**COMP 3540 Advanced Web Design and Programming**

Midterm Exam I – Fall 2016

Student Name: Student Number:

1. (10 marks) Fill in the blanks in each of the followings.
2. The HTML \_id\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attribute is used to assign a unique identity.
3. The CSS \_display\_\_\_\_\_\_\_\_\_\_\_\_\_\_ property is used to hide or show HTML elements.
4. The four positioning styles are \_absolute\_\_\_\_\_\_\_\_, \_relative\_\_\_\_\_\_\_, \_fixed\_\_\_\_\_\_, and

\_static\_\_\_\_\_\_\_\_.

1. The most popular software architecture for web applications is \_MVC\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The four components in the box model are \_content\_\_\_\_\_\_\_\_, \_padding\_\_\_\_\_\_\_\_, \_border\_\_\_\_\_\_\_\_, and \_margin\_\_\_\_\_\_\_\_.
3. The \_addEventListener\_\_\_\_ method attaches an event handler to an object, usually an HTML object.
4. The \_include or require\_\_ statement takes all the text/code/markup that exists in the specified file and copies it into the file that uses the statement. If the file does not exist, then a fatal error will occur.
5. The \_echo\_\_\_\_\_\_\_\_\_\_ statement is used to output texts that can be sent to clients.
6. The \_empty\_\_\_\_\_\_\_\_\_ function can be used to determines if a variable does not exist.
7. The \_mysqli\_connect\_\_\_\_\_\_\_\_\_\_ function is used to connect to a MySQL server.
8. (4 marks) Write the HTML code that always displays a button ‘Quick links’ at the top and at the horizontal center.

<div style='position:fixed; top:0; width:100%'>

<button style='margin:auto; display:block'>Quick links</button>

</div>

<!-- or -->

<div align='center' style='position:fixed; top:0; width:100%'>

<button>Quick links</button>

</div>

1. (4 marks) Write a form to send the ‘SignIn’ command to the controller from the StartPage. You need to additionally include the page value and the command value.

<form method='post' action='controller.php'>

<input type='hidden' name='page' value='StartPage'>

<input type='hidden' name='command' value='SignIn'>

<input type='text' name='username'>

<input type='password' name='password'>

<input type='submit' value='Submit'>

</form>

1. (4 marks) Complete the following code that registers an event handler and sends the command ‘SignIn’ when the button of ‘menu-signin’ is clicked.

window.addEventListener('load', function() {

document.getElementById('menu-signin').addEventListener('click',

send\_command\_signin); });

function send\_command\_signin() {

document.getElementById('id-form-signin').submit(); }

1. (4 marks) Write the PHP file, ‘controller.php’, that
   * gets the user inputs ‘username’ and ‘password’,
   * checks the validity of username and password using the function, ‘check\_user\_validity()’, in ‘module\_users.php’,
   * displays the content in ‘vew\_startpage.php’, when the username and password are invalid, and
   * displays the content in ‘vew\_mainpage.php’, when the username and password are valid,

$username = $\_POST['username'];

$password = $\_POST['password'];

include('module\_users.php');

if (check\_user\_validity($username, $password))

include('view\_mainpage.php');

else

include('view\_startpage.php');

1. (2 marks) Assuming your ‘Questions’ table, write the SQL query to get all the questions posted by the user whose id is stored ‘$userId’.

$sql = "select \* from Questions where UserId = $userId";

1. (6 marks) Assuming that the query in the above question is stored in ‘$query’, write the PHP code that

* Executes the query and gets the results,
* Prepares an HTML table code that includes the query results, and
* Sends the HTML code back to the client.

Note that the table ‘Questions’ have multiple columns and they have to be included in table columns.

$result = mysqli\_query($conn, $sql);

$table = "<table><tr><th>Question</th><th>Date</th></tr>";

while($row = mysqli\_fetch($result)) {

$table .= "<tr><td>" . $row['Question'] . "</td><td>" . $row['Date'] . "</td></tr>";

}

$table .= "</table>";

echo $table;