# "The Web Design Workshop" Decal – Spring 2014 Programming Handout 4

#### Goals:

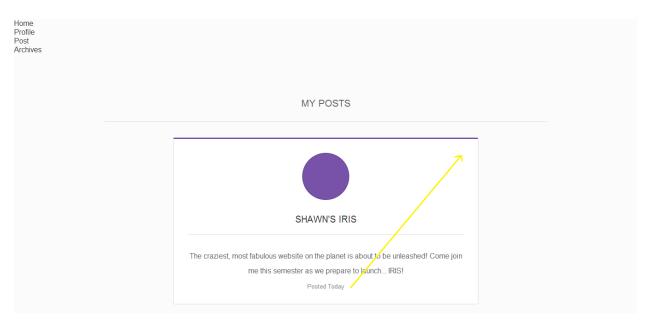
- 1. Using Position Fixed & Floats
- 2. Using Position Absolute and Relative

Before we begin, make sure you have downloaded the *handout4.zip* file. Unzip this file, and you should see 2 files inside the *handout4* folder: *positioning.html* and *styles.css* 

### 1 – Using Position Fixed & Floats

1. Open both *positioning.html* and *styles.css* in Sublime. Take a look at the *positioning.html* elements to get an understanding of the HTML structure. Then, pull up *styles.css*. We will start adding styles to *styles.css*.

If curious, you can open up *positioning.html* in your browser and you will see this:



Here's our goal: To make the top left text (Home, Profile, etc.) into a **fixed** menu. Later, we will use **position: absolute** to get our "Posted Today" date on the top-right corner of our post.

2. First, let's understand the #menu-container.

#menu-container will be the menu element that stretches across the screen, and will be fixed as we scroll down the page.

#menu will be the div inside #menu-container, that is set to 960px and is centered in the middle of the screen (we learned in design section to contain our elements in some

width, say 960px, or else our text/elements span the entire browser window.

*.menu-item* will be the individual menu items that we want horizontally, away from the left side of the browser window.

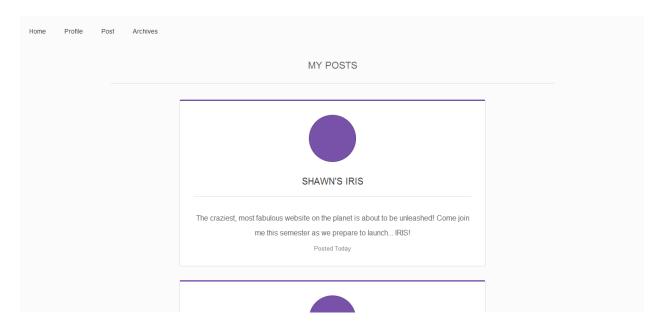
Now, let's first make our .menu-item elements next to each other, using float:

float: left;

padding: 25px 20px; font-size: 25px; cursor: pointer;

We added padding too, to space the elements from each other. We also added *cursor:* pointer, so that hovering over a .menu-item causes the mouse to transform into a pointer.

Open or refresh your *positioning.html* page in the browser. You get:

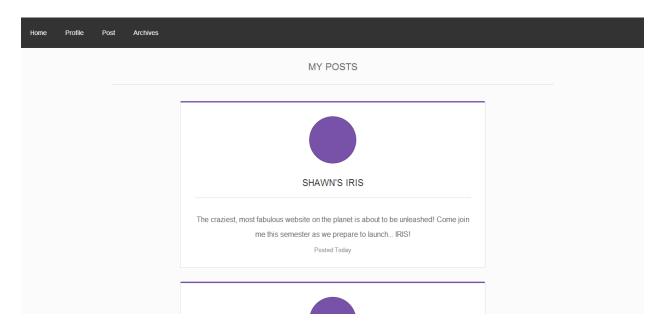


Woah! Our menu is already looking good!

3. Next, let's add a **background** to our menu that stretches the browser window. Also let's make it **position**: **fixed** and throw in a few styles. Find #menu-container, and add the following styles:

background-color: #333;

color: white; position: fixed; width: 100%;

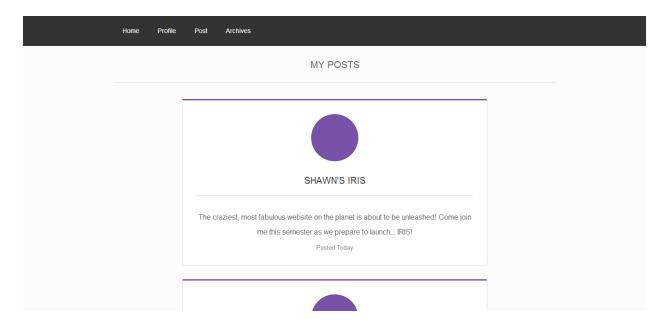


Wowza! A lot has happened. Try **scrolling** down the page, and you will notice that the menu is **fixed**!

4. What do we have so far? We have a fixed menu, stretching the entire page, and menu elements that float left to each other (and spaced away by padding).

However, we don't want the #menu-item elements to hug the left side of the browser window! We want it to hug the left side of a **centered 960px div**! Let's add the last styles to #menu:

margin-left: auto; margin-right: auto; width: 960px;



Nice! Notice how much better a menu is in a fixed width container.

For fun, you can also add a new style:

```
.menu-item:hover {
      background-color: #444;
}
```

We will talk about :hover and other CSS pseudo-classes next week. What the above style will do is if you hover over a .menu-item, the background-color will change! Cool right??

#### Extra:

- What happens if you do a *float: right* instead of a *float: left?* How could you fix the problem?
- Know that you can also make menu items using display: inline-block. This actually
  works better if you have a centered menu, as opposed to a floated left menu in
  this example.

## 2 – Using Position Absolute and Relative

1. Next, we want to **move** our "Posted Today" date (and the other "Posted ..." dates for the other posts) on the top-right corner of the post. What things should we do?

First, let's find the first .post element. Notice that it contains the .date element with "Posted Today" as the content.

If we want to shift .date to the top-right of the box, we could first make .post a **position**: **relative**, and make .date a **position**: **absolute**. If we don't do this, .date will not move relative to .post if you use top, left, right or bottom!

```
.post {
    position: relative;
}
.date {
    position: absolute;
}
```

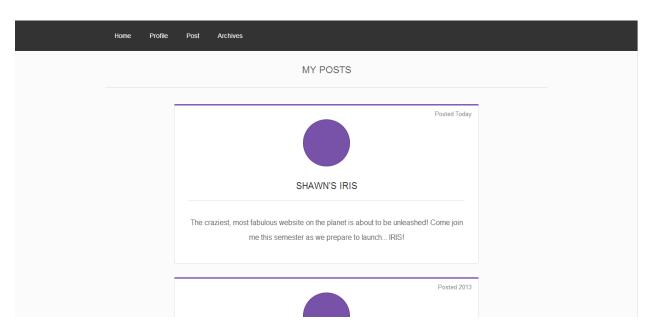
But we're not done!

You made .date position: absolute, but where (relative to .post) do you want .date to be?

Let's also add top and right values to .date!

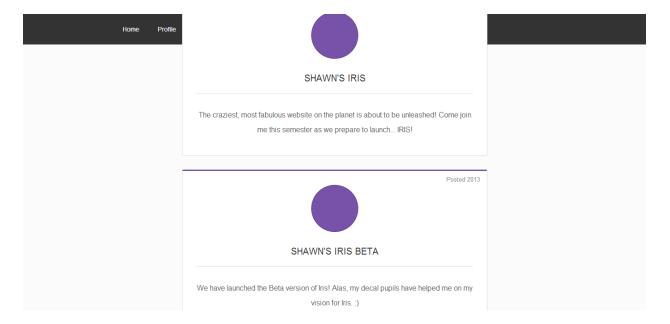
```
.post {
    position: relative;
}
.date {
    position: absolute;
    top: 10px;
    right: 15px;
}
```

Our product?



Awesome. We have a date on the top-right corner of our post!

### 2. Hmm. We seem done! ... Or are we?



Scroll down the page and you get the above image.

What did we do... wrong?

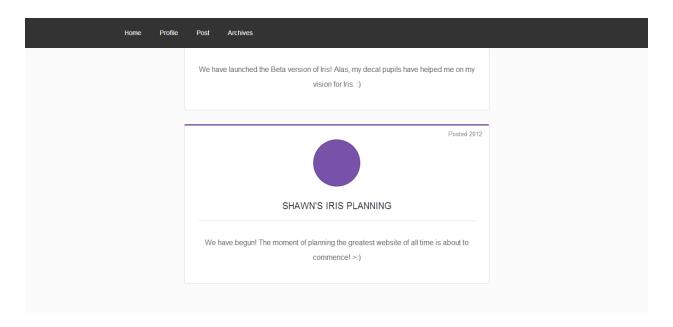
Well, nothing really. This is a common problem when you have lots of **position: absolute, position: relative** and **position: fixed** elements on the page.

Elements compete over layers. Say you have two **position: absolute** elements. You create the first one, and then you create a second one in the same spot as the first. The second element will show instead of the first. This is because elements are created in an order, and the newest **absolute/relative/fixed** element will be given a higher layer, or in terms of CSS: a higher **z-index**.

This gets crazier when you may have dozens of these elements on your page. To assure that **our** menu is over *all* of the **absolute/relative/other fixed** elements on the page, set #menu-container's **z-index** to a high value, such as 999999;

z-index: 999999;

Now try scrolling again!



## Aha! We fixed it! ©

Keep in mind, *z-index* only applies to **position: relative, position: absolute** and **position: fixed** elements.

## Congratulations! Let's review what we learned:

- We learned to float elements with float: left
- We learned how to make a horizontal menu, in a fixed width div
- We learned how to make use of *position: absolute* and *position: relative*
- We learned to use *z-index*