CSE 4500 – Platform Computing
Professor Lawrence Orijuela
Homework 2 (Due midnight Feb 28)

Instructions:
1. **Download this assignment as an editable word doc from Canvas.**
2. **Write your name and student ID.**
3. **Write your answers in the spaces provided. Give yourself more space as needed.**
4. **Export this doc with your name and answers as a PDF and resubmit it to canvas.**
   a. **Use this as your title: CSE4500_YourName_HW#**
   b. **Example: CSE4500_BobSmith_HW#1**

Name: Nathan Bush   Student ID #:_ 007463099   Points:_____/30_____

1. What are high-level programming languages?

   High level programming languages provide a significant layer of abstraction separating the programmer from low-level machine code and operations of the computer. They are meant to be easily understood and written by humans and closely resemble human language. On compilation/translation, high-level languages are compiled into assembly language which is finally assembled into machine code readable by the computer.

2. What are examples of high-level languages?

   JavaScript, Python, C++, C#, Ruby, Java

3. What are two different types of translations of high-level languages?

   High-level languages are either compiled or translated in order to execute. Compiled languages are compiled into a binary that contains the entire machine language needed prior to execution by the computer. Translated languages are translated to machine code one line at a time at runtime, or during execution.

4. What type of translation does JavaScript use?

   JavaScript is a translated language – it compiles at runtime (just-in-time) to manipulate the DOM and change what is displayed in the browser.

5. What HTML5 tag is used for including a script?

   <script></script>

6. What are jQuery and jQuery Mobile?

   jQuery is a JavaScript framework with an easy-to-use API that simplifies DOM manipulation and allows a web developer to create responsive web applications that work on a variety of browsers and resolutions without having to worry about those considerations. jQuery Mobile builds on the jQuery framework to include responsive design and implementation on whatever mobile platform that visits the web application/page. These frameworks allow developers to create web applications that run and display properly on any device or browser.

7. What is client-side programming?

Client-side programming utilizes the resources on the client browser to render HTML documents on the client side. Documents are modified in place in the browser without the server having any interaction aside from sending data that is needed by the client-side code to be rendered in the browser.

8. What is server-side programming?

Server-side programming builds the HTML document entirely on the server, which is then served to be rendered in its entirety on the browser. Any changes to the document are made on the server-side and resent to the browser.

9. What is the purpose of an id attribute?

The id attribute provides a name for later reference either in the HTML code, for linking the HTML element to a CSS element with a matching id, or for reference in JavaScript code that has been linked to the HTML document in some way. JavaScript can use the DOM to get HTML elements by their declared ids and then perform tasks on them.

10. What is a preferred way to add a label for an HTML5 widget?

Using the jQuery Mobile API, we can add a label with the <label></label> tag. The "for" attribute passed to the tag will reference the HTML element that needs to be labelled.