Midterm Review

CIS 115 – Winter 2015

You may bring one 8 ½” x 11” page of hand-written notes, front and back, and a calculator.

Questions will be in short-answer format with partial credit for partial answers.

Questions will require you to read HTML and JavaScript code, and to write JavaScript code.

Topics:

- HTML <head>, <body>, <img>, <div>, <br>, <script>, and <input> (text/button only) tags
- Math and relational operators (i.e., +, -, *, /, <, <=, >=, ==, !=, ===)
- If, else if, else conditional statements, for/while repetition statements
- String manipulation and concatenation
- Math.floor(), Math.random(), document.getElementById(), and alert() functions.
- Functions: advantages of using, parameters, return values, onclick handler
- Objects and arrays: in contrast to variables, creating, adding/accessing entries
- Geolocation: latitude/longitude coordinates, finding Google Maps documentation

Sample questions:

1. [5] Consider the following Javascript code:

   ```javascript
   var x = 15;
   if (x < 10) {
       alert("Green");
   }
   if (x < 20) {
       alert("Yellow");
   }
   ```

   What text is displayed by the above code? Why?

2. [5] Consider the following Javascript code:

   ```javascript
   function f(list) {
       var x = 0;
       for (var i = 0; i < list.length; i++) {
           x = x + 2*list[i];
       }
       return x;
   }
   alert(f([1, 2, 3, 4]));
   ```

   What text is displayed by the above code? Why?
3. Declare an object *point* with property *x* initialized to 5 and property *y* initialized to 10.

4. Define a class *point* with parameters *x* and *y* and properties *x* and *y* initialized to the values of the parameters.