



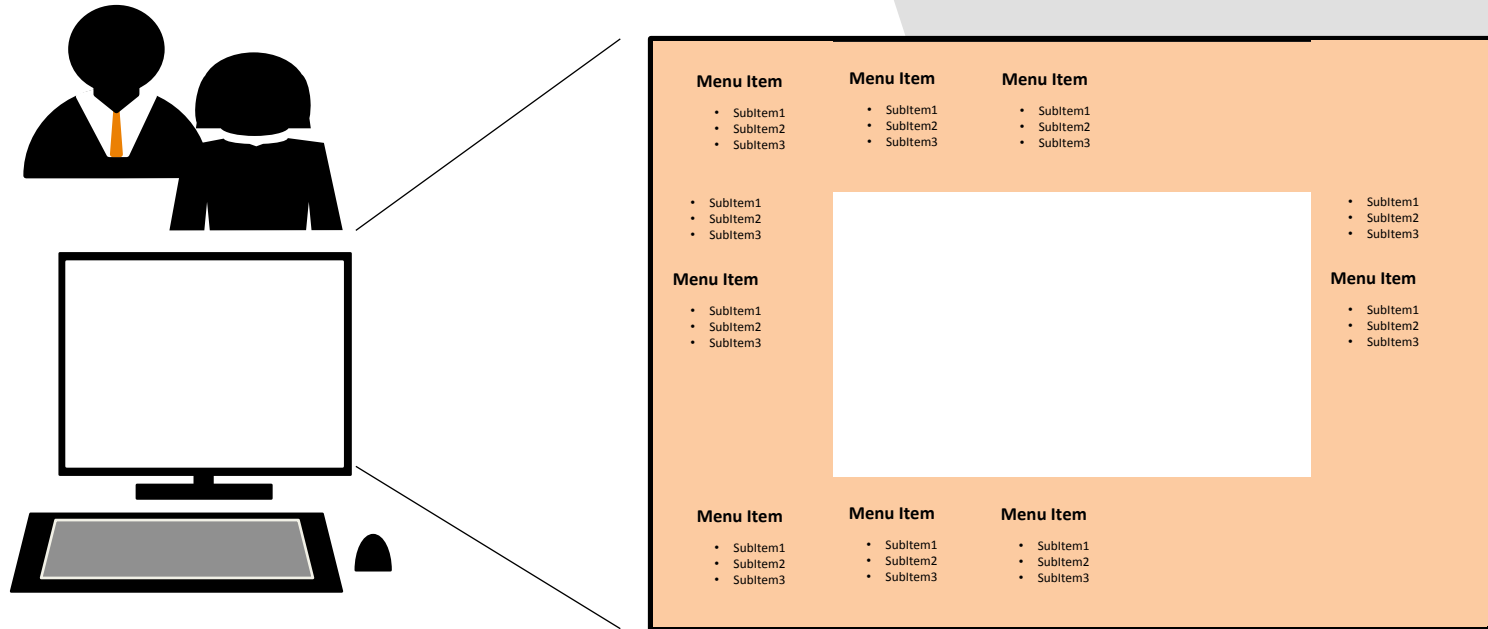
# Responsive Web Design

An approach to create sliding menus from the left, right, down and up utilising JQuery

The Design Requirement...  
A Simple Layout...  
The Basic HTML...  
The JQuery...  
The Final Result...



# The Design Requirement (view this in slide mode)

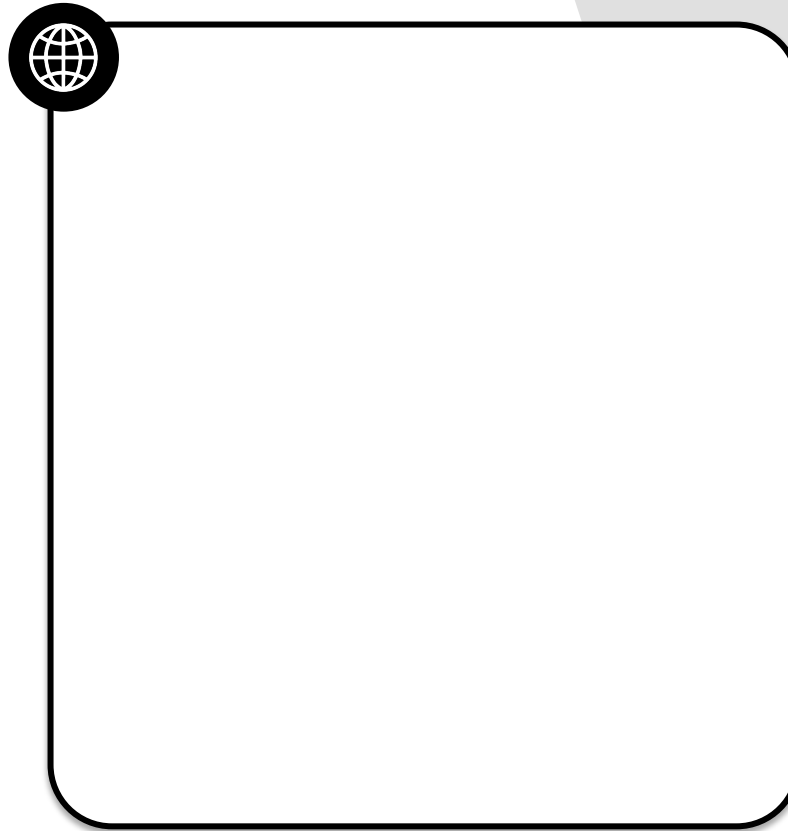


A significant challenge in web design (which on the face of it seems tremendously simple) is the placement of menus. Where should you place the menu that it is unobtrusive for the user and helps maximize the viewable space on the screen. Using up to 30% of any screen for a menu is often infeasible. The criteria therefore is to design a menu that can be called upon to slide out from the top, bottom or sides on demand and to hide again once used.



# A Simple Site Layout - 1

Lets begin with a simple layout – from here on in this presentation the following diagram denotes the browser window:



# A Simple Site Layout - 2

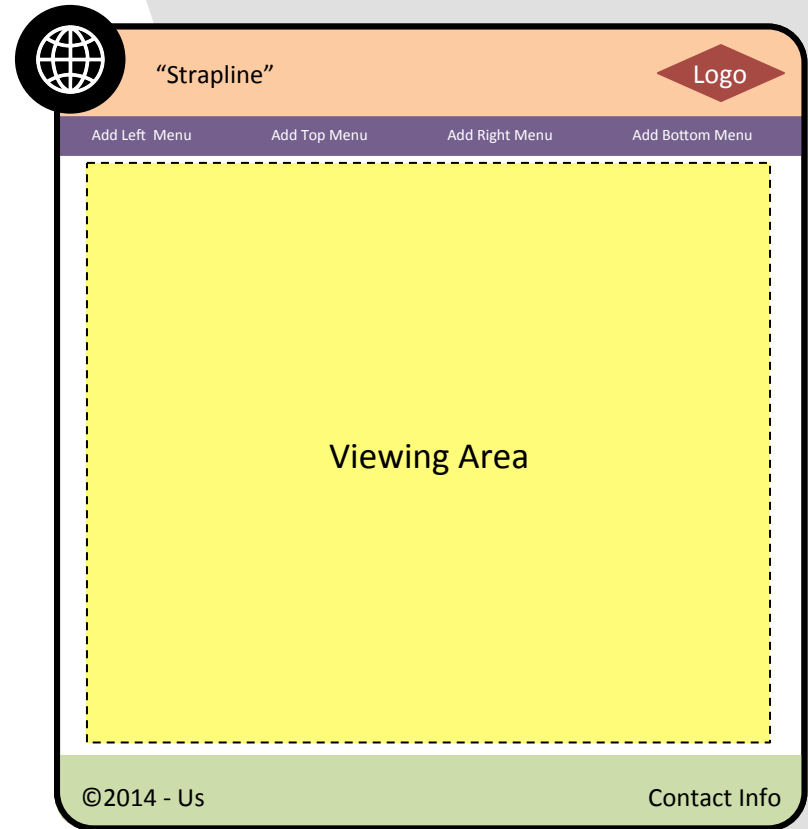
Within our browser window we will want to position the main aspects of a site.

This usually begins with:

- The placement of a banner bar;
- With the logo of your company on either the right or left of the screen;
- Perhaps a strapline welcoming visitors or with the mission statement for your company or organization;
- Then a footer at the bottom with copyright and contact information;
- Leaving you the center screen as viewing area ...

And there you have it – a simple web site set up!

Note: The awful colors are so we can see where every container is ...



# A Simple Slide Layout – 3

Lets have a look at the HTML that generates this simple site ...

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>Simple site layout - The HTML</title>
  </head>
  <body>
    <!-- Lets first define the total container -->
    <div class="mainContainer">
      <!-- First up in the container is the heading section -->
      <div class="mainHeader">
        <!-- The title for the site -->
        <span class="mainTitle">Simple Site Layout</span>
        <!-- The Logo for the simple site -->
        <img src="" />
      </div>
      <!-- Next up the menu area -->
      <div class="mainMenu">
        <nav>
          <ul>
            <li id='leftMenu' class='menuItem'><a href="#">Add Left Menu</a></li>
            <li id='topMenu' class='menuItem'><a href="#">Add Top Menu</a></li>
            <li id='rightMenu' class='menuItem'><a href="#">Add Right Menu</a></li>
            <li id='bottomMenu' class='menuItem'><a href="#">Add Bottom Menu</a></li>
          </ul>
        </nav>
      </div>
      <!-- Next the viewing area -->
      <div class="mainView"></div>
      <!-- Finally the footer section -->
      <div class="mainFooter">
        <!-- The copyright information -->
        <span class="mainCopyright">&#169; 2014</span>
        <!-- The contact information -->
        <span class="mainContactInfo">Contact: EJK</span>
      </div>
    </div>
  </body>
</html>
```



# A Simple Slide Layout – 4

We then add the CSS styles ... thus:

```
/*
  Created on : 23-Jun-2014
  Description: The main styles for the Simple SLAPI-Connect Site
  Author      : eamonnkillian
*/

/* -----
  Set up a font for the Simple Site
  Check out www.google.com/fonts for
  examples of all kinds of fonts...
  ----- */

@import url(http://fonts.googleapis.com/css?family=Cabin);

/* -----
  We will ensure there are no margins
  or padding set from the outset ...
  ----- */

* {
  margin:0;
  padding:0;
}

/* -----
  And to create a major contrast we'll
  use the font we loaded above set a
  background color for the whole page
  of red, a margin to generate a border
  effect, a font color black and no
  overflow (scrolling up and down, left
  or right) ...
  ----- */

body {
  background-color: #ff0000;
  color:#000;
  font-family: 'Cabin', sans-serif;
  overflow: hidden;
}

a {
  text-decoration: none;
  color: #fff;
}

a:hover {
  color: #3333ff;
}
```

```
/* -----
  The main container
  ----- */

.mainContainer {
  position: relative;
  float: left;
  top: 0;
  background-color: #fff;
}

/* -----
  The heading section
  ----- */

.mainHeader {
  position: relative;
  float: left;
  top: 0;
  background-color: #ff9966;
}

.mainTitle {
  position: absolute;
}

.logoImage {
  position: relative;
  float: right;
}

/* -----
  The menu section
  ----- */

.mainMenu {
  position: relative;
  float: left;
  background-color: #cc66ff;
  font-size: 0.7em;
}

nav ul li {
  display: inline-block;
}
```

```
/* -----
  The menu section
  ----- */

.mainView {
  position: relative;
  float: left;
  background-color: #ffffcc;
}

.centralWords {
  font-size: 0.8em;
  background-color: green;
}

/* -----
  The footer section
  ----- */

.mainFooter {
  position: relative;
  float: left;
  background-color: #99ff99;
}

.mainCopyright {
  position: relative;
  float: left;
}

.mainContactInfo {
  position: relative;
  float: right;
}
```



# A Simple Site Layout - 5

What we want to have happen are menu buttons appear when we click to add them and then when we click on them to have a menu slide out or down or up from the relevant side. We achieve this first by adding the menu buttons to the HTML.

```
<!-- Now the Menus - Lets do a left hand side first -->
<div class="lhsMenu">
  <a href="#"><img id='closeMenuLeft' class='closeMenu' src='img/menu-white.png' /></a>
  <nav>
    <ul>
      <li class='menuItem'><a href="#">Menu#1</a></li>
      <li class='menuItem'><a href="#">Menu#2</a></li>
      <li class='menuItem'><a href="#">Menu#3</a></li>
      <li class='menuItem'><a href="#">Menu#4</a></li>
    </ul>
  </nav>
</div>
<div class="topMenu">
  <a href="#"><img id='closeMenuTop' class='closeMenu' src='img/menu-white.png' /></a>
  <nav>
    <ul>
      <li class='menuItem'><a href="#">Menu#1</a></li>
      <li class='menuItem'><a href="#">Menu#2</a></li>
      <li class='menuItem'><a href="#">Menu#3</a></li>
      <li class='menuItem'><a href="#">Menu#4</a></li>
    </ul>
  </nav>
</div>
<div class="rhsMenu">
  <a href="#"><img id='closeMenuRight' class='closeMenu' src='img/menu-white.png' /></a>
  <nav>
    <ul>
      <li class='menuItem'><a href="#">Menu#1</a></li>
      <li class='menuItem'><a href="#">Menu#2</a></li>
      <li class='menuItem'><a href="#">Menu#3</a></li>
      <li class='menuItem'><a href="#">Menu#4</a></li>
    </ul>
  </nav>
</div>
<div class="bottomMenu">
  <a href="#"><img id='closeMenuBottom' class='closeMenu' src='img/menu-white.png' /></a>
  <nav>
    <ul>
      <li class='menuItem'><a href="#">Menu#1</a></li>
      <li class='menuItem'><a href="#">Menu#2</a></li>
      <li class='menuItem'><a href="#">Menu#3</a></li>
      <li class='menuItem'><a href="#">Menu#4</a></li>
    </ul>
  </nav>
</div>
</div>
```

... then lets launch into the magic that is JQuery ...





# Introducing JQuery

JQuery is a JavaScript library that helps designers manipulate everything in the DOM.

Whats the DOM?

DOM stands for Document Object Model which is the logical structure of everything that goes into building up your browsers view of the web page you have asked it to display. You can get a much better explanation of it here:

<http://www.w3.org/TR/DOM-Level-2-Core/introduction.html>



# Using JQuery

First we need to tell the browser we are going to be using JQuery. We do this in the main header. There are two ways to link in the JQuery library:

## 1) Download it and include it;

You can download JQuery library straight from these sites:

- <http://jquery.com/download/>
- <https://developers.google.com/speed/libraries/devguide#jquery>

## 2) Link to it on the web;

You can link to the JQuery library online by adding this line into the header:

- `<script src=http://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js></script>`

Lets link to it like this:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <link rel='stylesheet' href='css/simplesite.css' />
    <script src=http://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js></script>
    <title>Simple site layout - The HTML</title>
  </head>
```



# First up in the script is .. All the RWD stuff ..

Please review the sister workshop JQuery-RWD to see how the responsiveness is achieved with JQuery ... this deck will now focus solely on the menus.



# Dealing with Adding the Menu Button

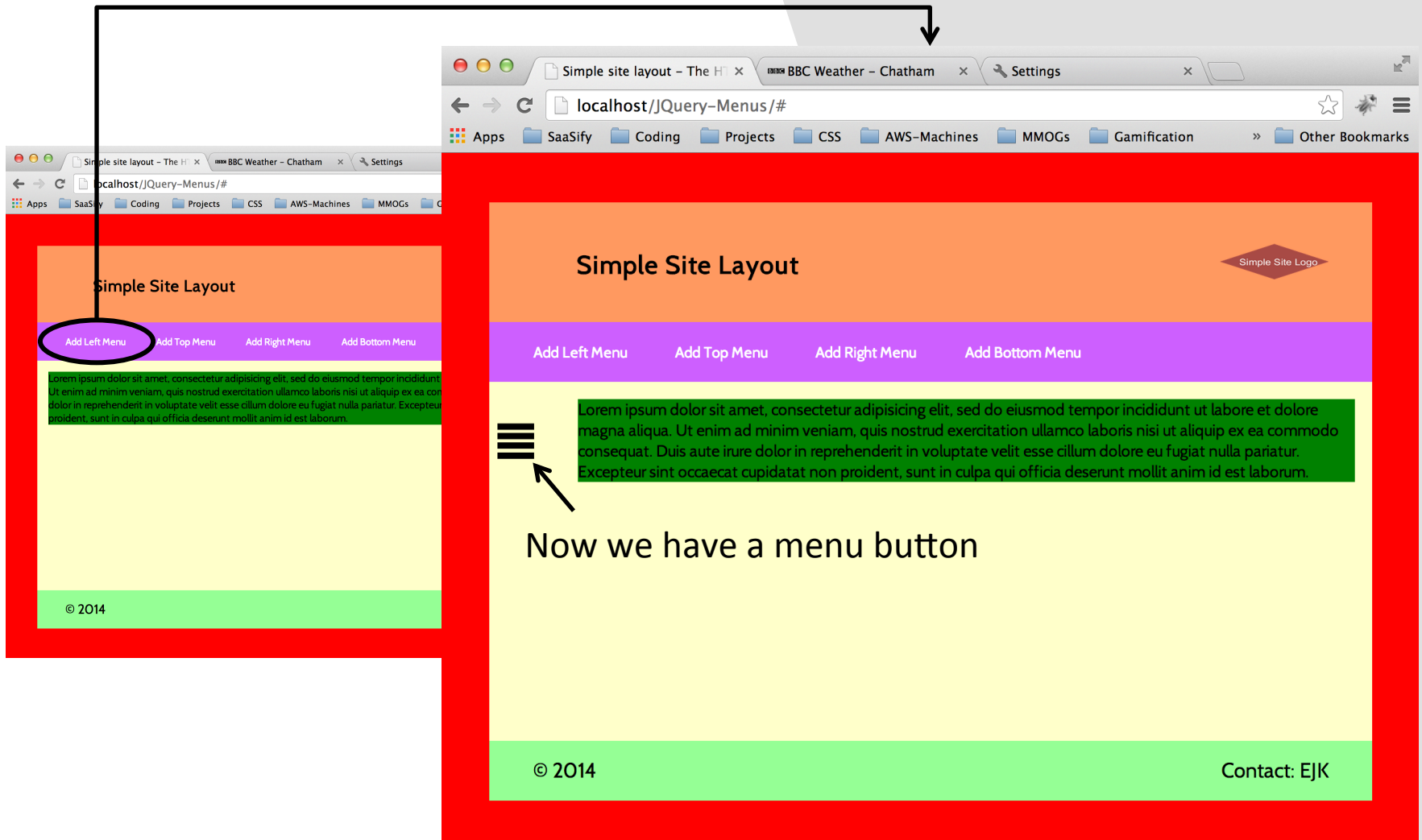
In JQuery we select items in the DOM using their ID or their Class. To get the effect we want we add a click listener with a function to the “Add xxx Button” on the main menu strip. When those hyperlinks are clicked they will run the relevant code ...

```
//  
// Lets add a sliding left menu to our site  
//  
  
$('#leftMenu').click(function(){  
    $('.centralWords').css('margin-right', '0');  
    $('.centralWords').css('margin-left', mainContainerWidth * 0.08);  
    $('.menuLogo').css('display','none');  
    $('#menuLogoLeft').css('display','block');  
    var menuLogoLeftMargin = ((mainheadingHeight - menuLogoHeight) / 2) - mainviewPadding;  
    $('#menuLogoLeft').css('margin-top', menuLogoLeftMargin);  
    $('#menuLogoLeft').css('margin-left', (mainContainerWidth * 0.01)-mainviewPadding);  
});
```

This will make the left menu button appear beside the “lorem ipsum” paragraph in the main section. Simultaneously it moves the “lorem ipsum” to the left to accommodate the button ...

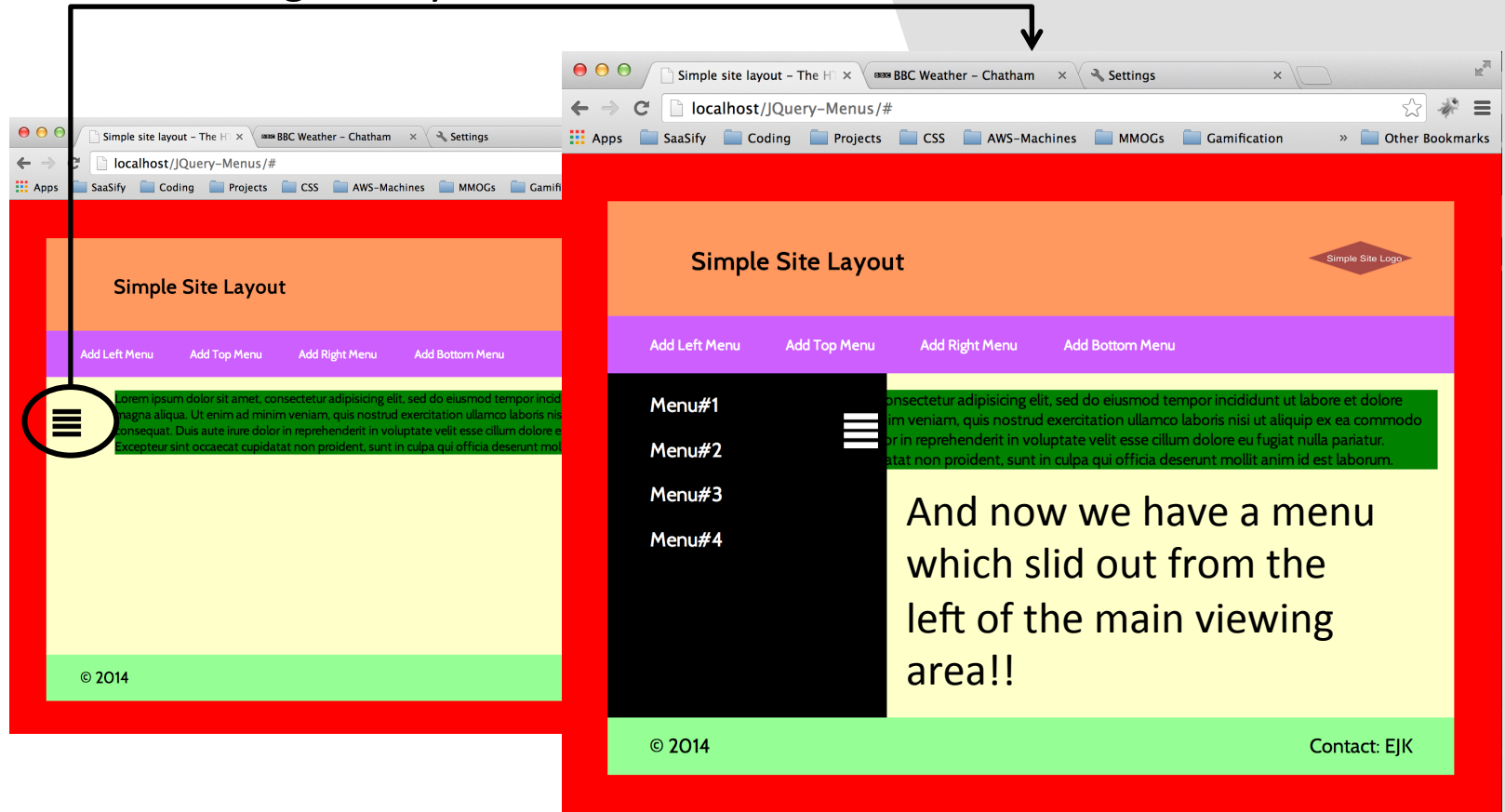


# The comparison looks like ...



# Then we add some JQuery to the button ...

We then add a selector on the “menuLeftButton” and it calls a function to reveal the left menu with another button encapsulated in that menu which makes the menu go away once we’ve used it ...



# Repeat for the rest ..

The thing to do is to repeat the process for the other menus and to add to the menu functions the forced disappearance of any open menus once the one you want is clicked!!

```
//
// Lets add a sliding top menu to our site
//

$('#topMenu').click(function(){
    $('.centralWords').css('margin-left', '0');
    $('.centralWords').css('margin-right', '0');
    $('.menuLogo').css('display','none');
    $('#menuLogoTop').css('display','block');
    var menuLogoTopMargin = ((mainheadingHeight - menuLogoHeight) / 2);
    $('#menuLogoTop').css('margin-top', menuLogoTopMargin);
    $('#menuLogoTop').css('margin-left', mainContainerWidth * 0.01);
});

//
// Lets add a sliding right menu to our site
//

$('#rightMenu').click(function(){
    $('.centralWords').css('margin-left', '0');
    $('.centralWords').css('margin-right', '0');
    $('.centralWords').css('margin-right', mainContainerWidth * 0.08);
    $('.menuLogo').css('display','none');
    $('#menuLogoRight').css('display','block');
    var menuLogoRightMarginTop = ((mainheadingHeight - menuLogoHeight) / 2);
    $('#menuLogoRight').css('margin-top', menuLogoRightMarginTop);
    $('#menuLogoRight').css('margin-right', -1*(mainContainerWidth * 0.01)-mainviewPadding));
});

//
// Finally a sliding bottom menu to our site
//

$('#bottomMenu').click(function(){
    $('.centralWords').css('margin-left', '0');
    $('.centralWords').css('margin-right', '0');
    $('.menuLogo').css('display','none');
    $('#menuLogoBottom').css('display','block');
    var menuLogoBottomMargin = ((mainfooterHeight - menuLogoHeight) / 2);
    $('#menuLogoBottom').css('margin-top', menuLogoBottomMargin);
    $('#menuLogoBottom').css('margin-left', mainContainerWidth * 0.01);
});
```



Hope this helps with Menus ... EJK

