**COMP 3540 Advanced Web Design and Programming**

Midterm Exam I – Fall 2017

Student Name: Student Number:

1. (10 marks) Fill in the blanks in each of the followings.
2. DOM stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attribute in an HTML element is used to define styling information.
4. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ event is triggered on window object when all the content is completely loaded.
5. An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to display a web page within a web page.
6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ function is used to register an event handler.
7. The 3 components of MVC are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. The 4 components of the box model are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The CSS property, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is used to give some transparency of background.
10. The type value, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, of <input> in a <form> is used to display a button to send data.
11. The PHP function, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is used to get the number of values stored in an array.
12. (4 marks) Complete the next code of CSS selection, which satisfies the following conditions.

* The inner <ul> is not displayed initially.
* When the mouse moves over ‘HTML’ or ‘CSS’, the corresponding inner <ul> is displayed.
* The selection should start with the outer <ul> with the both of id and class.

<style>

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ { display: none; }

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ { display: block; }

</style>

<ul id='q2-id' class='q2-class'>

<li>HTML

<ul> <li>Sructure</li> <li>Content</li> </ul>

</li>

<li>CSS

<ul> <li>Styling</li> <li>Presentation</li> </ul>

</li>

</ul>

1. (4 marks) Complete the next code so that the <button> in a <div> can be displayed at the exact center, i.e., at the horizontal center and at the vertical center, of the <div>.

<div style='position:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; width:400px; height: 300px;

border: 1px solid Blue; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_'>

<button style='display:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; width: 150px; height: 50px;

border: 1px solid Black; position: absolute;

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_'>

Quick links

</button>

</div>

1. (6 marks) Complete the next code that sends the ‘SignIn’ command to the controller from the ‘StartPage’ page with username and password. But the command and page should not be displayed to the user. (Note that the four pairs of name and value should be submitted when the button is clicked.)

<form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_='controller.php'>

<input \_\_\_\_\_\_\_\_\_\_\_\_\_='hidden' \_\_\_\_\_\_\_\_\_\_\_\_\_='page' \_\_\_\_\_\_\_\_\_\_\_\_\_='StartPage'>

<input type=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ name=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>

<input type=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ name=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>

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

<input \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value='Submit'>

</form>

1. (4 marks) Complete the next code that
   * registers an event handler on a button so that
   * when the button is clicked, a <div> box is displayed. Initially the <div> box should not be displayed.

<script>

window.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_() {

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

});

</script>

<button \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>Click me!</button>

<div \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ style='width: 400px; height: 200px;

background-color: LightGrey; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_'></div>

1. (4 marks) Write the PHP file, ‘controller.php’, that
   * gets the user inputs ‘username’ and ‘password’ from the client. (You need to assume that the data comes with the post method.)
   * checks the validity of username and password using the function, ‘is\_valid()’. (You need to pass the username and password to the function.)
   * if the function returns false, echo ‘Invalid username or password’.
   * otherwise, echo ‘Valid’.

<\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>

1. (6 marks) Write the PHP code that

* creates an associative array for

Name: Tom; Age: 20; Major: COMP

* write the HTML code that displays a table for the above associative array. (The table should include all the keys (or names) and their values together.)

<\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$person =

$str = "";

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>