

JavaScript

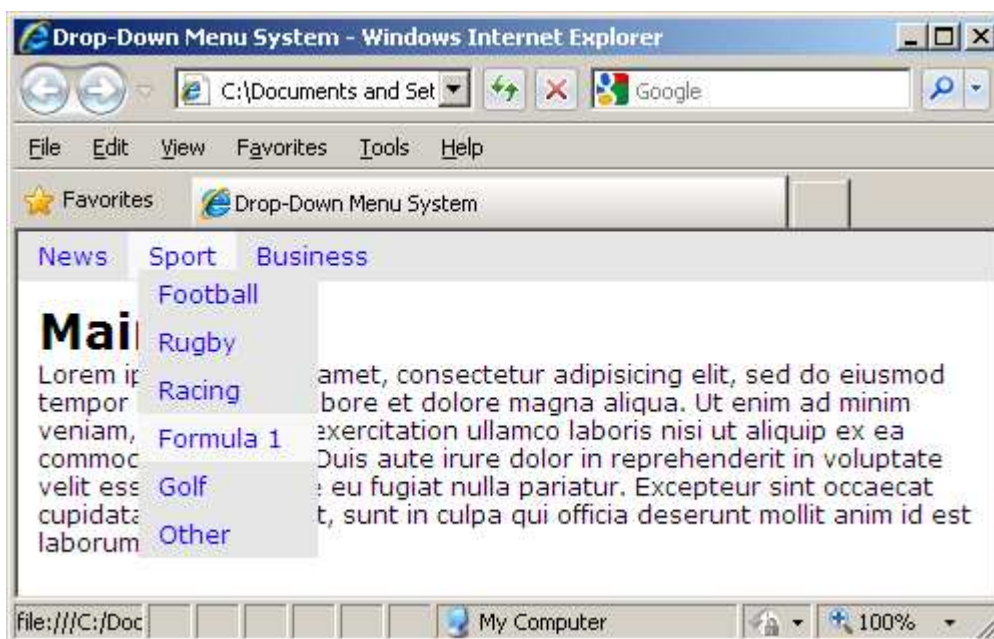
Terry Marris July 2011

4 Menus

I approached menus with the expectation that a heap of JavaScript would be involved. I was wrong. It is entirely possible to write an effective menu system entirely in HTML styled with cascading style sheets.

4.1 Drop-Down Menu

With a drop-down menu system we have a horizontal main menu and, for each main menu option, a drop down menu. Here we are selecting *Formula 1* from the *Sport* drop-down menu.



HTML

We start with the HTML. We put the content of the menu in a pair of unordered lists, one nested inside the other. For each element in the outer list, we have an inner list.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Drop-Down Menu System</title>
<link rel="stylesheet" href="menu.css" media="screen">
</head>
```

```

<body>

<div id="menu">
<ul>
<li><a href="menu.html">News</a>
<ul>
<li><a href="localnews.html">Local</a></li>
<li><a href="uknews.html">UK</a></li>
<li><a href="worldnews.html">World</a></li>
</ul></li>

<li><a href="menu.html">Sport</a>
<ul>
<li><a href="football.html">Football</a></li>
<li><a href="rugby.html">Rugby</a></li>
<li><a href="racing.html">Racing</a></li>
<li><a href="formula1.html">Formula 1</a></li>
<li><a href="golf.html">Golf</a></li>
<li><a href="other.html">Other</a></li>
</ul></li>

<li><a href="menu.html">Business</a>
<ul>
<li><a href="money.html">Money</a></li>
<li><a href="property.html">Property</a></li>
<li><a href="technology.html">Technology</a></li>
</ul></li>

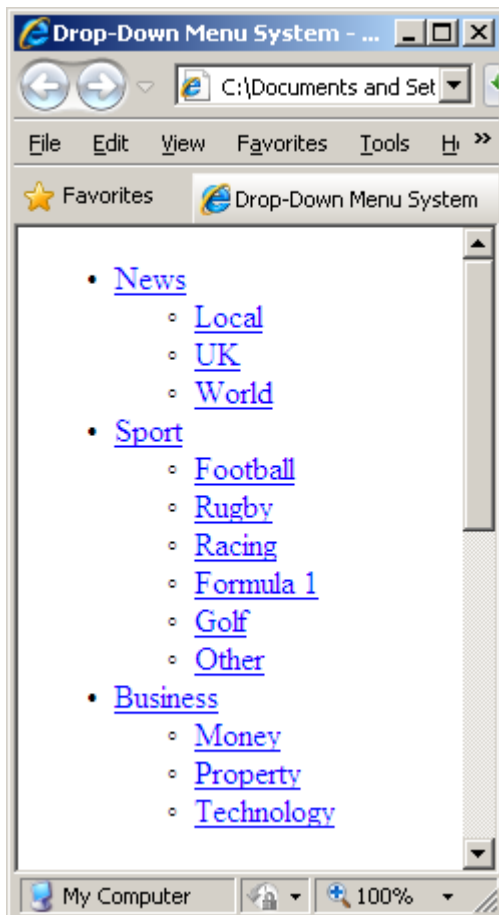
</ul>
</div>

<div id="news">
<h1>Main Page</h1>
<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>
</div>

</body>
</html>

```

The menu looks like this.



CSS

The first step in any cascading style sheet is to reset all margins and borders to zero. We specify the font, and set a menu bar to light gray.

```

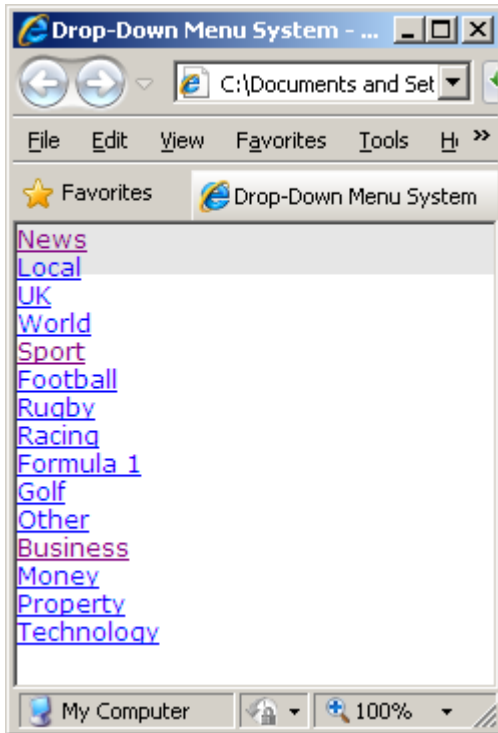
/* menu.css */

* {
  padding: 0; /* resets all margins, padding, borders, ... */
  margin: 0;
  border: 0;
  outline: none;
}

body {
  font: 12px Verdana, Arial, sans-serif;
}

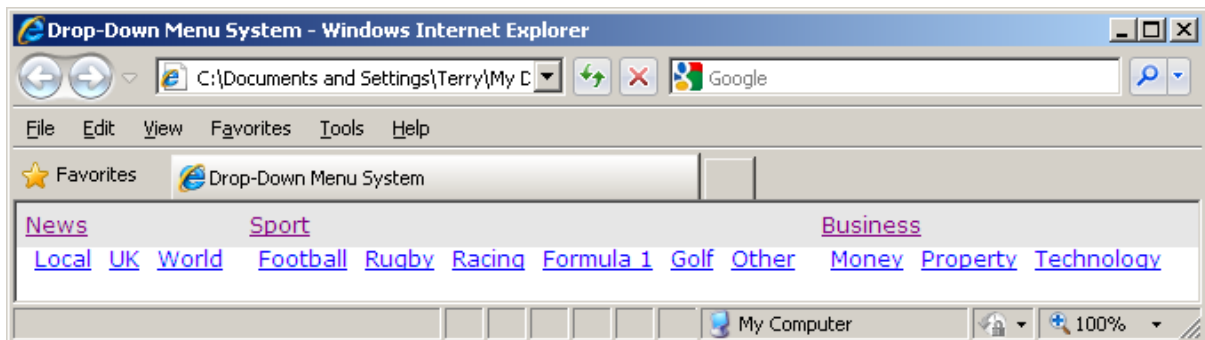
#menu {
  height: 25px; /* sets menu bar height */
  background-color: #e6e6e6; /* light gray */
}

```



We create the horizontal menu with *float:left*, remove the default unordered list bullets with *list-style:none*, and specify that any menu item with two or more words is not split up with *white-space:nowrap*. We apply some padding around each list item.

```
#menu li {
  position: relative; /* used with position absolute below */
  float: left; /* presents list items horizontally */
  list-style: none; /* removes list element markers */
  white-space: nowrap; /* prevents unwanted line breaks */
  padding: 5px 5px; /* pads each list item */
}
```



We specify *position:relative* so that the submenus, when used with *position:absolute*, can subsequently be displayed vertically.

But first we hide the sub menus.

```
#menu ul ul {
  position: absolute; /* removes sub menu from normal flow */
  visibility: hidden; /* hides the sub menu */
  background-color: #e6e6e6; /* light gray */
}
```



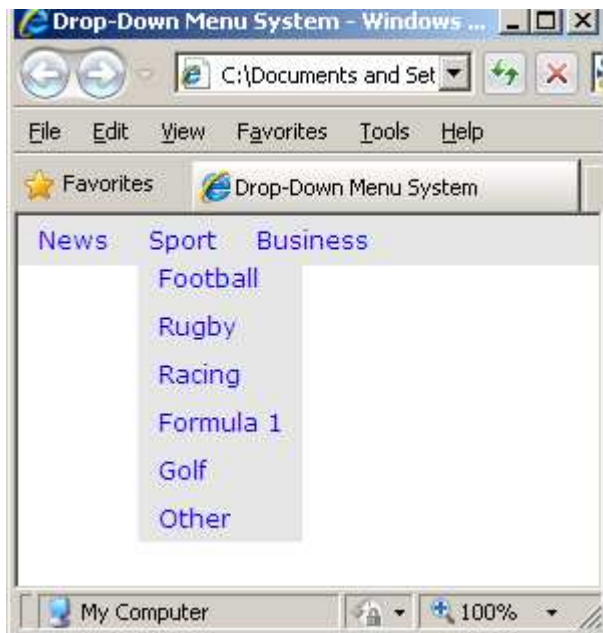
Then we format the links themselves. We remove the default underline with *text-decoration:none*, and set the links to blue with *color:blue*.

```
#menu li a {
  text-decoration: none; /* removes the underlines */
  padding: 0px 5px;
  color: blue;
}
```



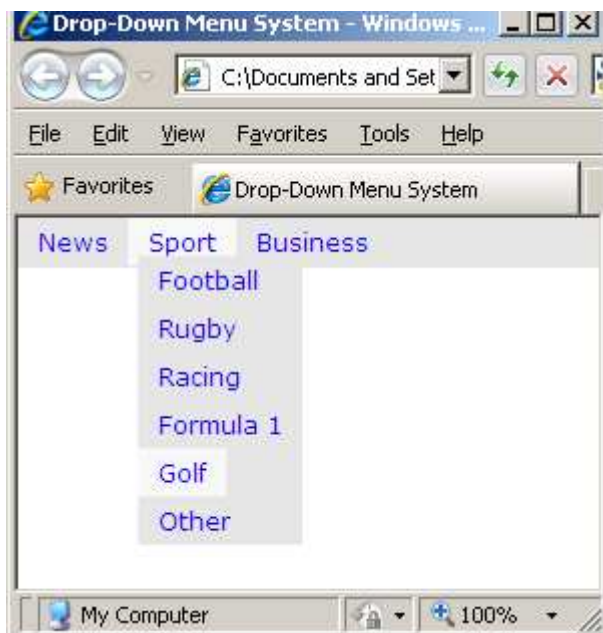
We make the drop-down menu visible on mouseover with

```
#menu ul li:hover ul {
  visibility: visible; /* displays the sub menu */
}
```



And set the appearance of its links with

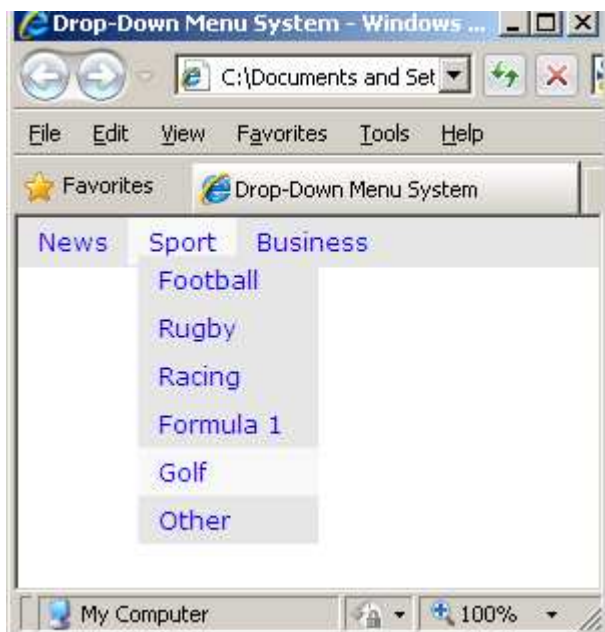
```
#menu li:hover {
  background-color: #f8f8f8; /* very light gray */
}
```



We would like the clickable area to extend the full width of the drop-down element.

```
#menu ul ul li a {
  width: 70px; /* sets width of clickable area */
  display: block; /* restores block element */
}
```

The actual width, *70px*, is set by trial and error.



Here is the entire css file.

```

/* menu.css */

* {
padding: 0; /* resets all margins, padding, borders, ... */
margin: 0;
border: 0;
outline: none;
}

body {
font: 12px Verdana, Arial, sans-serif;
}

#menu {
height: 25px; /* sets menu bar height */
background-color: #e6e6e6; /* light gray */
}

#menu li {
position: relative; /* used with position absolute below */
float: left; /* presents list items horizontally */
list-style: none; /* removes list element markers */
white-space: nowrap; /* prevents unwanted line breaks */
padding: 5px 5px; /* pads each list item */
}

#menu ul ul {
position: absolute; /* removes sub menu from normal flow */
visibility: hidden; /* hides the sub menu */
background-color: #e6e6e6; /* light gray */
}

#menu li a {
text-decoration: none; /* removes the underlines */
padding: 0px 5px;
color: blue;
}

```

```

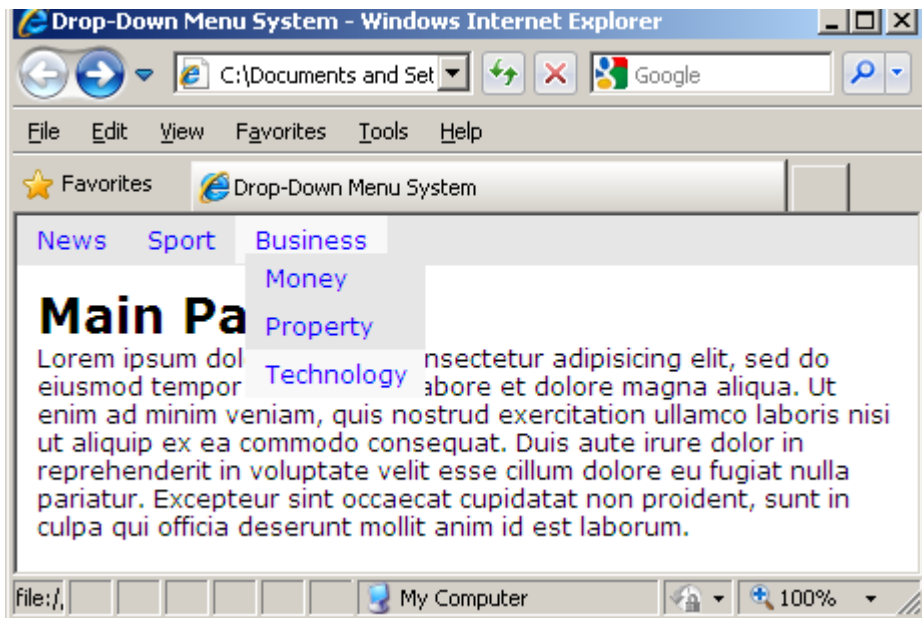
#menu ul li:hover ul {
  visibility: visible; /* displays the sub menu */
}

#menu li:hover {
  background-color: #f8f8f8; /* very light gray */
}

#menu ul ul li a {
  width: 70px; /* sets width of clickable area on drop down menu
               elements */
  display: block;
}

#news {
  clear: both;
  margin: 5px;
  padding: 5px;
}

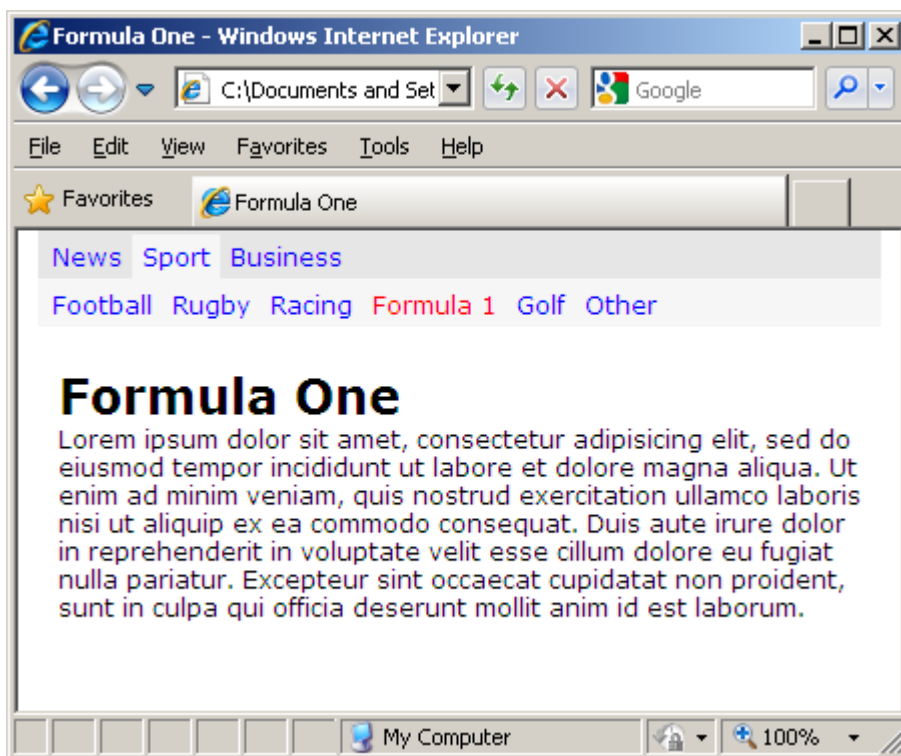
```



A problem with drop down menus is that they obscure material beneath them. A better idea might be to have horizontal sub menus

4.2 Horizontal Menu

With a horizontal menu system we have a horizontal main menu and a horizontal sub menu.



Here, the *Sport* sub menu is shown and *Formula 1* is selected.

HTML

We use HTML lists for both the main menu and a sub menu. Each sub menu is on its own page.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Local News</title>
<link rel="stylesheet" href="hmenu.css" media="screen">
</head>
<body>
<div id="menu">
<ul id="mainmenu">
<li class="here"><a href="localnews.html">News</a></li>
<li><a href="football.html">Sport</a></li>
<li><a href="money.html">Business</a></li>
</ul>

<ul id="submenu">
<li class="here"><a href="localnews.html">Local</a></li>
<li><a href="uknews.html">UK</a></li>
<li><a href="worldnews.html">World</a></li>
</ul>
</div>
```

```

<div id="news">
<h1>Local News</h1>
<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>
</div>

</body>
</html>

```

CSS

The style sheet is also straightforward. We present it without comment.

```

/* hmenu.css */

* {
padding: 0; /* resets all margins, padding, borders, ... */
margin: 0;
border: 0;
outline: none;
}

body {
font: 12px Verdana, Arial, sans-serif;
}

#menu {
margin: 0 10px;
}

#mainmenu {
height: 20px;
background: #e6e6e6; /* light gray */
padding: 2px;
}

#submenu {
height: 20px;
background: #f6f6f6; /* very light gray */
padding: 2px;
}

.here {
background: #f6f6f6; /* very light gray */
}

#mainmenu li, #submenu li {
float: left;
list-style: none;
padding: 4px 5px;
}

```

```
#mainmenu li a, #submenu li a {
  color: blue;
  background: transparent;
  text-decoration: none;
}

#submenu li.here a {
  color: red;
  background: transparent;
}

#mainmenu li:hover, #submenu li:hover {
  text-decoration: underline;
  color: blue;
  background: #f6f6f6;
}

#news {
  clear: both;
  margin: 10px;
  padding: 10px;
}
```

I suppose the main point regarding JavaScript is that if you can manage without it, do so. Users are more likely to switch off JavaScript on their computers than style sheets.

Bibliography

Briggs O et al *Cascading Style Sheets* Apress 2004
Williams A *Implementing Drop-downMenus in Pure CSS*
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bbc.co.uk/news accessed July 2011