

## Tutorial 6

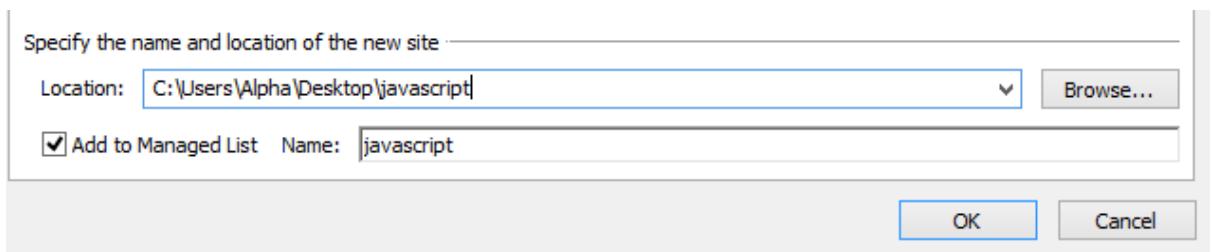
### Activities

- Code
  - Editor: Expression Web
  - Focus : Base Layout, navigation with folders, external stylesheets, javascript

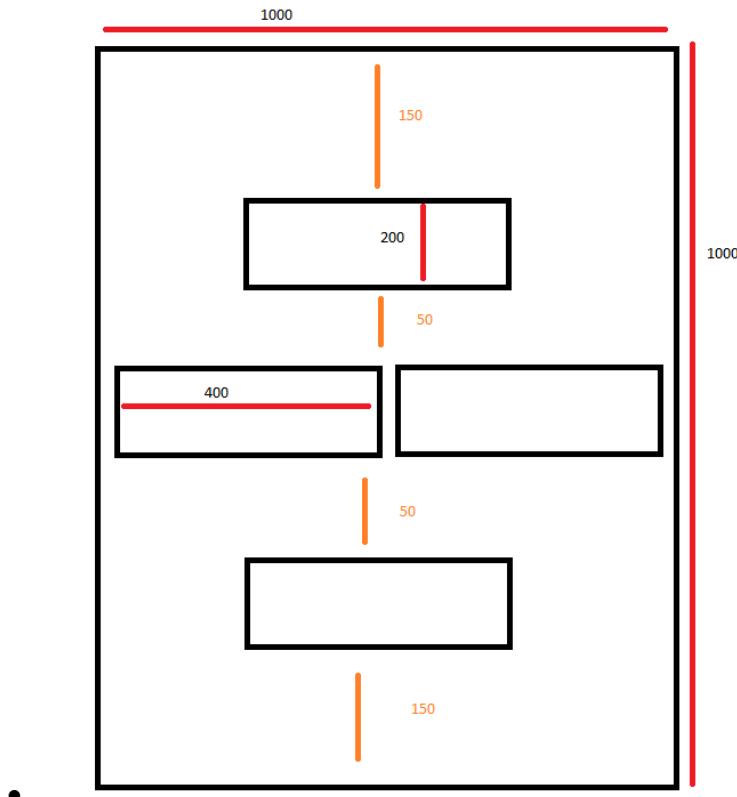
### Javascript

Responsive web pages are pages that adapt to the screen resolution, so one page being written that can be viewed in differing devices with differing resolutions.

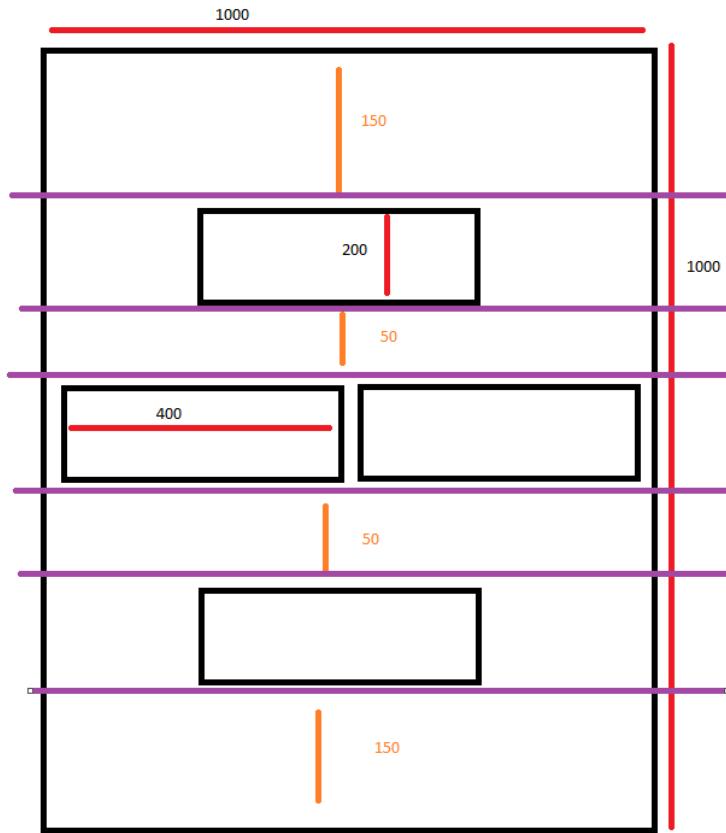
So start a new web site



- 
- Rename to index.html
- We're going to make a couple of different structures for today's site, First off the index page



- Before you move on and see what the code is, attempt the design your self.
  - First thing you want to do is determine the rows
  - Second is the columns
- Once that is done you have the boxes for your skeleton.
- Here's the breakdown of the picture



- So we have 7 rows and 2 columns
- So, let's build the skeleton first
- As always work from outside to inside, and top to bottom

```

7 <body>
8   <div id="dPage">
9     <div id="dSpace"></div><!-- eo dSpace -->
10    <div id="dTopNav"></div><!-- eo dTopNav -->
11    <div id="midSpace"></div><!-- eo midSpace -->
12    <div id="dMidNav"></div><!-- eo dMidNav -->
13    <div id="midSpace"></div><!-- eo midSpace -->
14    <div id="dBottomNav"></div><!-- eodBottomNav -->
15    <div id="dSpace"></div><!-- eo dSpace -->
16  </div><!-- eo dPage -->
17 </body>
18

```

- From here, add the missing divs.

```

7 <body>
8   <div id="dPage">
9     <div id="dSpace"></div><!-- eo dSpace -->
10    <div id="dTopNav">
11      <div id="tNav"></div><!-- eo tNav -->
12    </div><!-- eo dTopNav -->
13    <div id="midSpace"></div><!-- eo midSpace -->
14    <div id="dMidNav">
15      <div id="dLeftNav"></div><!-- eo dLeftNav -->
16      <div id="dRightNav"></div><!-- eo dRightNav -->
17    </div><!-- eo dMidNav -->
18    <div id="midSpace"></div><!-- eo midSpace -->
19    <div id="dBottomNav">
20      <div id="bNav"></div><!-- eo bNav -->
21    </div><!-- eodBottomNav -->
22    <div id="dSpace"></div><!-- eo dSpace -->
23  </div><!-- eo dPage -->
24 </body>

```

- Now it is time to style these all up

- Work from outside to inside

- ```

<style type="text/css">
    #dPage {width:1000px; height:1000px; background-color:lime; margin:0 auto;}
</style>

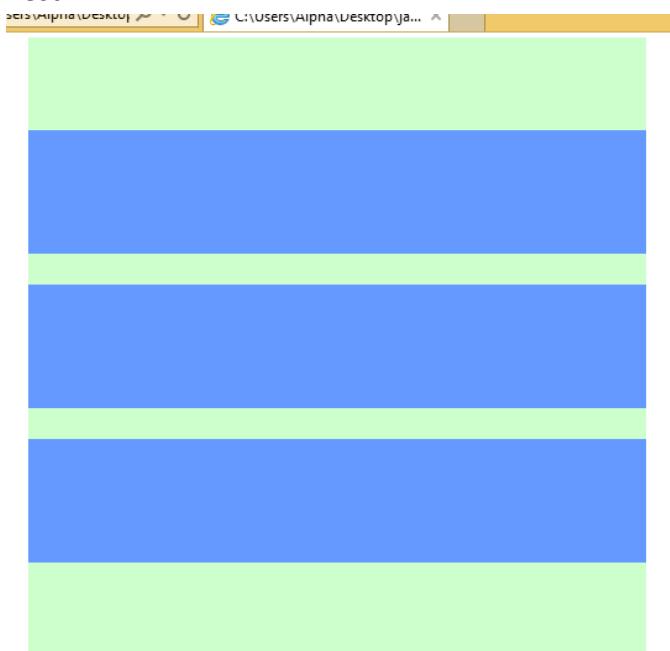
```
- Test, this is the green box we want to see
- Now for the rows

```

4 <head>
5     <style type="text/css">
6         #dPage {width:1000px; height:1000px; background-color:lime; margin:0 auto;}
7         #dSpace{width:1000px; height:150px; background-color:#CCFFCC;}
8         #dTopNav{width:1000px; height:200px; background-color:#6699FF;}
9         #midSpace{width:1000px; height:50px; background-color:#CCFFCC;}
10        #dMidNav{width:1000px; height:200px; background-color:#6699FF;}
11        #dBottomNav{width:1000px; height:200px; background-color:#6699FF;}
12     </style>
13 </head>

```

- Test



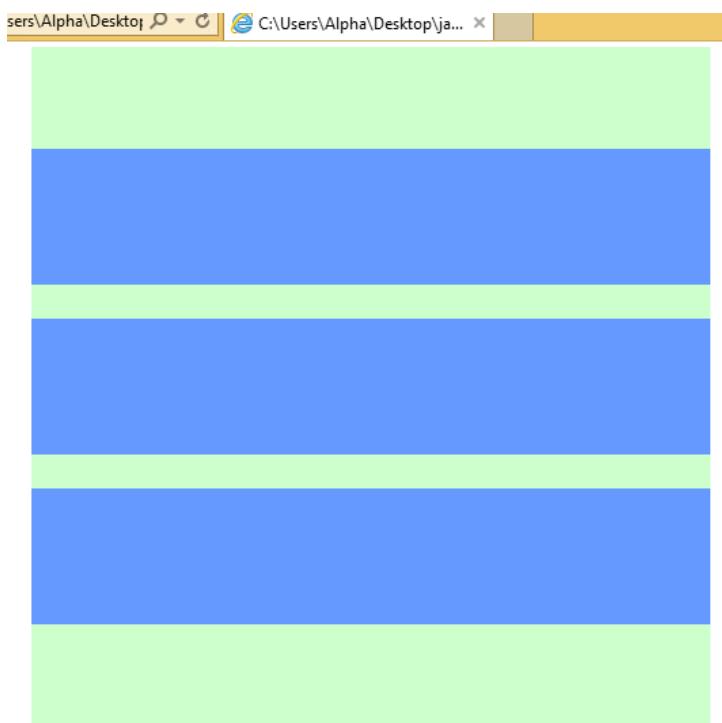
- Once this is done, stop and re-examine the code. Notice how topNav, MidNav and BottomNav are essentially the same, so clean up the code. Change them to dNav in the styles and the skeleton.

```

5
4 <head>
5   <style type="text/css">
6     #dPage {width:1000px; height:1000px; background-color:lime; margin:0 auto;}
7     #dSpace{width:1000px; height:150px; background-color:#CCFFCC;}
8     #dNav{width:1000px; height:200px; background-color:#6699FF;}
9     #midSpace{width:1000px; height:50px; background-color:#CCFFCC;}
10    </style>
11 </head>
12
13 <body>
14   <div id="dPage">
15     <div id="dSpace"></div><!-- eo dSpace -->
16     <div id="dNav">
17       <div id="tNav"></div><!-- eo tNav -->
18     </div><!-- eo dTopNav -->
19     <div id="midSpace"></div><!-- eo midSpace -->
20     <div id="dNav">
21       <div id="dLeftNav"></div><!-- eo dLeftNav -->
22       <div id="dRightNav"></div><!-- eo dRightNav -->
23     </div><!-- eo dMidNav -->
24     <div id="midSpace"></div><!-- eo midSpace -->
25     <div id="dNav">
26       <div id="bNav"></div><!-- eo bNav -->
27     </div><!-- eo dBottomNav -->
28     <div id="dSpace"></div><!-- eo dSpace -->
29   </div><!-- eo dPage -->
30 </body>
31

```

- Save and test

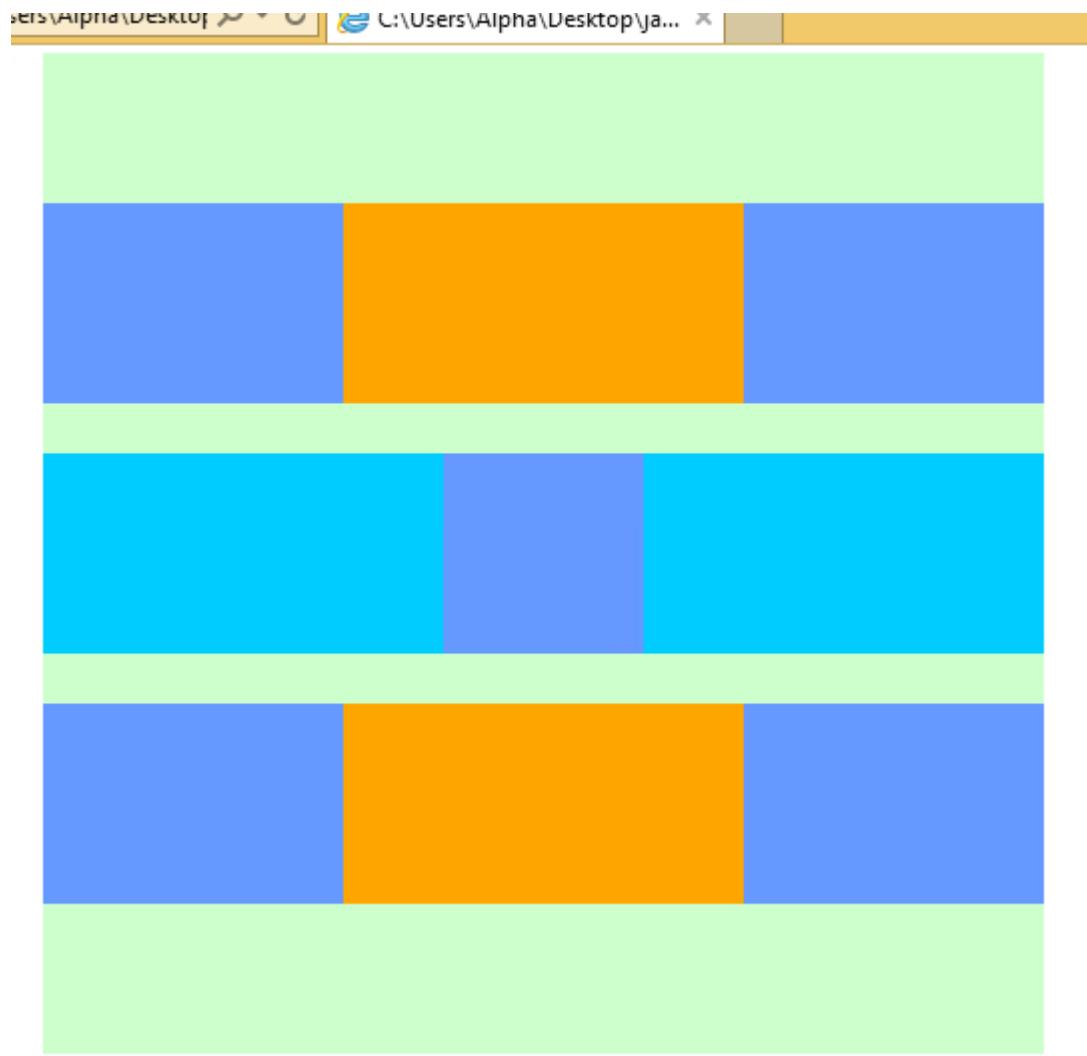


- Now add the missing div styles

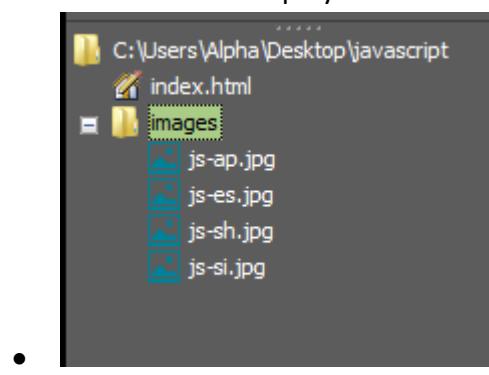
```

4 <head>
5   <style type="text/css">
6     #dPage {width:1000px; height:1000px; background-color:lime; margin:0 auto;}
7     #dSpace{width:1000px; height:150px; background-color:#CCFFCC;}
8     #dNav{width:1000px; height:200px; background-color:#6699FF;}
9     #midSpace{width:1000px; height:50px; background-color:#CCFFCC;}
10    #tNav{width:400px; height:200px; background-color:orange; margin:0 auto;}
11    #dLeftNav{width:400px; height:200px; background-color:#00CCFF; float:left;}
12    #dRightNav{width:400px; height:200px; background-color:#00CCFF; float:right;}
13    #bNav{width:400px; height:200px; background-color:orange; margin:0 auto;}
14   </style>
15 </head>

```



- Now jump into photoshop, create 4 images, 400x200 with the following:
  - JS – Show/Hide
  - JS – Expand/Shrink
  - JS – Swap Images
  - JS – Auto play



- Now put one image in each of the nav boxes

```

1 <body>
2   <div id="dPage">
3     <div id="dSpace"></div><!-- eo dSpace -->
4     <div id="dNav">
5       <div id="tNav"></div><!-- eo tNav -->
6     </div><!-- eo dTopNav -->
7     <div id="midSpace"></div><!-- eo midSpace -->
8     <div id="dNav">
9       <div id="dLeftNav"></div><!-- eo dLeftNav -->
10      <div id="dRightNav"></div><!-- eo dRightNav -->
11    </div><!-- eo dMidNav -->
12    <div id="midSpace"></div><!-- eo midSpace -->
13    <div id="dNav">
14      <div id="bNav"></div><!-- eo bNav -->
15    </div><!-- eodBottomNav -->
16  </div><!-- eo dSpace -->
17 </div><!-- eo dPage -->
18
19 </body>

```

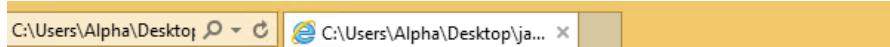
- Then clean up the code for the design

```

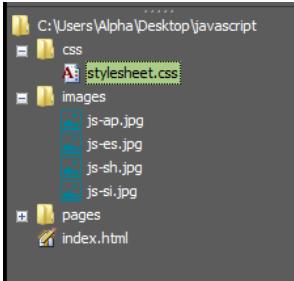
4 <head>
5   <style type="text/css">
6     #dPage {width:1000px; height:1000px; margin:0 auto;}
7     #dSpace{width:1000px; height:150px;}
8     #dNav{width:1000px; height:200px;}
9     #midSpace{width:1000px; height:50px;}
10    #tNav{width:400px; height:200px; margin:0 auto;}
11    #dLeftNav{width:400px; height:200px; float:left;}
12    #dRightNav{width:400px; height:200px; float:right;}
13    #bNav{width:400px; height:200px; margin:0 auto;}
14  </style>
15 </head>

```

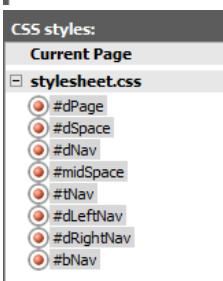
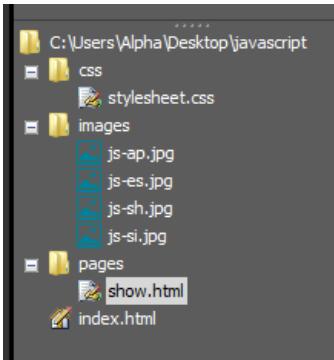
- You should have something like this



- Now from here create a sub folder called pages and css
- Create an external css file called stylesheet.css , link and move the styles from the index page to the stylesheet

- 
- ```

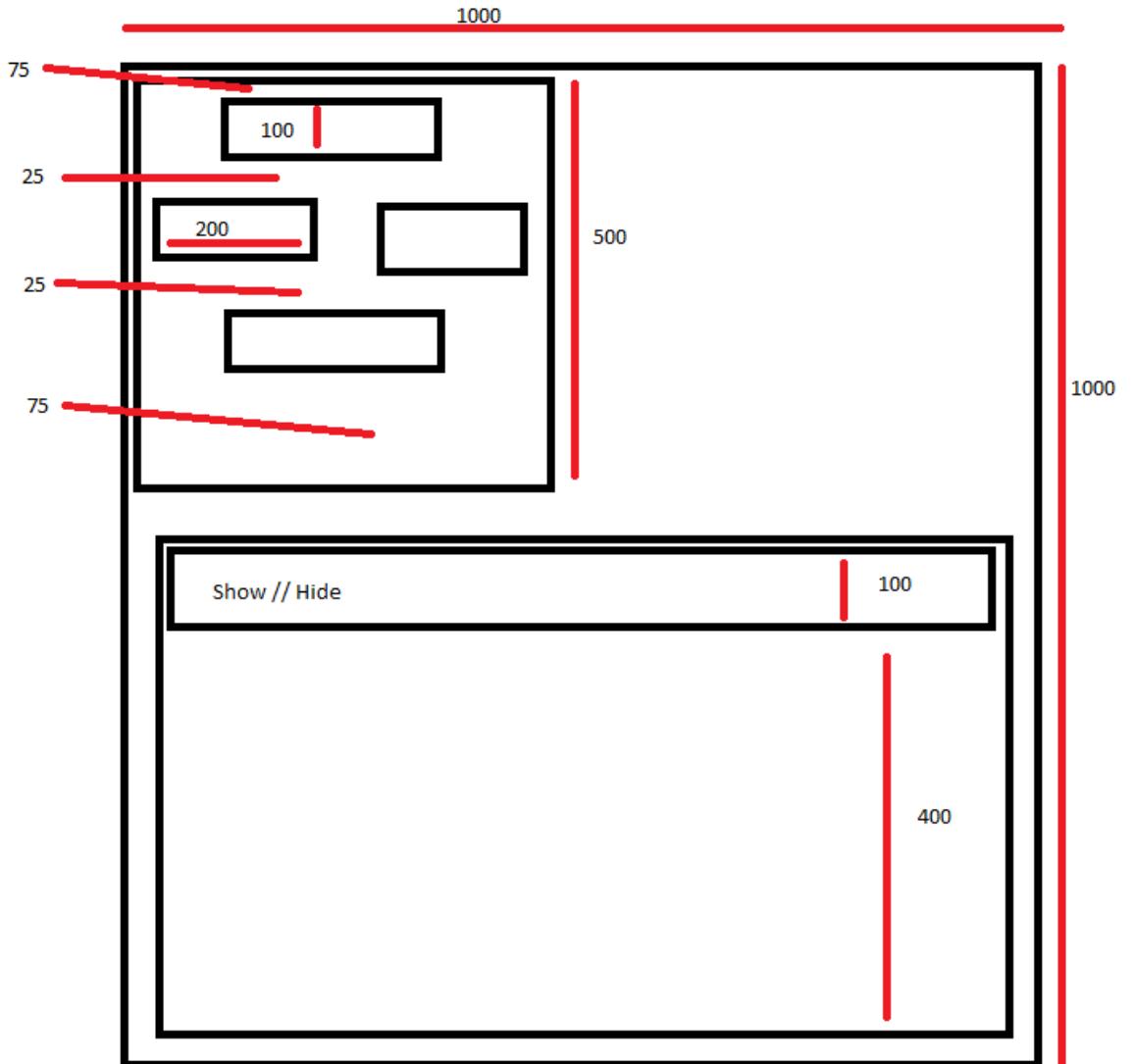
<head>
  <style type="text/css">
    </style>
  <link href="css/stylesheet.css" rel="stylesheet" type="text/css">
</head>

```
- 
- From here create a new page called show in the pages folder and then link in the stylesheet and begin the skeleton
  - 
  - ```

1 <!DOCTYPE html>
2 <html>
3
4 <head>
5 <title>Untitled 1</title>
6
7 <link href="../css/stylesheet.css" rel="stylesheet" type="text/css">
8
9 </head>
0
1 <body>
2   <div id="dPage">
3     </div><!-- eo dPage -->
4 </body>
5
6 </html>
7

```

- From here we go with a new design, incorporating our menu system from the index page



- Start by splitting the page and then work on filling out the divs for each section

```

11 <body>
12   <div id="dPage">
13     <div id="dTop"></div><!-- eo dTop -->
14     <div id="dBottom"></div><!-- eo dBottom -->
15   </div><!-- eo dPage -->
16 </body>
17

```

- So this is the nav layout

```

10
11 <body>
12   <div id="dPage">
13     <div id="dTop">
14       <div id="menu">
15         <div id="mSpace"></div><!-- eo mSpace -->
16         <div id="mNav">
17           <div id="mImage"></div><!-- eo mImage -->
18         </div><!-- eo mNav -->
19         <div id="mGap"></div><!-- eo mGap -->
20         <div id="mNav">
21           <div id="mImage"></div><!-- eo mImage -->
22           <div id="mImage"></div><!-- eo mImage -->
23         </div><!-- eo mNav -->
24         <div id="mGap"></div><!-- eo mGap -->
25         <div id="mNav">
26           <div id="mImage"></div><!-- eo mImage -->
27         </div><!-- eo mNav -->
28         <div id="mSpace"></div><!-- eo mSpace -->
29       </div><!-- eo menu -->
30     </div><!-- eo dTop -->
31     <div id="dBottom"></div><!-- eo dBottom -->
32   </div><!-- eo dPage -->
33 </body>

```

- Notice that the naming of the divs are becoming quite similar, this is because I will apply inline styles on a couple to make them position correctly.
- Now style them up.

```

<!--cau<
<title>Javascript Hide / Show</title>
<style type="text/css">
  #menu{width:500px; height:500px; float:left; background-color:lime;}
  #mSpace{width:500px; height:75px; background-color:aqua;}
  #mNav{width:500px; height:100px; background-color:#006699;}
  #mGap{width:500px; height:25px; background-color:#FF66FF;}

</style>
<link href="..../css/stylesheet.css" rel="stylesheet" type="text/css">

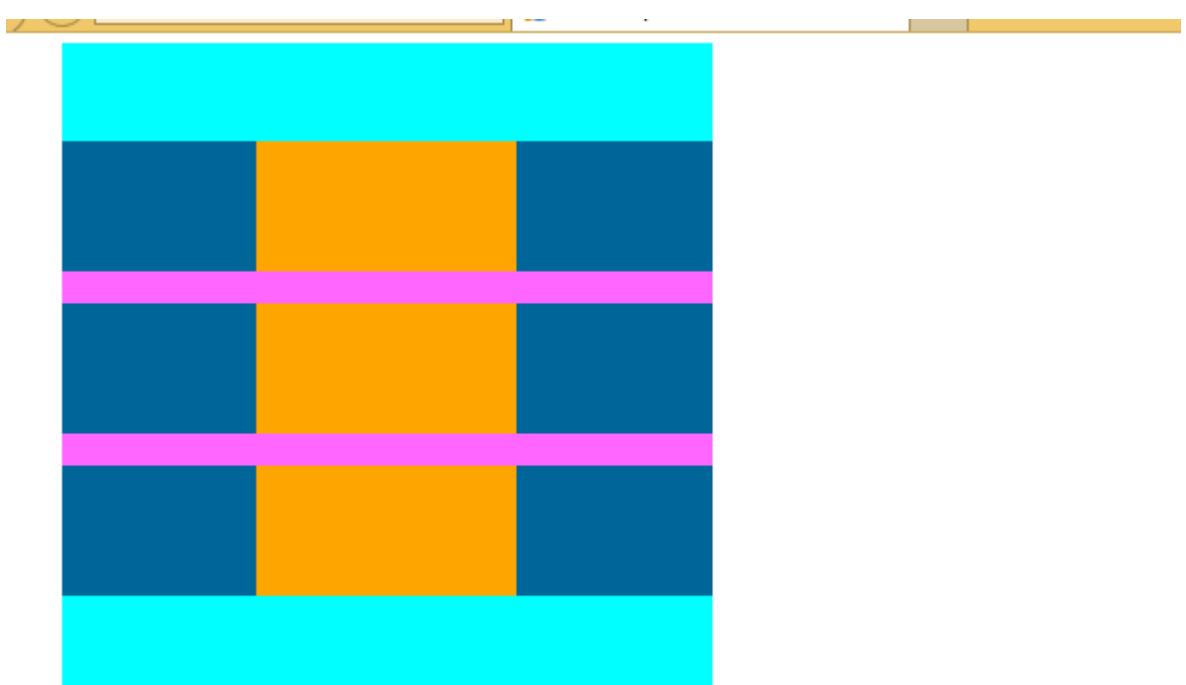
```

- Gives



- Next we put in the mImage tag

```
<style type="text/css">
    #menu{width:500px; height:500px; float:left; background-color:lime;}
    #mSpace{width:500px; height:75px; background-color:aqua;}
    #mNav{width:500px; height:100px; background-color:#006699;}
    #mGap{width:500px; height:25px; background-color:#FF66FF;}
    #mImage{width:200px; height:100px; background-color:orange; margin:0 auto;}
```



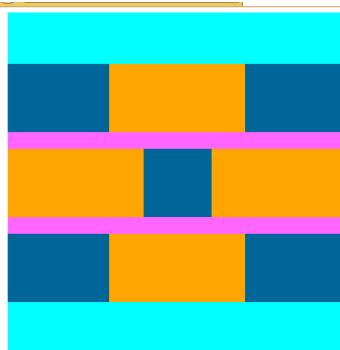
- The middle has both mImage tags over writing each other, so now we look at apply an inline style on them to position them in the correct position.

```

<div id="dPage">
  <div id="dTop">
    <div id="menu">
      <div id="mSpace"></div><!-- eo mSpace -->
      <div id="mNav">
        <div id="mImage"></div><!-- eo mImage -->
      </div><!-- eo mNav -->
      <div id="mGap"></div><!-- eo mGap -->
      <div id="mNav">
        <div id="mImage" style="float:left;"></div><!-- eo mImage -->
        <div id="mImage" style="float:right"></div><!-- eo mImage -->
      </div><!-- eo mNav -->
      <div id="mGap"></div><!-- eo mGap -->
      <div id="mNav">
        <div id="mImage"></div><!-- eo mImage -->
      </div><!-- eo mNav -->
      <div id="mSpace"></div><!-- eo mSpace -->
    </div><!-- eo menu -->
  </div><!-- eo dTop -->
  <div id="dBottom"></div><!-- eo dBottom -->
</div><!-- eo dPage -->

```

- Save and Test



- Now place the images we made earlier in the same locations and clean up the css to give a better looking menu system. Don't forget to apply a class to the images to halve their dimensions

```

18 <body>
19   <div id="dPage">
20     <div id="dTop">
21       <div id="menu">
22         <div id="mSpace"></div><!-- eo mSpace -->
23         <div id="mNav">
24           <div id="mImage"></div><!-- eo mImage -->
25           </div><!-- eo mNav -->
26           <div id="mGap"></div><!-- eo mGap -->
27           <div id="mNav">
28             <div id="mImage" style="float:left;"></div><!-- eo mImage -->
29             <div id="mImage" style="float:right"></div><!-- eo mImage -->
30             </div><!-- eo mNav -->
31             <div id="mGap"></div><!-- eo mGap -->
32             <div id="mNav">
33               <div id="mImage"></div><!-- eo mImage -->
34               </div><!-- eo mNav -->
35               <div id="mSpace"></div><!-- eo mSpace -->
36             </div><!-- eo menu -->
37             </div><!-- eo dTop -->
38             <div id="dBottom"></div><!-- eo dBottom -->
39           </div><!-- eo dPage -->
40 </body>
41

```

```

<style type="text/css">
    #menu{width:500px; height:500px; float:left;}
    #mSpace{width:500px; height:75px;}
    #mNav{width:500px; height:100px;}
    #mGap{width:500px; height:25px;}
    #mImage{width:200px; height:100px; margin:0 auto;}
        .mNavImageSize{width:200px;}
</style>

```

- Produces



JS show/hide

JS - Search/Print

JS - Stop Images

JS - Autoplay

- Now that the layout is what we want, move the styles into the stylesheet, and we focus on the bottom half now.

```

</div><!-- eo dTop -->
<div id="dBottom">
    <div id="dBNav"></div><!-- eo dBNav -->
    <div id="dBContent"></div><!-- eo dBContent-->
</div><!-- eo dBottom -->
</div><!-- eo dPage -->

```

- ~~odv~~

- Style this up and check it

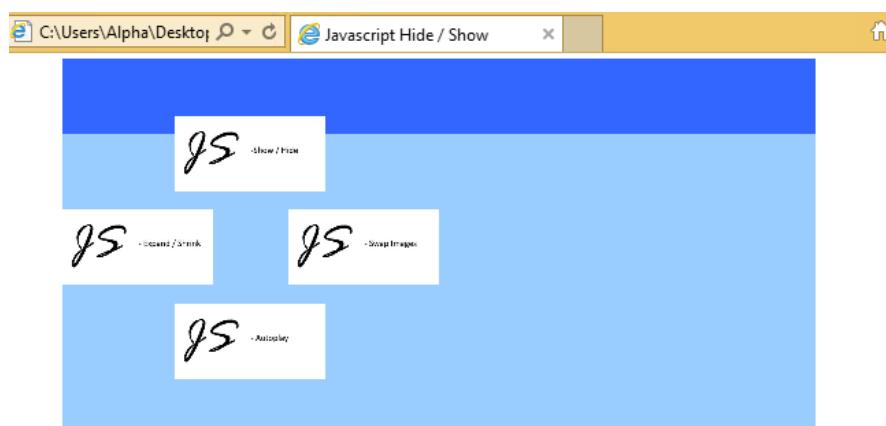
```

<title>Javascript Hide / Show</title>
<style type="text/css">
    #dBNav{ width:1000px; height:100px; background-color:#3366FF; color:white; }
    #dBContent{ width:1000px; height:400px; background-color:#99CCFF; }
</style>

```

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

- Produces



-

- Not what we want, the problem is the divs have gotten confused over where things float, so to fix that we add the following div to the page

```

30      </div><!-- eo mNav -->
31      <div id="mSpace"></div><!-- eo mSpace -->
32      </div><!-- eo menu -->
33      </div><!-- eo dTop -->
34      <div style="clear:both;"></div>
35      <div id="dBottom">
36          <div id="dNav"></div><!-- eo dNav -->
37          <div id="dContent"></div><!-- eo dContent-->
38      </div><!-- eo dBottom -->
39  </div><!-- eo dPage -->
40 </body>

```

- Save and Test



JS

JS

JS



- Now, let's put a div tag with some lorem ipsum in the bottom div box

```


<div id="dBottom">
        <div id="dNav"></div><!-- eo dNav -->
        <div id="dContent">
            <div id="text">
                ipsum dolor sit amet, consectetur adipiscing
                end varius. In sit amet augue sed orci varius
                m eget felis in mi tempus congue quis accumsan
                quam, placerat non nulla facilisis, faucibus
                raesent interdum nunc in lorem tristique, nor
            </div><!-- eo text -->
        </div><!-- eo dContent-->
    </div><!-- eo dBottom -->
    ...


```

- From here we create a couple of links in the nav section and add the onclick command to it.
- onClick indicates to the browser that there is some javascript that will be applied when the link is click.

```

<div id="dNav">
    <a href="#" onclick="showText()">Show Text</a><a href="#" onclick="hideText()">Hide Text</a>
</div><!-- eo dNav -->

```

- Apply a style so you can see the links and test

```

<style type="text/css">
    #dBNavy { width:1000px; height:100px; background-color:#3366FF; color:white; }
    #dBContent { width:1000px; height:400px; background-color:#99CCFF; }
    #dBNavy a {padding-left:100px; font-size:50px; text-decoration:none; color:white; }
    #dBNavy a:hover{color:#FFCC66; }
</style>

```

- Save and test, if prompted (depending on browser) allow the javascript to run.
- You should see



JS - Expand / Shrink      JS - Swap Images

JS - Autoplay



- Now that we have that, it's time for some javascript.
- In the header section of our code, type the following

```

12 <link href="../css/stylesheets.css" rel="stylesheet" type="text/css">
13
14 <script type="text/javascript">
15 |
16 </script>
17 </head>

```

- In between the <script> tags, this is where we create functions for the javascript. A function is a small modular piece of code that can be called multiple times. We've already selected the names for our code, showText() and hideText().
- Let's write a function, hideText()

```

14 <script type="text/javascript">
15     function hideText()
16     {
17         document.getElementById("text").style.visibility = "hidden";
18     }
19 </script>
20 </head>

```
- Now save and view it. Click on the hide text link, you should see the following



- The text is no longer visible, now we write the function to bring it back, `showText()`

```
14 <script type="text/javascript">
15     function hideText()
16     {
17         document.getElementById("text").style.visibility = "hidden";
18     }
19     function showText()
20     {
21         document.getElementById("text").style.visibility = "visible";
22     }
23 </script>
24 </head>
```

- Save and test
- With the text appearing and disappearing, we'd best make the remainder pages for the site and link up the navigation.
- Create the following links

```

29         <div id="menu">
30             <div id="mSpace"></div><!-- eo mSpace -->
31             <div id="mNav">
32                 <div id="mImage"><a href="show.html"></a></div><!-- eo mImage -->
33             </div><!-- eo mNav -->
34             <div id="mGap"></div><!-- eo mGap -->
35             <div id="mNav">
36                 <div id="mImage" style="float:left;"><a href="expand.html"></a></div><!-- eo mImage -->
37                 <div id="mImage" style="float:right;"><a href="swap.html"></a></div><!-- eo mImage -->
38             </div><!-- eo mNav -->
39             <div id="mGap"></div><!-- eo mGap -->
40             <div id="mNav">
41                 <div id="mImage"><a href="auto.html"></a></div><!-- eo mImage -->
42             </div><!-- eo mNav -->
43             <div id="mSpace"></div><!-- eo mSpace -->
44         </div><!-- eo menu -->
45     </div><!-- eo dTop -->

```

- Don't forget to re-write the links on the index page.

```

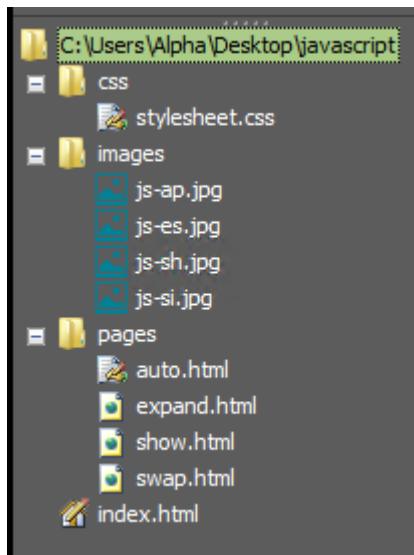
0 <body>
1     <div id="dPage">
2         <div id="dSpace"></div><!-- eo dSpace -->
3         <div id="dNav">
4             <div id="tNav"><a href="pages/show.html"></a>
5             </div><!-- eo tNav -->
6             <div id="midSpace"></div><!-- eo midSpace -->
7             <div id="dNav">
8                 <div id="dLeftNav"><a href="pages/expand.html"></a></div><!-- eo dLeftNav -->
9                 <div id="dRightNav"><a href="pages/swap.html"></a>
0             </div><!-- eo dRightNav -->
1             <div id="dMidNav"></div><!-- eo dMidNav -->
2             <div id="dNav">
3                 <div id="bNav"><a href="pages/auto.html"></a></div>
4             </div><!-- eo bNav -->
5             <div id="dSpace"></div><!-- eo dSpace -->
6         </div><!-- eo dPage -->
7     </body>

```

- Once you have done all this, create the pages

- Auto.html
- Expand.html
- Swap.html

- These files should all be in the pages folder and have the same structure as the show page we just built.
- You should have the following



- Once this is done, go and bing a decent background image and save it in the images folder. We're going to mod the dbcontent using javascript.

- Apply the image to the style for the content

```

<style type="text/css">
  #dBNav{ width:1000px; height:100px; background-color:#3366FF; color:white; }
  #dBContent{ width:1000px; height:400px; background-image:url('../images/bwall.jpg'); background-size:cover; }
  #dBNav a {padding-left:10px; font-size:50px; text-decoration:none; color:white; }
  #dBNav a:hover{color:#FFCC66; }
</style>

```

- Add a couple of extra Nav links

```

<div id="dBottom">
  <div id="dBNav">
    <a href="#" onclick="showText()">Show Text</a>
    <a href="#" onclick="hideText()">Hide Text</a>
    <a href="#" onclick="showIm()">Show Image</a>
    <a href="#" onclick="hideIm()">Hide Image</a>
  </div><!-- eo dBNav -->
  <div id="dBContent">

```

- Depending on your screen size you might have to change the link size in the style

```

  #dBContent{ width:1000px; height:400px; background-image:url('../images/bwall.jpg'); }
  #dBNav a {padding-left:50px; font-size:40px; text-decoration:none; color:white; }
  #dBNav a:hover{color:#FFCC66; }
</style>

```

- Now write the following javascript

```

13 <script type="text/javascript">
14   function hideText()
15   {
16     document.getElementById("text").style.visibility = "hidden";
17   }
18   function showText()
19   {
20     document.getElementById("text").style.visibility = "visible";
21   }
22   function hideIm()
23   {
24     document.getElementById("dBContent").style.backgroundImage = "url('')";
25   }
26   function showIm()
27   {
28     document.getElementById("dBContent").style.backgroundImage = "url('../images/bwall.jpg')";
29   }
30
31
32 </script>
33

```

- Save and Test

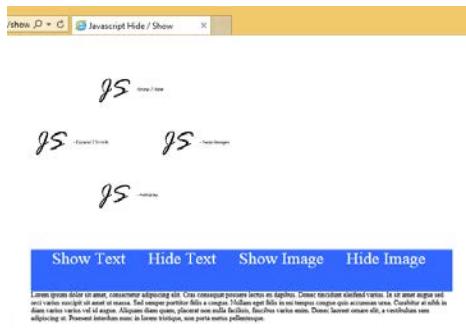
JS Show Text

JS - Home / Back

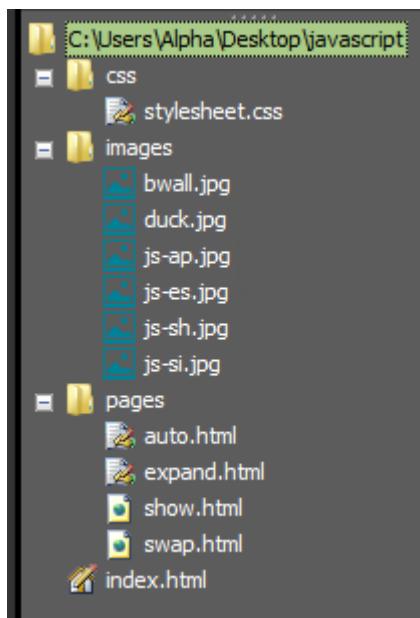
JS - Add Image

JS - Autoplay





- 
- So, as you can see, images and text can be hidden using simple javascript commands.
- Now, let's move onto the expand and shrink image
- Get a new image from bing



- So, on the expand.html page add the following

```
</ul><!-- eo dBContent -->
<div id="dBContent">
  
</div><!-- eo dBContent-->

```

- Add the following style

```
#dBContent a:Hover{color:;
#duck{width:20%;}
```

- style>
- Save and test

JS 

JS 

JS 

JS 



- Now, we are going to add a mouseover effect to the image.
- Write the following function

```
5 <script type="text/javascript">
6     function expandImage()
7     {
8         document.getElementById("duck").style.width="50%";
9     }
0 </script>
1 </head>
```

- Save and test by running the mouse over the duck, it should grow, now when you remove the mouse, the image stays the same , so we have to write the reverse version

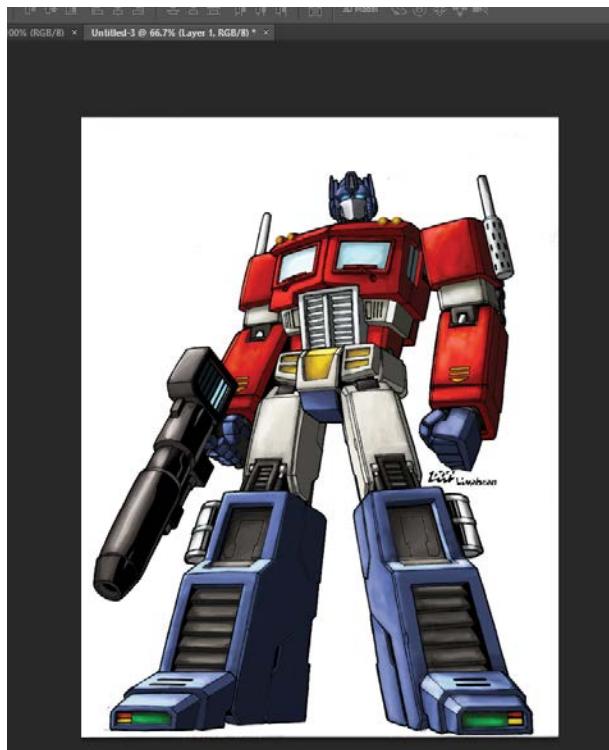
```
5 <script type="text/javascript">
5     function expandImage()
7     {
8         document.getElementById("duck").style.width="50%";
9     }
0     function shrinkImage()
1     {
2         document.getElementById("duck").style.width="20%";
3     }
4 </script>
"
```

- And then apply that to the html code

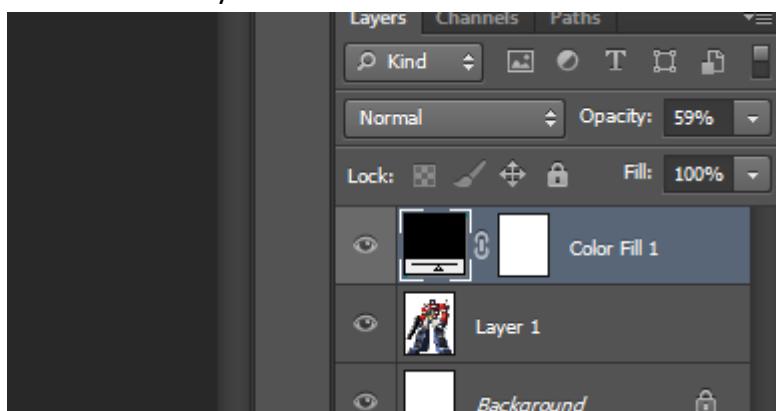
```
51         </div><!-- eo dBNav -->
52         <div id="dBContent">
53             <!-- eo dBContent-->
55         ...
```

- Save and test
- You should have the ability to have the image grow and shrink with the mouse being either on or off it.

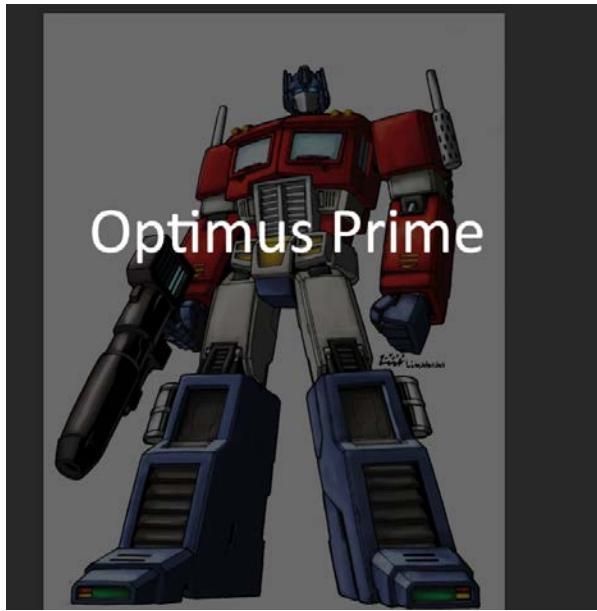
- Now we move to the swap images page.
- So go grab a new image from bing and load it into photoshop



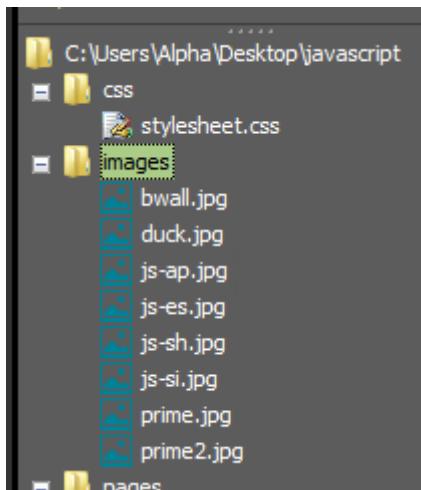
- Save a copy of this in your images folder as well.
- Now add a fill layer



- Then add some white text over the image above the Fill

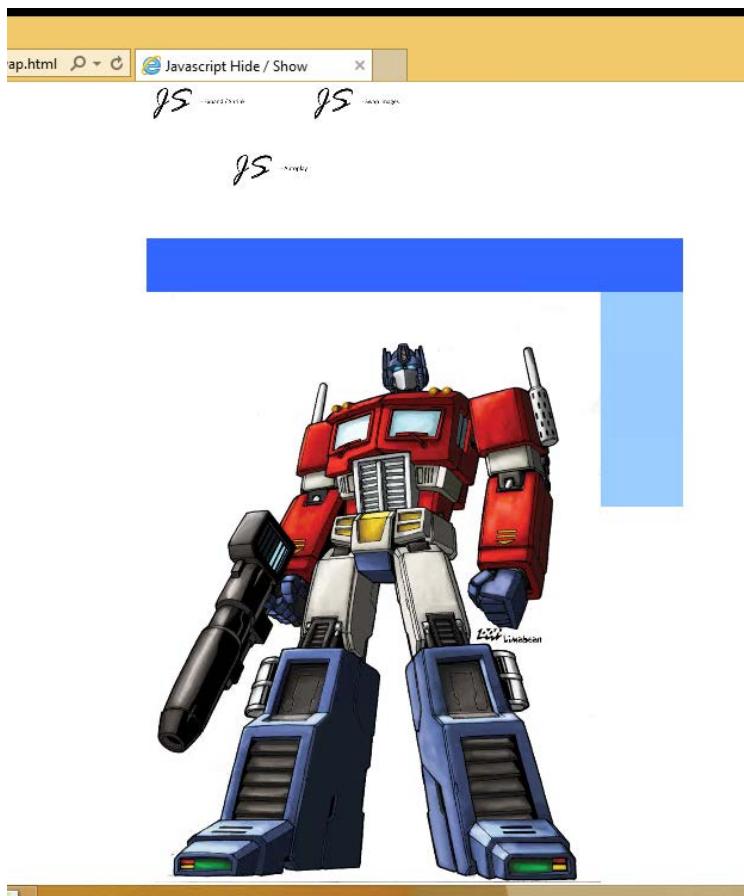


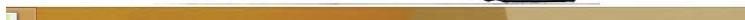
- 
- 
- Save this new version into your images folder



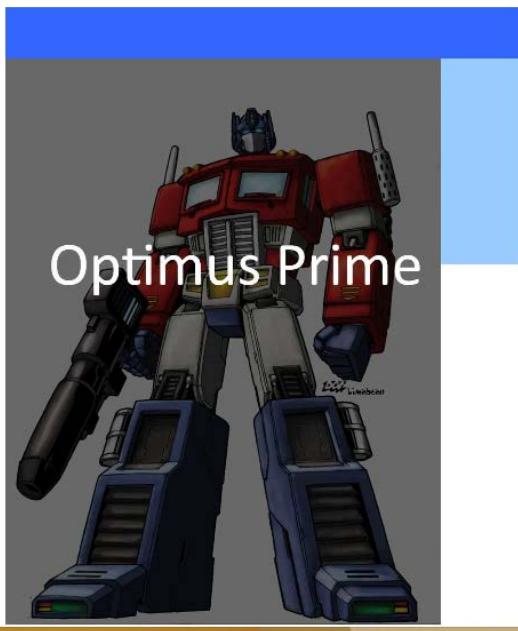
- From here let's write in the following code
- 
- Save and test it.
- You should see the following

```
41      </div><!-- eo dBNAV -->
42      <div id="dBContent">
43          
45      </div><!-- eo dBContent-->
46      </div><!-- eo dBBottom -->
```

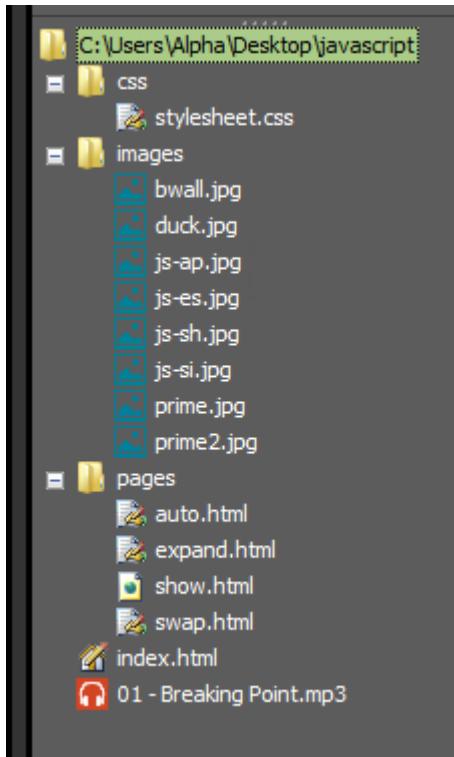


- 
- And with the mouse over



- 
- Using this technique, you can easily make roll over images for navigation.

- Now onto the auto play page, grab the mp3 from the previous tutorial and copy it into the folder system



- Go to the auto play and add the following code

```

</div><!-- eo dBNav -->
<div id="dBContent">
    <audio src="../01 - Breaking Point.mp3" id="adc" controls="controls" onmouseover="autop()" |></audio>
</div><!-- eo dBContent-->

```

- Add the following javascript

```

15 <script type="text/javascript">
16     function autop()
17     {
18         var audioElement = document.createElement('audio');
19         audioElement.setAttribute('src', '../01 - Breaking Point.mp3');
20         audioElement.play();
21     }
22

```

- Save and test
- When you put the mouse over the controls, it should start to play without the end user clicking anything. Of course this does leave the issue of stopping the music.
- This is a prime example of just because you can, doesn't mean you should do it.
- Now go create inverse menu images and create a rollover effect for all menu systems.