Web Lab #13

Advanced Lab

This is a two part lab! The first part is optional and is not necessary to complete but is provided for you to try out and possibly use in your website project. The second part is mandatory and is expected to have in your website project.

Part 1: **Optional**

Position is a CSS code that allows us to dictate position elements with more control than floating. I will introduce the three ways you can position an element using position.

1. Position: absolute – positions elements absolutely or in other words forces the element to always reside at a certain X and Y coordinates relative to the first object positioned in the page. This allows you to lay elements on top of others if you chose.
2. Position: relative – positions elements relatively or in other words tells the element to always reside at a certain X and Y coordinates relative to where it would normally be if it wasn't positioned. This allows your page some flexibility in that the elements will readjust themselves to page resizing. This works fairly well but can break badly if not coded carefully.
3. Position: fixed - positions elements absolutely relative to the browser window or in other words tells the element to always reside at a certain X and Y coordinates of your browser window. This could be useful on long pages for having your navigation links always accessible on the left or right sidebar or making an annoying web advertisement.
4. With each type of positioning you will need to provide a X and Y coordinate for each element you position with absolute and fixed. Relative positioning could be a little more generic.
5. Here is example code of how to position elements each way:
    a. Div{position: absolute; top: 50px; left: -20px;} – this code says it will be placed 50px from the top of the page and 20px closer to the left of the page
    b. Div{position: relative; top: 10px; left: 15px; bottom: 10px; right:15px;} – This code says it will be 10 pixels below and above the elements above and below it and it will be 15 pixels to the right and left of the elements beside it on either side.
    c. Div{position: fixed: bottom: 30px; right: 200px;} – this code says the element will be 30 pixels up from the bottom of the browser window and 200 pixels from the right side of the browser.
6. In addition to position another bit of code to add in so called the Z-index this allows you to layer your elements so that you can control what appears on top or below other

things. To do this enter this code and choose a number greater or less the zero (Your body or background is default z-index zero(0))

   a. #ontop{z-index: 5;} – this is on layer 5 which will beat everything lower than 5
   b. #bottom{z-index: 4;} – this is on layer 4 and will go beneath layer 5 elements if they overlap

7. If you wish to attempt this try building a new HTML page and make a couple div's with some content like pictures and words and attempt to position them using each type of positioning rule. Making a decent page with 3 div's using to the various rules will net you **10 bonus marks.**
8. If you do this part of the lab validate it and submit it under Web Bonus Lab!

Part 2 – **Mandatory**

This part of the lab is compulsory. This lab will introduce the concept of making a special CSS page specific for printing purposes. Often when we print websites, we find ourselves using a lot of colour ink printing meaningless background colours and coloured links, etc. So web developers will now have a special CSS page that will style the pages similarly but without all the flashy colours and style it to fit a printer page.

So this lab will task you with creating a printer-friendly page using CSS. This means you will need to create a new CSS page called print.css and enter in your styling rules to make your page printer friendly.

Add in this code on your HTML page in the <head> section right below the code you use to link your regular CSS page.

```
<link rel="stylesheet" type="text/css" media="print" href="css/print.css" />
```

Now to check how your page is styled with this CSS, open your page on a web browser and go to file and select print preview to view your page as it would look printed.

To submit this lab you must print your webpage, sign it and hand it in to me.