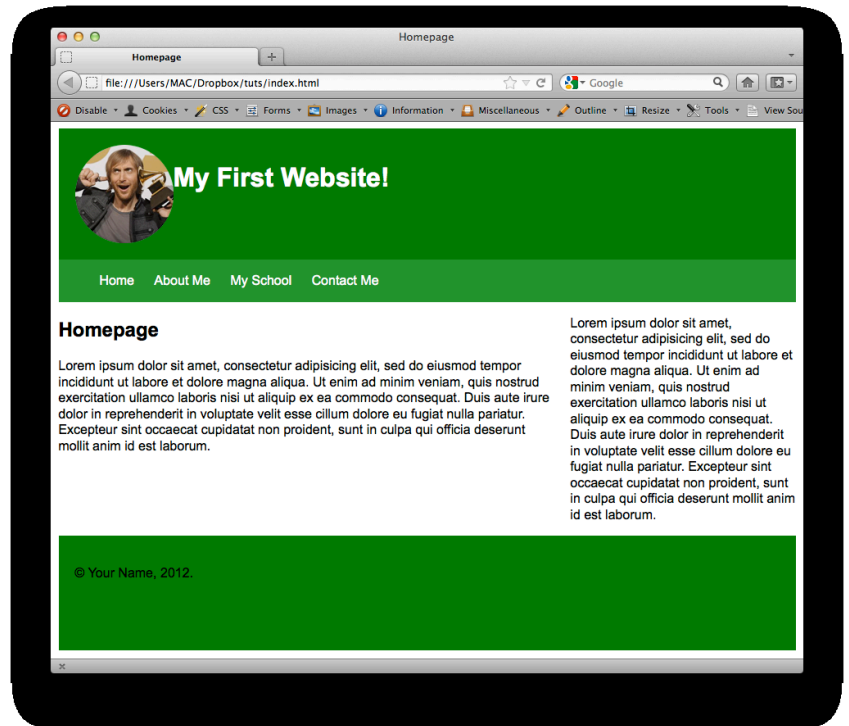


What are we going to create?

A 4 page website with:

- Header
- Footer
- Sidebar
- Navigation bar with links
- External stylesheet



Preparation

1. Create a folder called 'website'. Inside this create 2 folders called 'styles' & 'images'. Add the headshot.png file to the images folder.
2. Create a file called index.html inside the website folder.
3. Create your basic page defining a doctype, html, head, body, title tags etc.

```
<!DOCTYPE HTML>
<html>

<head>
<title>Homepage</title>
</head>

<body>
</body>

</html>
```

4. We're going to use some new HTML5 tags (<header> <footer> <nav> <section>) but older versions of Internet Explorer don't recognise these. To get round this we add the following code to the head section.

```
<!--[if lt IE 9]>
<script>
    document.createElement("header" );
    document.createElement("footer" );
    document.createElement("section");
    document.createElement("nav" );
</script>
<![endif]-->
```

5. Next we add in the main sections, header, footer, navigation, main content area & sidebar. Add this code inside the `<body>` tags.

```
<header></header>

<nav></nav>

<section id="mainContent"></section>

<section id="sidebar"></section>

<footer></footer>
```

6. We can now add in our image & some text inside our header tag which should look like this.

```
<header>
  
  <h1>My First Website!</h1>
</header>
```

7. Next, inside our `<nav>` tags we will create a list of links which will link to other pages.

```
<nav>
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="about-me.html">About Me</a></li>
    <li><a href="my-school.html">My School</a></li>
    <li><a href="contact-me.html">Contact Me</a></li>
  </ul>
</nav>
```

8. Finally, add content to your 2 sections & footer. Create a `<h2>` called Homepage inside 'mainContent' & add some paragraph text to both sections. Here's some sample paragraph text.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Then add some content to your footer eg: © Your Name, 2012.

9. Your code should look something like this:

```
<!DOCTYPE HTML>
<html>
<head>
<title>Homepage</title>

    <!--[if lt IE 9]>
        <script>
            document.createElement("header" );
            document.createElement("footer" );
            document.createElement("section");
            document.createElement("nav"      );
        </script>
    <![endif]-->

</head>

<body>

    <header>
        
        <h1>My First Website!</h1>
    </header>

    <nav>
        <ul>
            <li><a href="index.html">Home</a></li>
            <li><a href="about-me.html">About Me</a></li>
            <li><a href="my-school.html">My School</a></li>
            <li><a href="contact-me.html">Contact Me</a></li>
        </ul>
    </nav>

    <section id="mainContent">
        <h2>Homepage</h2>
        <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis
nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis
aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat
nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui
officia deserunt mollit anim id est laborum.</p>
    </section>

    <section id="sidebar">
        <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,
quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu
fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
qui officia deserunt mollit anim id est laborum.</p>
    </section>

    <footer>
        <p>&copy; Your Name, 2012.</p>
    </footer>

</body>
</html>
```

If you view your page in a browser it will have styling & should look something like this



My First Website!

- [Home](#)
- [About Me](#)
- [My School](#)
- [Contact Me](#)

Homepage

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© Your Name, 2012.

10. We are going to create one style sheet to apply styles simultaneously to all pages at once. Create an empty text file called 'styles.css' in the CSS folder. We can then link to this file by adding the following code to the <head> section of our index.html file.

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

Any CSS added to this file will style all pages that link to it.

11. The first thing we want to do is change the default font to Arial. Open the styles.css file & add the following code:

```
body{  
    font-family:Arial;  
}
```

This will change all fonts to Arial in all the tags.

12. Next we need to tell the browser to treat the new HTML5 tags as 'block' type elements.

```
header, footer, nav, section{  
    display:block;  
}
```

13. We want to add some styles to our header. First we'll change the background colour to green &

apply 20px of padding to move the image away from the edge:

```
header{
  background:green;
  padding:20px;
}
```

Next add the following styles to float the image to the left bringing the heading alongside it.

```
header img{
  float:left;
}

header h1{
  color:white;
}
```

To fit the header around the image we can set the 'overflow' to 'auto'. This tells the header to automatically resize to fit the elements inside. Add this `overflow:auto;` to the header's style like below.

```
header{
  background:green;
  overflow:auto;
  padding:20px;
}
```

14. To give the footer a green background, set the height to 100px & some padding add the following

```
footer{
  background:green;
  height:100px;
  padding:20px;
}
```

15. If you view your homepage you can see that it stretches out to the full width of the browser. We can fix the width to say 900px & center the page as we like. To do this we need to wrap all the elements inside the `<body>` in a `<div>` and apply some styles to it.

Immediately inside the `<body>` create a `div` with an id of 'wrapper' like this

```
<div id="wrapper">
```

Don't forget to close the tag immediately before the closing `</body>` tag with `</div>`

Next set the width to 900px & align the page centrally by setting the right & left margins to 'auto'

```
#wrapper{
  width:900px;
  margin-left:auto;
  margin-right:auto;
}
```

The page should now be centered within your browser.

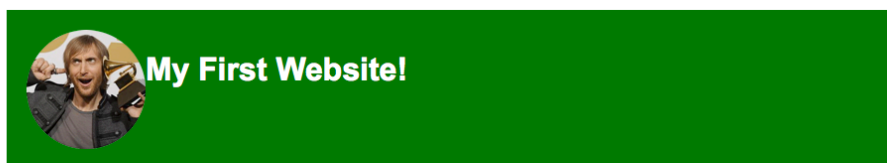
16. Lets look at the actual content between the header & footer. We want a large main area to the left & a narrower sidebar to the right.

Lets split the into a 600px wide main content area & a 275px wide sidebar. We've already created 2 <section> tags with id's of 'mainContent' & 'sidebar'. Add the styles & float them right or left into the desired positions.

```
#mainContent{
  width:600px;
  float:left;
}
```

```
#sidebar{
  width:275px;
  float:right;
}
```

As you can see the footer rides up under the content. We need something to push the footer down.



- [Home](#)
- [About Me](#)
- [My School](#)
- [Contact Me](#)

Homepage

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Your Name, 2012.

© Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Create a <div> with a class of 'clearit' & place it in the after the side bar <section> & before the opening <footer> tag. <div class="clearit"></div>. Then add the following code to your stylesheet & test in :

```
.clearit{
  clear:both;
}
```

This creates an invisible line which pushes the footer down after the content & sidebar.

17. The list of links creates a lot of white space & pushes the content down. We want to create a horizontal navigation bar instead. First give the <nav> tag a lighter green background

```
nav{
  background:#339933;
  overflow:auto;
}
```

Then we want to align the links horizontally by setting the list elements to display 'inline' (as opposed to blocks). We can also add a little padding to space the links out & create a little 'hit

area' making them easier to click.

```
nav ul li{
  display:inline;
  padding:5px;
}
```

The line `nav ul li` targets all `` inside a `` which are also inside a `<nav>`

18. Next we'll change the link text to white & remove the white underline. Also we'll add a little padding here too. We can target the `<a>` tag using the same technique as above.

```
nav ul li a{
  color:white;
  text-decoration:none;
  padding:5px;
}
```

So here we're finding any `<nav>` tags & drilling down through the `` & `` tags to find the `<a>` & then applying the styles.

Finally we'll change the style of a link when its foller over with the mouse. It target a link when the mouse is over it we use `a:hover`

```
nav ul li a:hover{
  background:#060;
}
```

Your index.html code should look something like this:

```
<!DOCTYPE HTML>
<html>
<head>
<title>Homepage</title>
  <!--[if lt IE 9]>
    <script>
      document.createElement("header" );
      document.createElement("footer" );
      document.createElement("section");
      document.createElement("nav" );
    </script>
  <![endif]-->
<link href="css/styles.css" rel="stylesheet" type="text/css">
</head>

<body>

<div id="wrapper">

<header>
  
  <h1>My First Website!</h1>
</header>

<nav>
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="about-me.html">About Me</a></li>
    <li><a href="my-school.html">My School</a></li>
    <li><a href="contact-me.html">Contact Me</a></li>
  </ul>
</nav>
```

```

<section id="mainContent">
  <h2>Homepage</h2>
  <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis
nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis
aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat
nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui
officia deserunt mollit anim id est laborum.</p>
</section>

<section id="sidebar">
  <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis
nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis
aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat
nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui
officia deserunt mollit anim id est laborum.</p>
</section>

<div class="clearit"></div>

<footer>
  <p>&copy; Your Name, 2012.</p>
</footer>

</div>

</body>
</html>

```

Your CSS file code should look something like this:

```

body{
  font-family:Arial, Helvetica, sans-serif;
}

header, footer, nav, section{
  display:block;
}

header{
  background:green;
  overflow:auto;
  padding:20px;
}

header img{
  float:left;
}

header h1{
  color:white;
}

  footer{
    background:green;
    height:100px;
    padding:20px;
  }

#wrapper{
  width:900px;

```



```

    margin-left:auto;
    margin-right:auto;
}

#mainContent{
    width:600px;
    float:left;
}

#sidebar{
    width:275px;
    float:right;
}

.clearit{
    clear:both;
}

nav{
    background:#339933;
    overflow:auto;
}

nav ul li{
    display:inline;
    padding:5px;
}

nav ul li a{
    color:white;
    text-decoration:none;
    padding:5px;
}

nav ul li a:hover{
    background:#060;
}

```

19. Finally we can create our other pages. You can duplicate your index.html file & rename it to whatever you like. In the example above we created 4 links called 'Home', 'About Me', 'My School' & 'Contact Me' but you can create whatever you like.

Make sure to set the 'href' to the correct file name like the example below.

```

<nav>
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="about-me.html">About Me</a></li>
    <li><a href="my-school.html">My School</a></li>
    <li><a href="contact-me.html">Contact Me</a></li>
  </ul>
</nav>

```