CS 133S Week 1 Day 1 Notes

1. Paperwork
   1. Moodle is our course management system – <http://online.clackamas.edu>
      1. Login info is the same as for the myClackamas portal
   2. Syllabus
      1. Available in Moodle
         1. Required book is required, but available online for free as a downloadable PDF from the author’s website
         2. <http://Eloquentjavascript.net>
         3. Debra will review 2nd and 3rd editions to see how different they are
   3. Calendar
      1. Available in Moodle
         1. Debra will add the skills contest date
2. Introductions
   1. Name you’d like to use for class
   2. What programming experience you’ve had (if any)
   3. What you are hoping to get out of the class
3. Content
   1. HTML vs JavaScript
      1. Markup language – used to identify meaningful sections of text
      2. Scripting language – used to solve any number of problems
         1. You’ll use basic programming structures in different combinations to solve lots of different problems
            1. Variables
            2. Logical structures
            3. Looping structures
            4. Math techniques
   2. Client side scripting – JavaScript is processed on the client side of the Request-Response model (see diagram on board)
      1. Implications
         1. Easy to test (text editor and a web browser)
         2. Access to client side events 🡨 this is the reason why JavaScript is still relevant
         3. NO access to server side resources other than web-accessible files (no database access)
   3. OOP (like) scripting
      1. Object oriented programming language has programmatic representations of convenient ideas or things. What types of ideas or things are generally specific to the language. In JavaScript, there are intrinsic and browser objects
         1. Intrinsic objects
            1. Date object
            2. Math object
            3. Others – see reading
         2. Browser objects
            1. Window
            2. Document
            3. All of the other html elements
      2. Each object will typically have a number of pre-defined characteristics that can be read or set. These are the object’s **properties**.
         1. Changing an object’s property value  
            objectname.propertyname = some\_new\_value
            1. Ex: window.document.forms[0].inputs[0].value = “JS is great!”;
            2. Ex: window.document.getElementById(“logo”).src = “images/bluelogo.gif”;
      3. Each object will typically also have a number of actions or interactions that it can complete. These are the object’s **methods  
         objectname.methodname(***arguments, inside, the parentheses***)**
         1. Using an object’s methods
            1. EX: show a message in a system alert

window.alert(“this is the text in the alert”);

* + - * 1. EX: programmatically submit a form

window.document.forms[0].submit();

* + - * 1. EX: programmatically close a window

window.close();

* 1. Some practical coding
     1. See uploaded example for the 3 locations for JavaScript in a web page