td>
58.          </tr>
59.      </table>
60.
61.  </div>
62.  <div class="right">
63.      
64.  </div>
65. </body>
66. </html>

```

Ans. to the question no. 03

SGPA calculation by given formula in php:

```
1. <?php
2. // Multiplying credit and obtained for every subject
3. function SubjectCalculation($credit, $obtainedgpa){
4.     return $credit * $obtainedgpa;
5. }
6. // Credit and obtained array following serial
7. function sgpa($creditArray, $obtainedArray){
8.     $totalSubjects = count($creditArray);
9.
10.    $totalSum = 0;
11.
12.    $totalCredit = array_sum($creditArray);
13.
14.    // Getting toalSum (Credit Per Subject x Obtained GPA)
15.    for ($i=0; $i < $totalSubjects ; $i++) {
16.        $totalSum += SubjectCalculation($creditArray[$i], $obtainedArray[$i]);
17.    }
18.
19.    /// Getting SGPA
20.    return $totalSum / $totalCredit;
21.
22. }
23.
24. // Example
25. $credit = [4, 4, 3, 4];
26. $obtained = [3, 4, 2, 2];
27.
28. // Printing Result
29. echo sgpa($credit, $obtained);
30.
31. ?>
```

Ans. to the question no. 04

```
1. <?php
2. session_start();
3. // This file will be included in a page
4. // if needed authentication permission to execute operations
5. if(empty(trim($_SESSION['login']))){
6.     header("location: login.php");
7.     die();
8. }
9. ?>
```

Ans. to the question no. 05

Mysqli Connection with a query:

```
1.  <?php
2.      $dbhost = 'localhost:3306';
3.      $dbuser = 'root';
4.      $dbpass = 'yourdbpass';
5.      $dbname = 'yourdb';
6.
7.      $conn = mysqli_connect($dbhost, $dbuser, $dbpass,$dbname);
8.
9.      if(! $conn ) {
10.         // If Database Connection Failed
11.         die('Could not connect: ' . mysqli_error());
12.
13.     }
14.     // SQL Query for getting everyting from table
15.     $sql = 'SELECT * FROM tablename';
16.
17.     // Executing Query with connection
18.     $result = mysqli_query($conn, $sql);
19.
20.     // Checking if any data available in result
21.     if (mysqli_num_rows($result) > 0) {
22.
23.         //Storing all available data into data variable
24.         $data = mysqli_fetch_assoc($result);
25.
26.         // Printing data
27.         print_r($data);
28.
29.     }else{
30.         // If no data available
31.         echo "No data available in this table!";
32.     }
33.     // Closing Database Connection
34.     mysqli_close($conn);
35.  ?>
```


Database Connection with PDO and OOP:

```
1.  <?php
2.      class DB{
3.          private $hostname = 'localhost';
4.          private $dbuser = 'yourdbusername';
5.          private $dbpass = 'yourdbpass';
6.          private $dbname = 'yourdb';
7.          private $charset = 'utf8mb4';
8.
9.          public static function connect(){
10.             $db = new DB;
11.             try{
12.                 $dsn = "mysql:host=".$db->hostname.";dbname=".$db->dbname;
13.                 $pdo = new PDO($dsn, $db->dbuser, $db->dbpass);
14.
15.                 // Set pdo exception as default
16.                 $pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
17.                 // Setting default fetch method as object
18.                 $pdo->setAttribute(PDO::ATTR_DEFAULT_FETCH_MODE, PDO::FETCH_OBJ);
19.                 // Returning pdo connection
20.                 return $pdo;
21.
22.             }catch(PDOException $e){
23.                 // If connection failed!
24.                 echo "Connection Failed! ". $e->getMessage();
25.             }
26.         }
27.     }
28.
29.     // Creating Class object
30.     $db = new DB;
31.
32.     // Preparing Query
33.     $stmt = DB::connect()->prepare("SELECT * FROM tablename WHERE something = ?");
34.     // Parameter for query
35.     $something = 'something_you_are_validating_with';
36.     // Setting parameter for query
37.     $stmt->bindParam(1, $something, PDO::PARAM_STR);
38.     // Executing Query
39.     $stmt->execute();
40.     // Checking if query executed successfully
41.     if($stmt->rowCount()){
42.
43.         // Fetching data
44.         $result = $stmt->fetchAll();
45.         // Encoding object to json and printing
46.         echo json_encode($result);
47.     }
48.     ?>
```

Part (B)

Ans. to the question no. 06

Common Difference between GET and POST methods:

GET:

- GET is used to request data from a specified resource.
- GET is one of the most common HTTP methods.
- GET requests can be cached
- GET requests remain in the browser history
- GET requests can be bookmarked
- GET requests should never be used when dealing with sensitive data
- GET requests have length restrictions
- GET requests is only used to request data (not modify)
- More than 2,000 characters in GET request not work in the most popular web browsers

POST:

- POST is one of the most common HTTP methods.
- POST requests are never cached
- POST requests do not remain in the browser history
- POST requests cannot be bookmarked
- POST requests have no restrictions on data length

Ans. to the question no. 07

form **action** attribute parameter determine which php page will work after submitting a form.

Example:

```
1. <form action="login.php" method="POST">
2.     <input type="text" name="user">
3.     <input type="password" name="pass">
4.     <input type="submit" value="Login">
5. </form>
```

In this form after submitting *login.php* page will work with data submitted by form.

Ans. to the question no. 08

What I understand about JavaScript event *onkeyup* and *onkeydown*

onkeyup:

The onkeyup event occurs when the user releases a key (on the keyboard).

onkeydown:

The onkeydown event occurs when the user is pressing a key (on the keyboard).

Done