### **IT-130, A5 – Fall 2020**

## Page #1 (20 points)

**Memory Question:**

The good news, is that these pages are almost identical to examples that have been given in lecture. In other words, there is nothing new in this code. Also, as you are working on your pages, **you MAY refer to your notes as much as you like**.

Everything from the opening  DOCTYPE tag to the closing </html> must be done without having looked at your notes.

It is perfectly acceptable to first create the page with your notes in front of you. But the version that you submit must have been written without looking at your notes, code, or any other reference. If, for example, you get "most" of the page working, and there is something small that didn't work and you had to go back and look something up, then the page was NOT done from memory. **In that case, you must delete the page and start again**!

You are certainly allowed to test the page in your browser as you are working.

The page should NOT be difficult. In other words, after spending a fair amount of time practicing with the examples from lectures and experimenting on your own, you should not find the required pages here too problematic. The only ‘tricky’ part will be to be able to put it all together without looking at any notes.

So the only two pages that should be visible to you while typing the official (submitted) page are:

1. This web page with the instructions for the assignment.
2. The web page in which you are testing your code.

Now, if you happen to forget something and feel the need to go back and look up notes or something that's okay. BUT….. You have to go back and retype the page from scratch. In other words, the only "honest" submission is a page that you started and finished without looking at any notes or other references.

You will be graded on:

1.      Presence of all required tags (i.e. including doctype, meta, etc.)

2.      Use of proper conventions (file names, form names, variable names, whitespace, etc.)

3.      Properly functioning JavaScript. (This is the most important part).

**Tip #1:** I have given you a nearly identical page that you can look at and try to "match". See **simple\_conversion\_1.**html on the course web page under module #5.

**The Problem:**

Create a page with a text field that asks the user for a value in ounces. You should have a button that says: "Convert to Grams". When the user clicks the button, you should output the amount to a div section called "results".

The conversion is very simple: simply multiply by 28.3. That is, 1 ounce = 28.3 grams. So if the user types 3, your page should output: 84.9

         Retrieve the value the user entered, and store it inside a variable.

         Do the conversion. You may find it makes your code easier if you store the converted value inside a second variable.

         Output the converted value to the "results" div.

         Using an inline style (or a CSS class if you want to!) change for font of the 'results' div section to '**Candara**'.  The property to do is called: font-family. -> Again, remember that you ARE allowed to view this page while doing your assignment. So you do not have to memorize the property or font name.

         You do NOT have to worry about the number of decimal places.  (However, if you want to look up and use toFixed() you may, of course!)

You do NOT have to use any other semantic tags or div sections for your page.

**Tip #2**: Feel free to try your page in advance (i.e. without doing any memorization) to make sure it is easy for you and that you can do it. Then once you’re comfortable, do it from memory!

## Page #2 (20 points)

This will be another simple conversion page, but it is not to be done from memory.

In scuba diving, a commonly used cylinder (scuba tank) holds about 80 cubic feet of air – provided that the tank is pressurized to 3000 pounds per square inch (PSI). If, however, the tank is pressurized to, say, only half of that (1500 psi), then the tank is only holding 40 cubic feet of air.

The formula is: **Volume of Air = User’s PSI / 3000 \* 80**

You will write a page that asks the user to enter a pressure, and you will output how much air volume they have in their tank. For example, if they write 1000 psi, then they would have (1000/3000\*80) or 26.7 cubic feet. So you would simply output that number.

So you will have one text field that asks for the length. Output to a div section the volume of air that they have.

Have a heading, and some image. (It can be a picture of a calculator, a scuba tank, or whatever you want!). Use your semantic tags to organize your page into at least a header section and a main section.

Create two CSS classes. Apply one of the classes to the header section, and the second class to the main section. The class for the header section should change the color to something other than black. Feel free to do other styles if you like. The class for the main section should change have a border around it. Create the styles inside an external stylesheet.