**COMP 3540 Advanced Web Design and Programming**

Midterm Exam I – Winter 2017

Student Name: Student Number:

1. (8 marks) Fill in the blanks in each of the following.
2. The three tiers in the web application environment are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The purpose of PHP in web applications is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The rich user interface can be provided with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ programming language and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ model.
5. The three components in the MVC software architecture are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The four positioning types are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. The four components in the CSS box model are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ method accesses the first HTML element with the specified id, and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ method attaches an event handler.
9. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ function is used to create an array, and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ function is used to get the number of elements in an array.
10. (2 marks) Complete the HTML code that displays ‘Copyright © cs.tru.ca’ at the bottom of the window and at the exact horizontal center.

<p style='width:80px;

'>

Copyright &copy; <a href='//cs.tru.ca'>cs.tru.ca<a>

</p>

1. (4 marks) Complete the code that displays <ul> right below an <li> only when the mouse moves over the <li>. The <ul> should be displayed right below of the <li> and the left position of the <ul> should be the same as the <li>. Only the <ul> element in the <li> with id of pdm should be affected by the CSS code.

<style>

li#pdm, li#pdm > ul, li#pdm li { list-style:none; padding:0; margin:0; }

</style>

<li id='pdm'><img src='menu.jpg' width:'50px' height:'50px'></img>

<ul>

<li>SignIn</li>

<li>Join</li>

</ul>

</li>

1. (4 marks) Complete the following code that registers the event handler, show\_signin\_modal\_window, that displays a modal window.

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

document.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_('menu-signin').\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(

'click', \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_);

});

function show\_signin\_modal\_window() {

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.getElementById('id-signin').\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ =

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;

}

1. (4 marks) Write the HTML code for ‘SignIn’ that
   * reads username and password, and
   * submits them to “controller.php” using the ‘post’ method.

The code should include another input named ‘command’ that is not visible to the user. The input is used to specify that the above values are used for ‘SignIn’.

<html><body>

</body></html>

1. (8 marks) Write the PHP code that

* creates an associative array for – manufacturer: VW; model: Golf; year: 2010; color: Silver.
  + creates a string of the <table> code that contains the above values in the associative array, and
  + sends the string back to the client.

You should start the code with the PHP tag. You should use a foreach loop.