

Tutorial 6

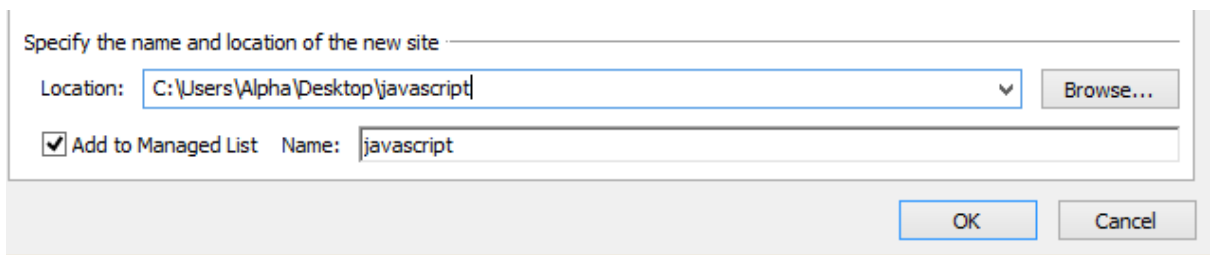
Activities

- 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



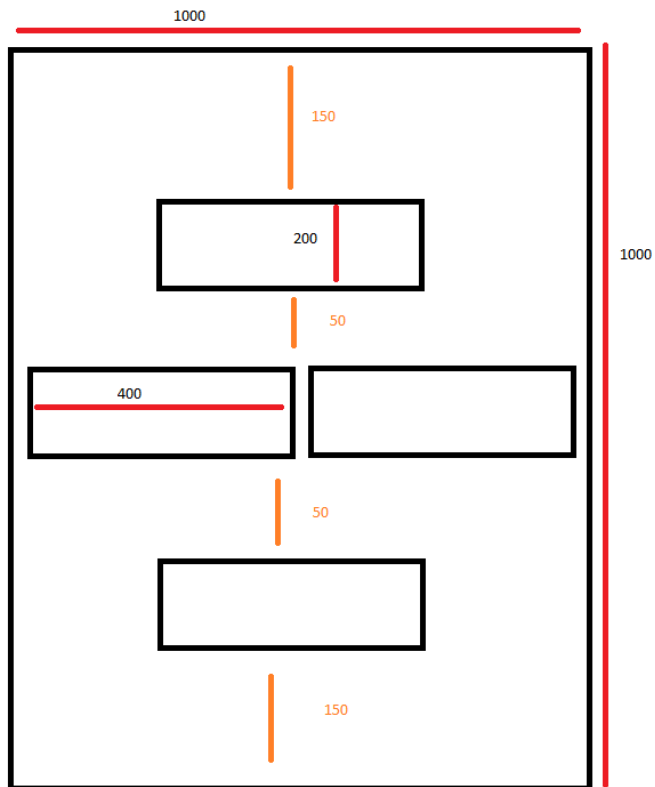
Specify the name and location of the new site

Location: C:\Users\Alpha\Desktop\javascript Browse...

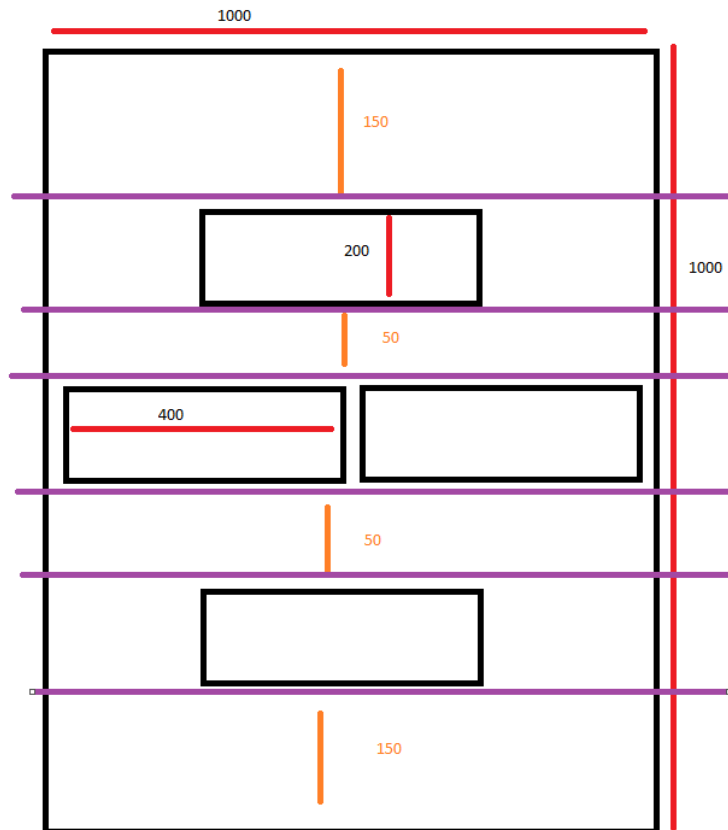
☒ Add to Managed List Name: javascript

OK Cancel

-
- 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>

```

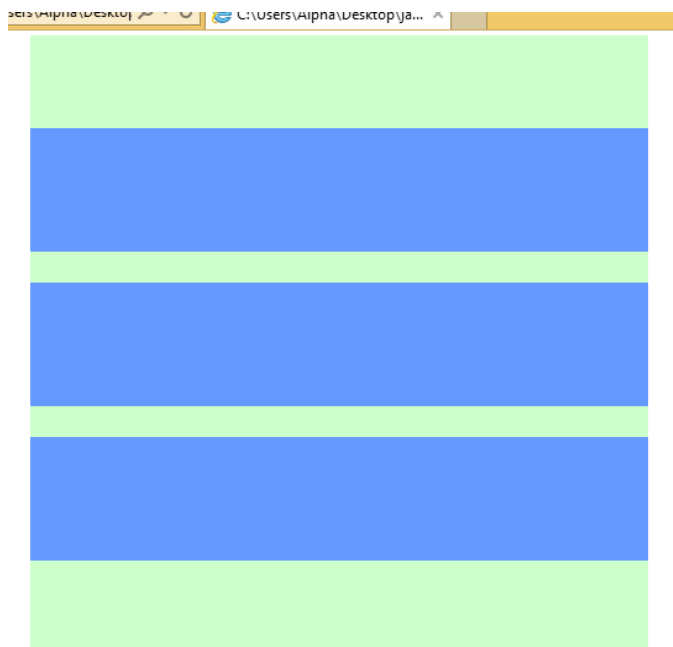
- Test, this is the green box we want to see
- Now for the rows

```

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



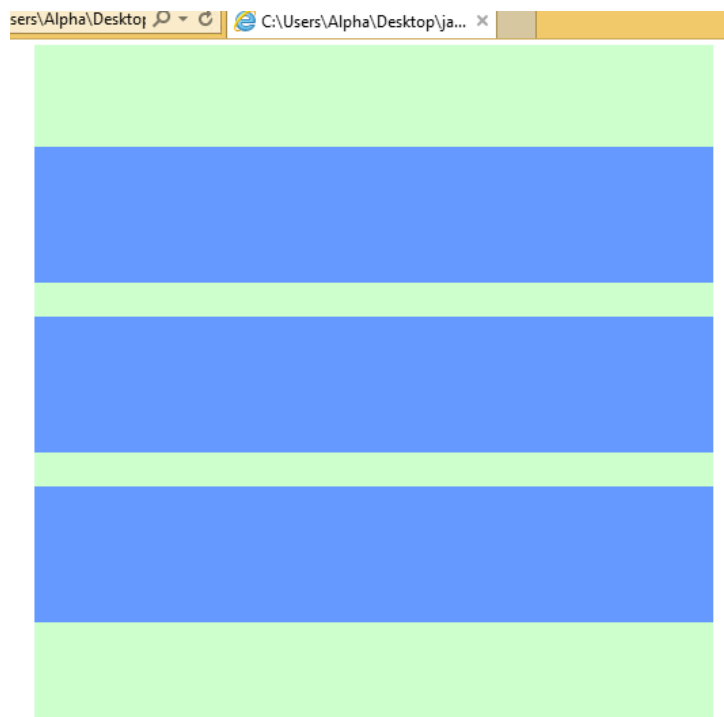
- Once this is done, stop and re-examine the code. Notice how topNav, MidNav and BottomNav are essentially the same, so clean up the code. Change them to dNav in the styles and the skeleton.

- ```

3
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><!-- eodBottomNav -->
28 <div id="dSpace"></div><!-- eo dSpace -->
29 </div><!-- eo dPage -->
30 </body>
--

```

- Save and test

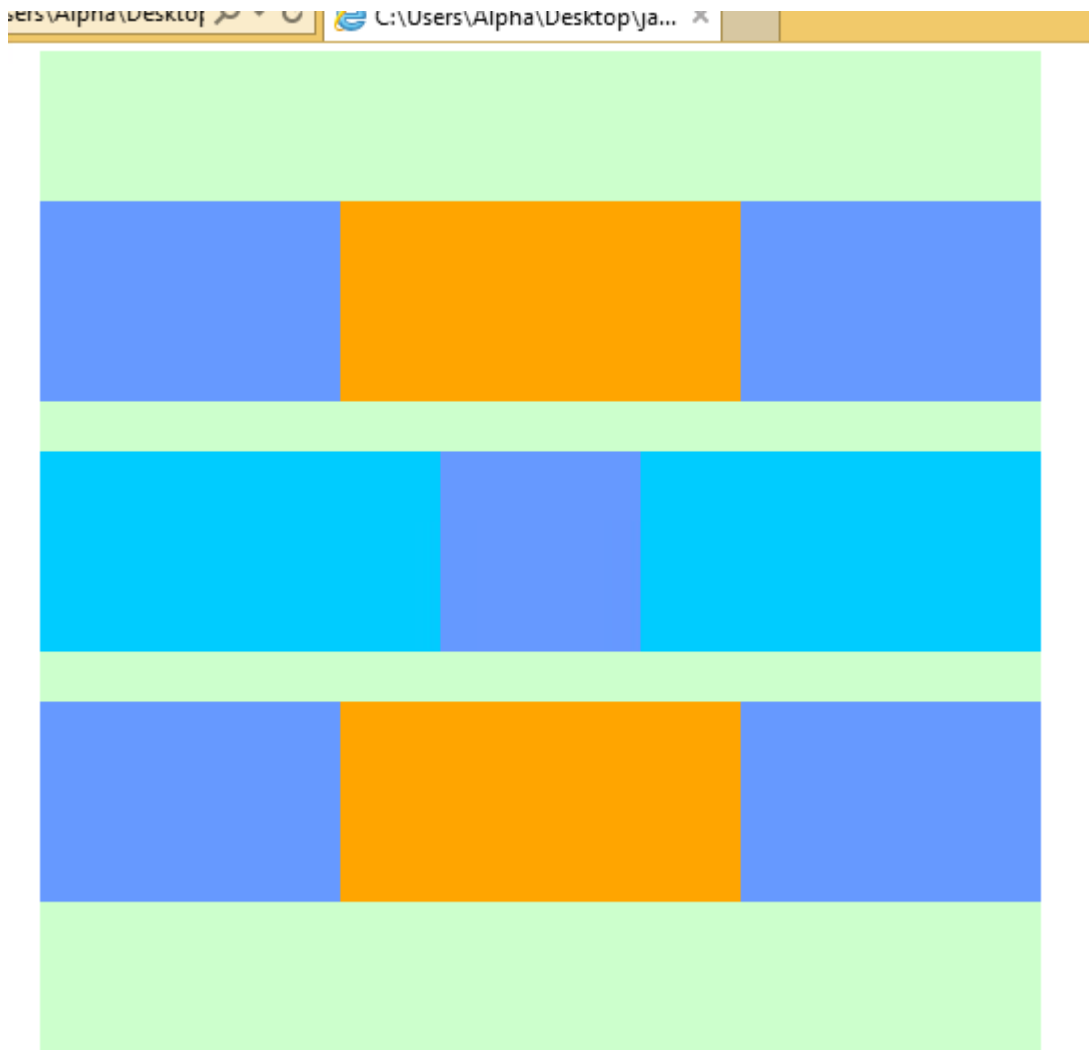


- 
- Now add the missing div styles

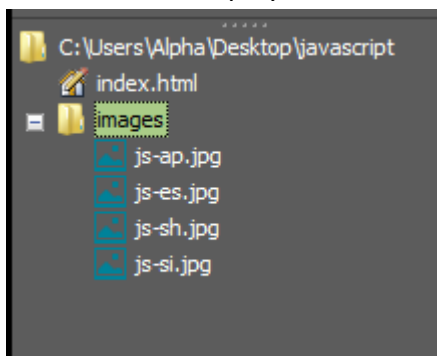
- ```

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

```

<body>
  <div id="dPage">
    <div id="dSpace"></div><!-- eo dSpace -->
    <div id="dNav">
      <div id="tNav"></div><!-- eo tNav -->
    </div><!-- eo dTopNav -->
    <div id="midSpace"></div><!-- eo midSpace -->
    <div id="dNav">
      <div id="dLeftNav"></div><!-- eo dLeftNav -->
      <div id="dRightNav"></div><!-- eo dRightNav -->
    </div><!-- eo dMidNav -->
    <div id="midSpace"></div><!-- eo midSpace -->
    <div id="dNav">
      <div id="bNav"></div><!-- eo bNav -->
    </div><!-- eo dBottomNav -->
    <div id="dSpace"></div><!-- eo dSpace -->
  </div><!-- eo dPage -->
</body>

```

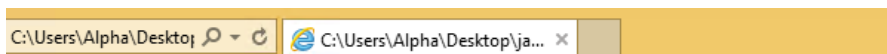
- Then clean up the code for the design

```

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



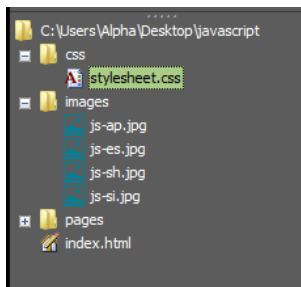
JS - Show / Hide

JS - Expand / Shrink

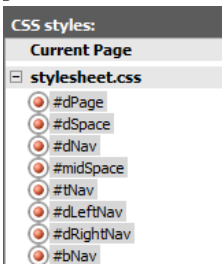
JS - Swap Images

JS - Autoplay

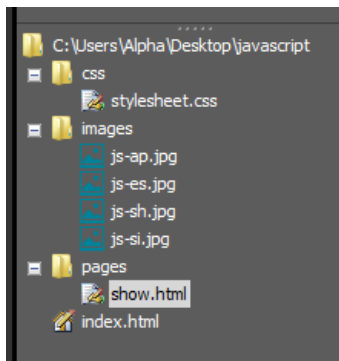
-
- Now from here create a sub folder called pages and css
- Create an external css file called stylesheet.css , link and move the styles from the index page to the stylesheet



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

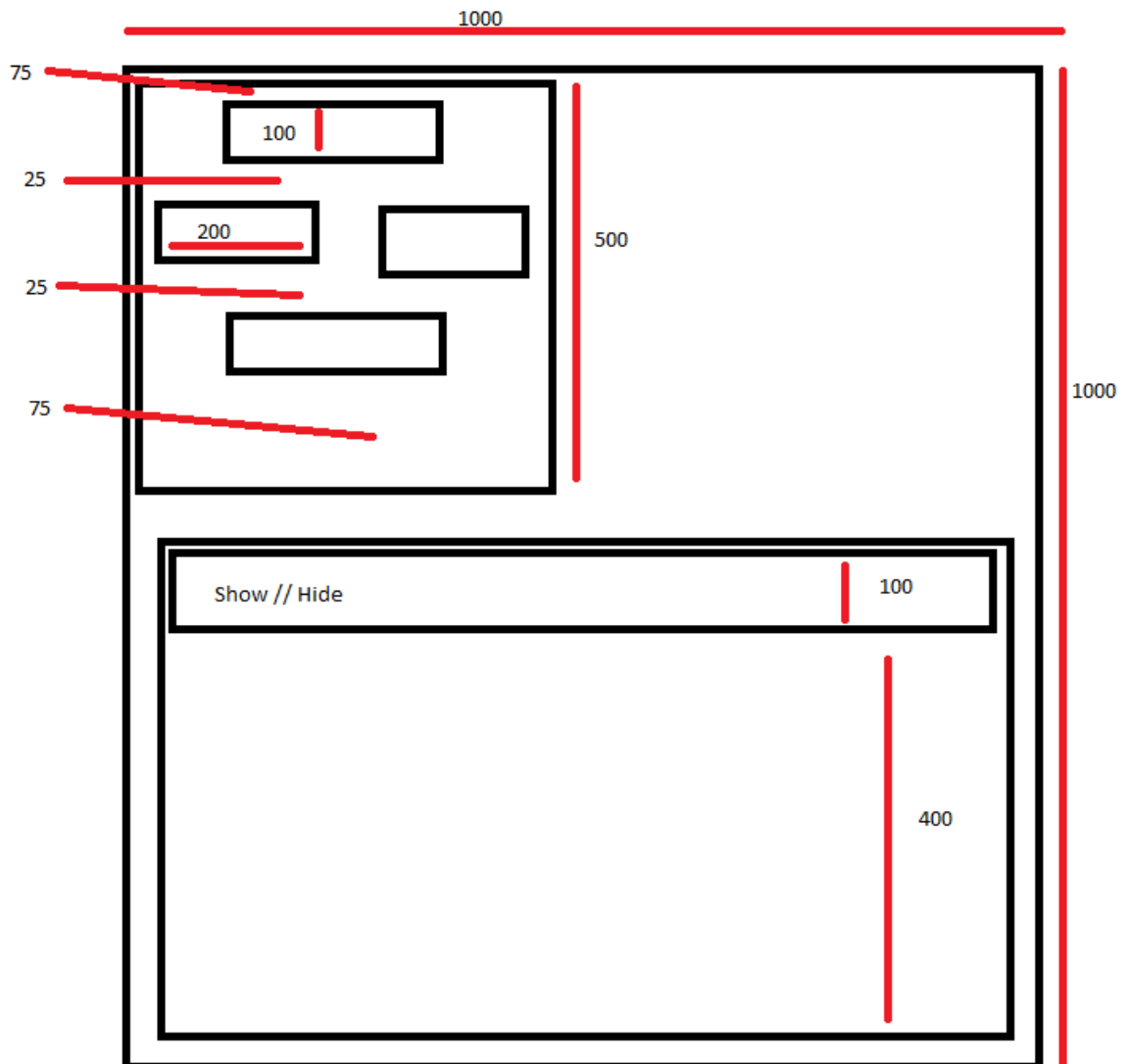


- From here create a new page called show in the pages folder and then link in the stylesheet and begin the skeleton



```
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>
10
11 <body>
12   <div id="dPage">
13     </div><!-- eo dPage -->
14 </body>
15
16 </html>
17
```


- 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

```

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.

```

<!-- css -->
<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">

```

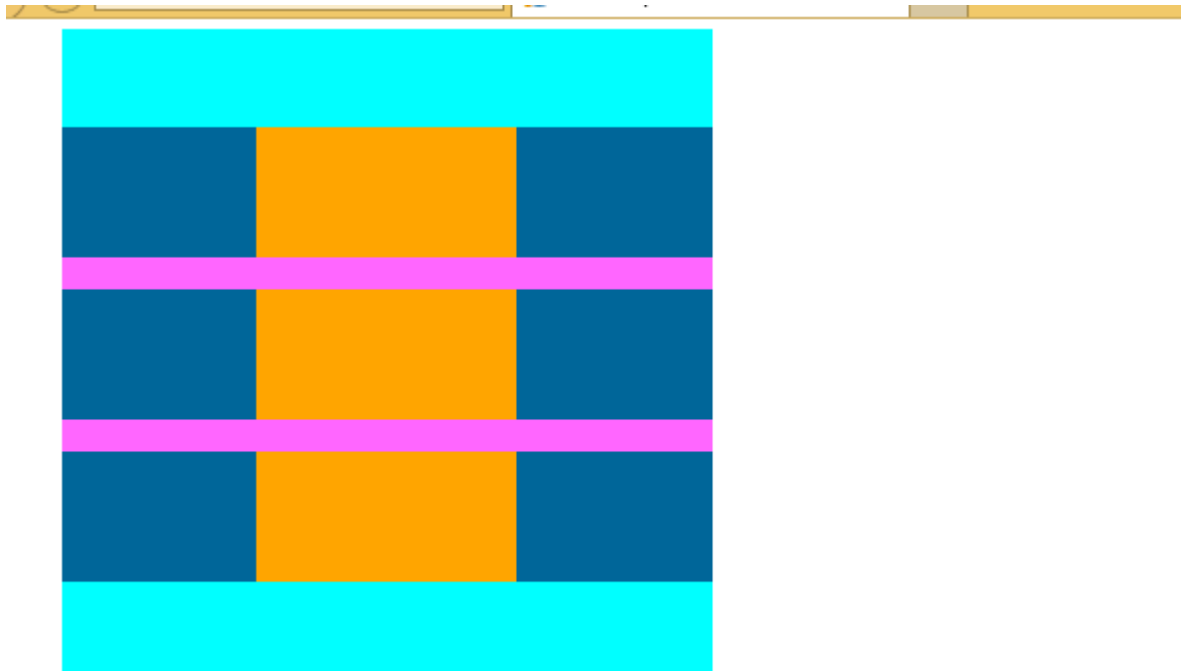
-
- Gives



-
- 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;}
```

-



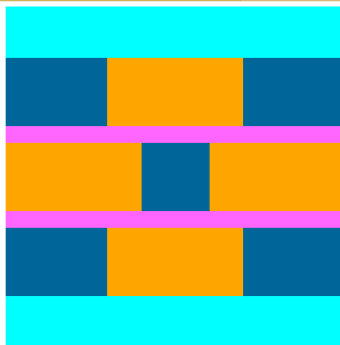
-
- The middle has both mImage tags over writing each other, so now we look at apply an inline style on them to position them in the correct position.

```

<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 -->
26           </div><!-- eo mNav -->
27           <div id="mGap"></div><!-- eo mGap -->
28           <div id="mNav">
29             <div id="mImage" style="float:left;"></div><!-- eo mImage -->
31             <div id="mImage" style="float:right;"></div><!-- eo mImage -->
33             </div><!-- eo mNav -->
34             <div id="mGap"></div><!-- eo mGap -->
35             <div id="mNav">
36               <div id="mImage"></div><!-- eo mImage -->
38               </div><!-- eo mNav -->
39               <div id="mSpace"></div><!-- eo mSpace -->
40             </div><!-- eo menu -->
41           </div><!-- eo dTop -->
42           <div id="dBottom"></div><!-- eo dBottom -->
43         </div><!-- eo dPage -->
44       </body>

```

- ```

<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;}

```

- Produces



*JS* - Show / Hide

*JS* - Expand / Shrink

*JS* - Swap 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 -->

```

- body>

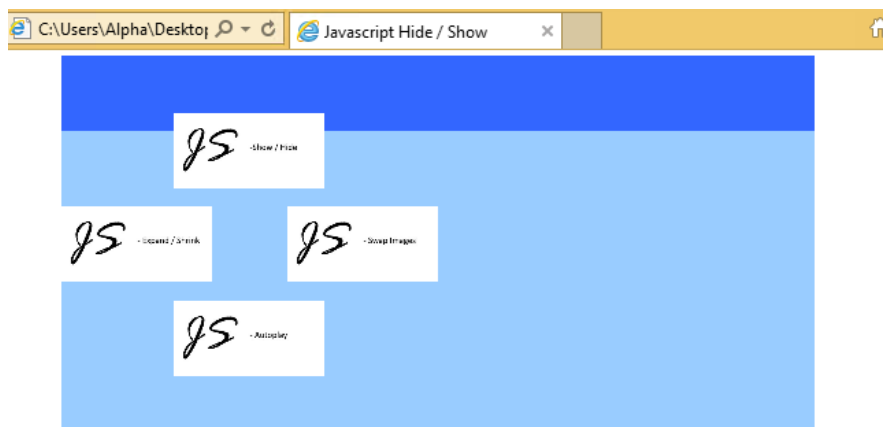
- Style this up and check it

- ```

<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



-

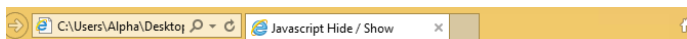
- Not what we want, the problem is the divs have gotten confused over where things float, so to fix that we add the following div to the page

```

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="dBNav"></div><!-- eo dBNav -->
37 <div id="dBContent"></div><!-- eo dBContent-->
38 </div><!-- eo dBottom -->
39 </div><!-- eo dPage -->
40 </body>

```

- Save and Test

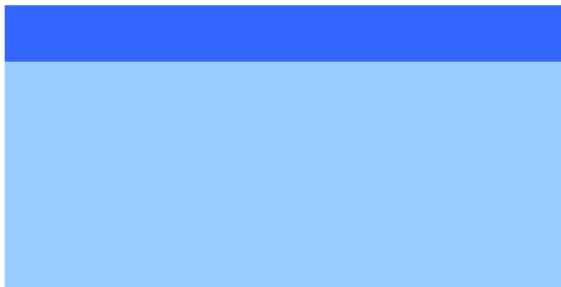


JS - Show / Hide

JS - Load / Unload

JS - Group Images

JS - Animation



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

```

<div style="clear:both;"></div>
<div id="dBottom">
 <div id="dBNav"></div><!-- eo dBNav -->
 <div id="dBContent">
 <div id="text">
 ipsum dolor sit amet, consectetur adipiscing
 hend varius. In sit amet augue sed orci varius
 m eget felis in mi tempus congue quis accumsa
 quam, placerat non nulla facilisis, faucibus
 raesent interdum nunc in lorem tristique, nor
 </div><!-- eo text -->
 </div><!-- eo dBContent-->
</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="dBNav">
 Show TextHide Text
</div><!-- eo dBNav -->

```

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

```

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

```

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



- 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/stylesheet.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()

```

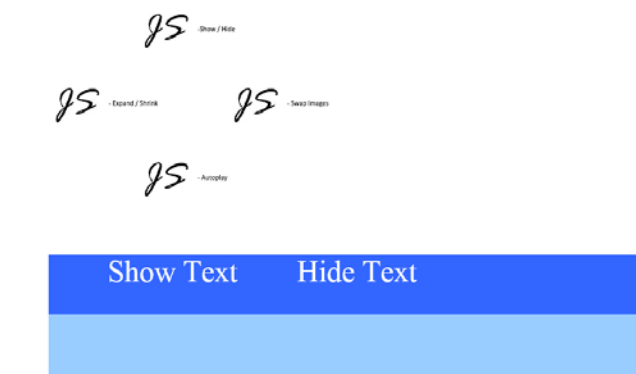
14 <script type="text/javascript">
15 function hideText()
16 {
17 document.getElementById("text").style.visibility = "hidden";
18 }
19 </script>
20 </head>

```

- 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"></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;"></div><!-- eo mImage -->
37 <div id="mImage" style="float:right;"></div><!-- eo mImage -->
38 </div><!-- eo mNav -->
39 <div id="mGap"></div><!-- eo mGap -->
40 <div id="mNav">
41 <div id="mImage"></div><!-- eo mImage -->
42 </div><!-- eo mNav -->
43 <div id="mSpace"></div><!-- eo mSpace -->
44 </div><!-- eo menu -->
45 </div><!-- eo dTop -->

```

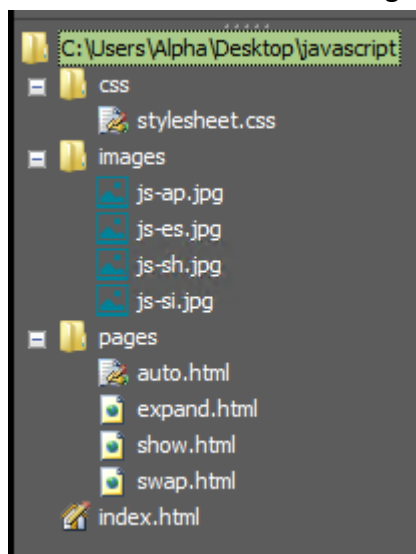
- Don't forget to re-write the links on the index page.

```

0 <body>
1 <div id="dPage">
2 <div id="dSpace"></div><!-- eo dSpace -->
3 <div id="dNav">
4 <div id="tNav">
</div><!-- eo tNav -->
5 </div><!-- eo dTopNav -->
6 <div id="midSpace"></div><!-- eo midSpace -->
7 <div id="dNav">
8 <div id="dLeftNav"></div><!-- eo dLeftNav -->
9 <div id="dRightNav">
</div><!-- eo dRightNav -->
0 </div><!-- eo dMidNav -->
1 <div id="midSpace"></div><!-- eo midSpace -->
2 <div id="dNav">
3 <div id="bNav"></div>
<!-- eo bNav -->
4 </div><!-- eodBottomNav -->
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 find 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

```
<title>JavaScript Hide / Show</title>
<style type="text/css">
 #dBNav{ width:100px; 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:100px; 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">
 Show Text
 Hide Text
 Show Image
 Hide Image
 </div><!-- eo dBNav -->
 <div id="dBContent">
```

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

```
#dBNav{ width:100px; height:100px; background-color:#3366FF; color:white;}
#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
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 function hideIm()
24 {
25 document.getElementById("dBContent").style.backgroundImage = "url('')";
26 }
27 function showIm()
28 {
29 document.getElementById("dBContent").style.backgroundImage = "url('../images/bwall.jpg')";
30 }
31
32 </script>
```

- Save and Test

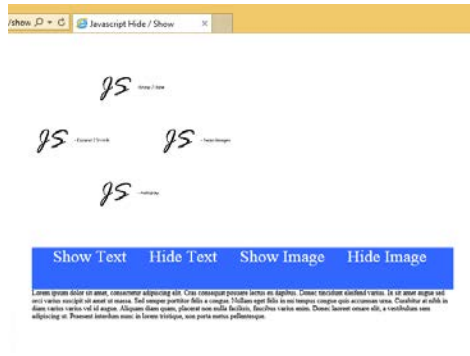
JS - Home / Index

JS - Home / Index

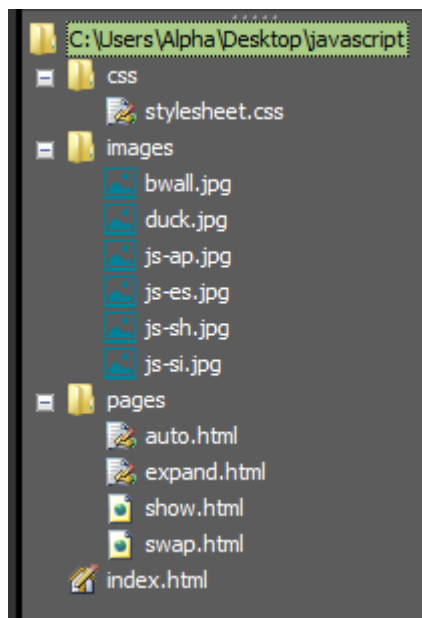
JS - Home / Index

JS - Home / Index





- 
- 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
 

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

</div><!-- eo dBContent-->
</div><!-- eo dBBottom -->
```
- Add the following style
 

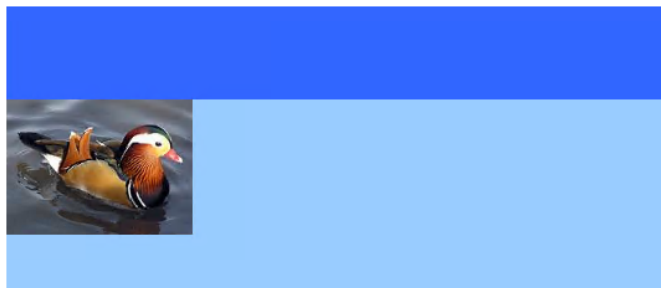
```
#uBNav a:HOVER{color:blue; text-decoration:underline;}
#duck{width:20%;}
style>
```
- Save and test

JS - Show / Hide

JS - Expand / Shrink

JS - Swap Images

JS - Autoplay



- 
- 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 }
10 </script>
11 </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

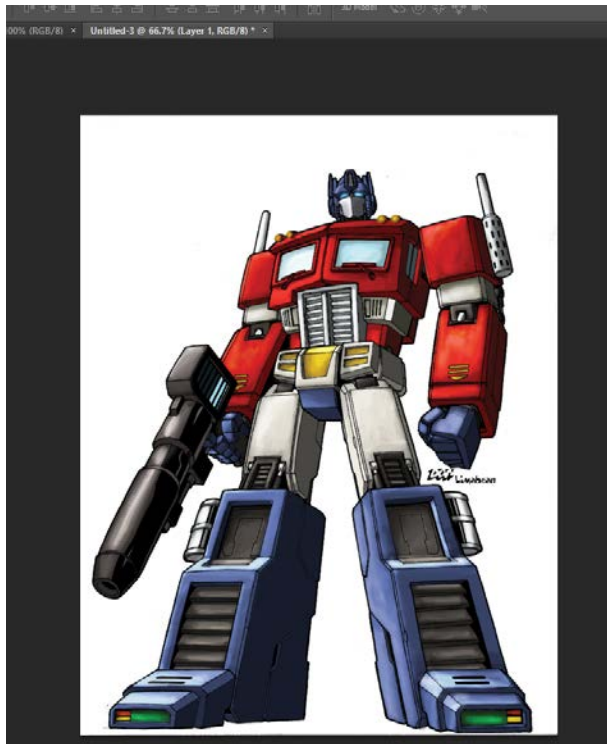
```
5 <script type="text/javascript">
6 function expandImage()
7 {
8 document.getElementById("duck").style.width="50%";
9 }
10 function shrinkImage()
11 {
12 document.getElementById("duck").style.width="20%";
13 }
14 </script>
```

- And then apply that to the html code

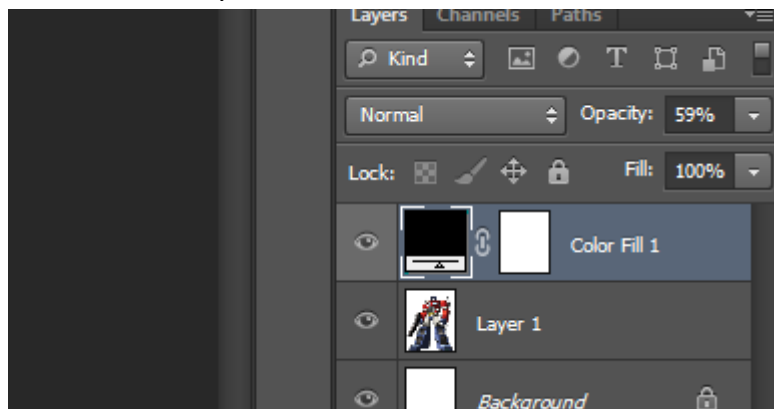
```
51 </div><!-- eo dBNav -->
52 <div id="dBContent">
53
55 </div><!-- eo dBContent -->
```

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

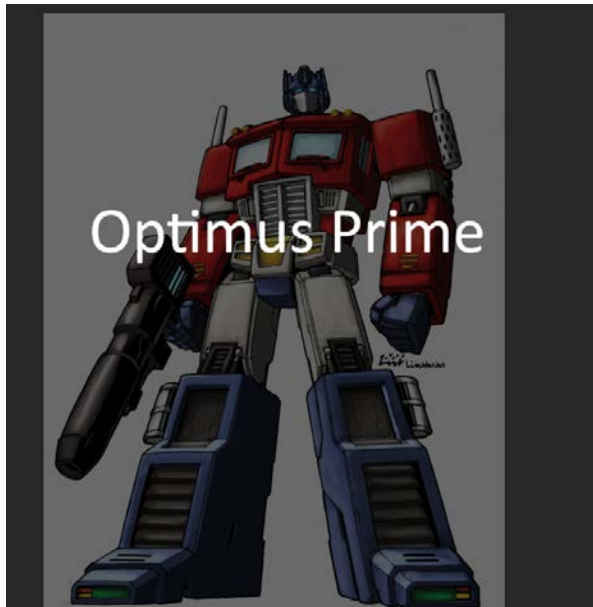
- Now we move to the swap images page.
- So go grab a new image from bing and load it into photoshop



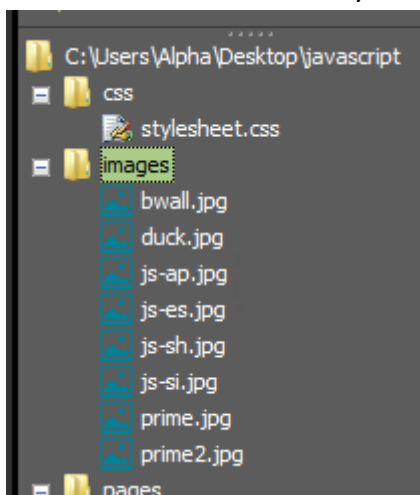
- 
- Save a copy of this in your images folder as well.
- Now add a fill layer



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



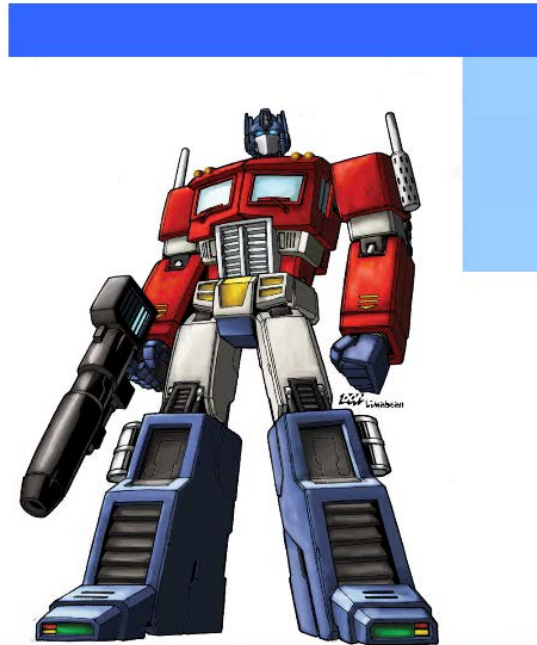
- 
- 
- Save this new version into your images folder



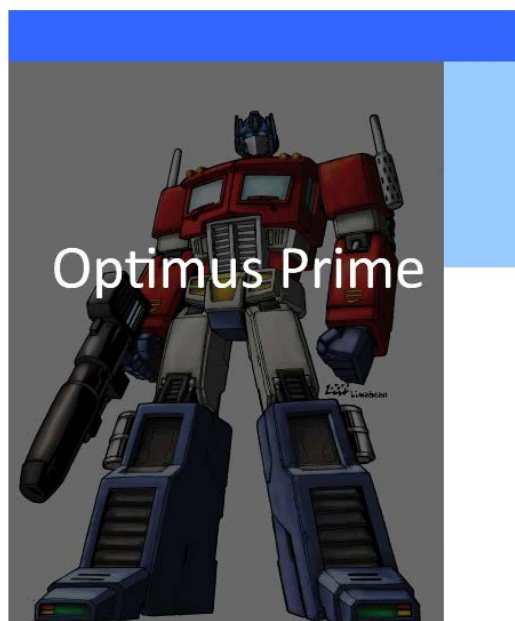
- - From here let's write in the following code
- ```

41 </div><!-- eo dbNav -->
42 <div id="dBContent">
43   
44 </div><!-- eo dBContent -->
45 </div><!-- eo dBBottom -->

```
- - Save and test it.
 - You should see the following

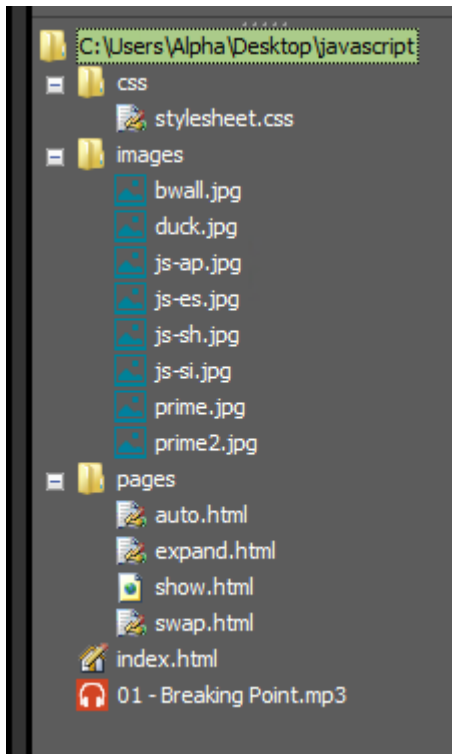


-
- And with the mouse over



-
- 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.