CGS 3175: Internet Applications
Fall 2007

Web Page Layouts - Part 3

Instructor : Dr. Mark Llewellyn
markl@cs.ucf.edu
HEC 236, 407-823-2790
http://www.cs.ucf.edu/courses/cgs3175/fall2007

School of Electrical Engineering and Computer Science
University of Central Florida

Things to Try Yourself (From Part 2)

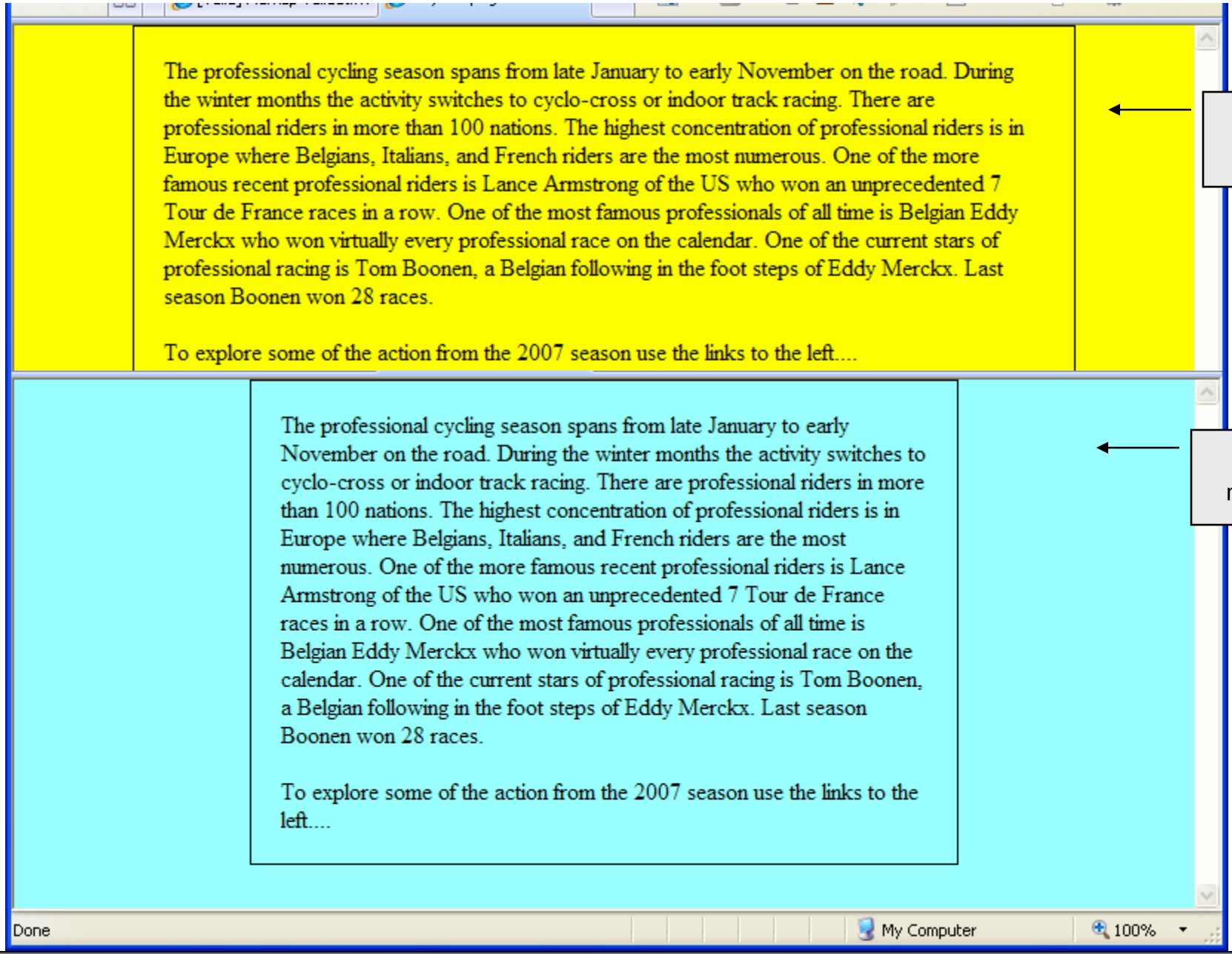
14. Using CSS properties figure out how to create a "jello" page with the text area centered with blank areas on either side.

Solution: This is fairly straight-forward to do using CSS-P. What you need to do is configure the margins on the `<body>` element. It is easiest to configure the left and right margins to the same percentage (a true "jello" page). This will cause the page content to center automatically with blank areas on either side of the browser window. Margins can be set for each side individually using the `margin-top`, `margin-right`, `margin-bottom`, and `margin-left` properties. (Remember that there is also a short-hand version to set all four values in one `margin` property.) For a true "jello" page set the top and bottom margins to 0 pixels and the left and right to the same percentage – commonly this would be around 10% as follows:

```
body {  margin: 0px 10% 0px 10%
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <title>A "jello" page</title>
  <style type="text/css">
     <!--
        body { margin:0px 10% 0px 10%;
               background-color:yellow;
               text:black;
               border: 1px solid black;
               padding: 20px;
        }
     -->
  </style>
</head>

<body>
  <div>
  <p>The professional cycling season spans from late January to early November on the road.  During the
winter months
      the activity switches to cyclo-cross or indoor track racing.  There are professional riders in more
than 100 nations.  The highest concentration of
      professional riders is in Europe where Belgians, Italians, and French riders are the most numerous.
One of the more famous
      recent professional riders is Lance Armstrong of the US who won an unprecedented 7 Tour de France races
in a row.  One of the most famous
      professionals of all time is Belgian Eddy Merckx who won virtually every professional race on the
calendar.
      One of the current stars of professional racing is Tom Boonen, a Belgian following in the foot steps of
Eddy Merckx.  Last season Boonen won
      28 races.</p>
  <p>To explore some of the action from the 2007 season use the links to the left....</p>
  </div>
</body>
</html>
```


The professional cycling season spans from late January to early November on the road. During the winter months the activity switches to cyclo-cross or indoor track racing. There are professional riders in more than 100 nations. The highest concentration of professional riders is in Europe where Belgians, Italians, and French riders are the most numerous. One of the more famous recent professional riders is Lance Armstrong of the US who won an unprecedented 7 Tour de France races in a row. One of the most famous professionals of all time is Belgian Eddy Merckx who won virtually every professional race on the calendar. One of the current stars of professional racing is Tom Boonen, a Belgian following in the foot steps of Eddy Merckx. Last season Boonen won 28 races.
To explore some of the action from the 2007 season use the links to the left....
10% margin
The professional cycling season spans from late January to early November on the road. During the winter months the activity switches to cyclo-cross or indoor track racing. There are professional riders in more than 100 nations. The highest concentration of professional riders is in Europe where Belgians, Italians, and French riders are the most numerous. One of the more famous recent professional riders is Lance Armstrong of the US who won an unprecedented 7 Tour de France races in a row. One of the most famous professionals of all time is Belgian Eddy Merckx who won virtually every professional race on the calendar. One of the current stars of professional racing is Tom Boonen, a Belgian following in the foot steps of Eddy Merckx. Last season Boonen won 28 races.
To explore some of the action from the 2007 season use the links to the left....
20% margin
Done
My Computer
100%

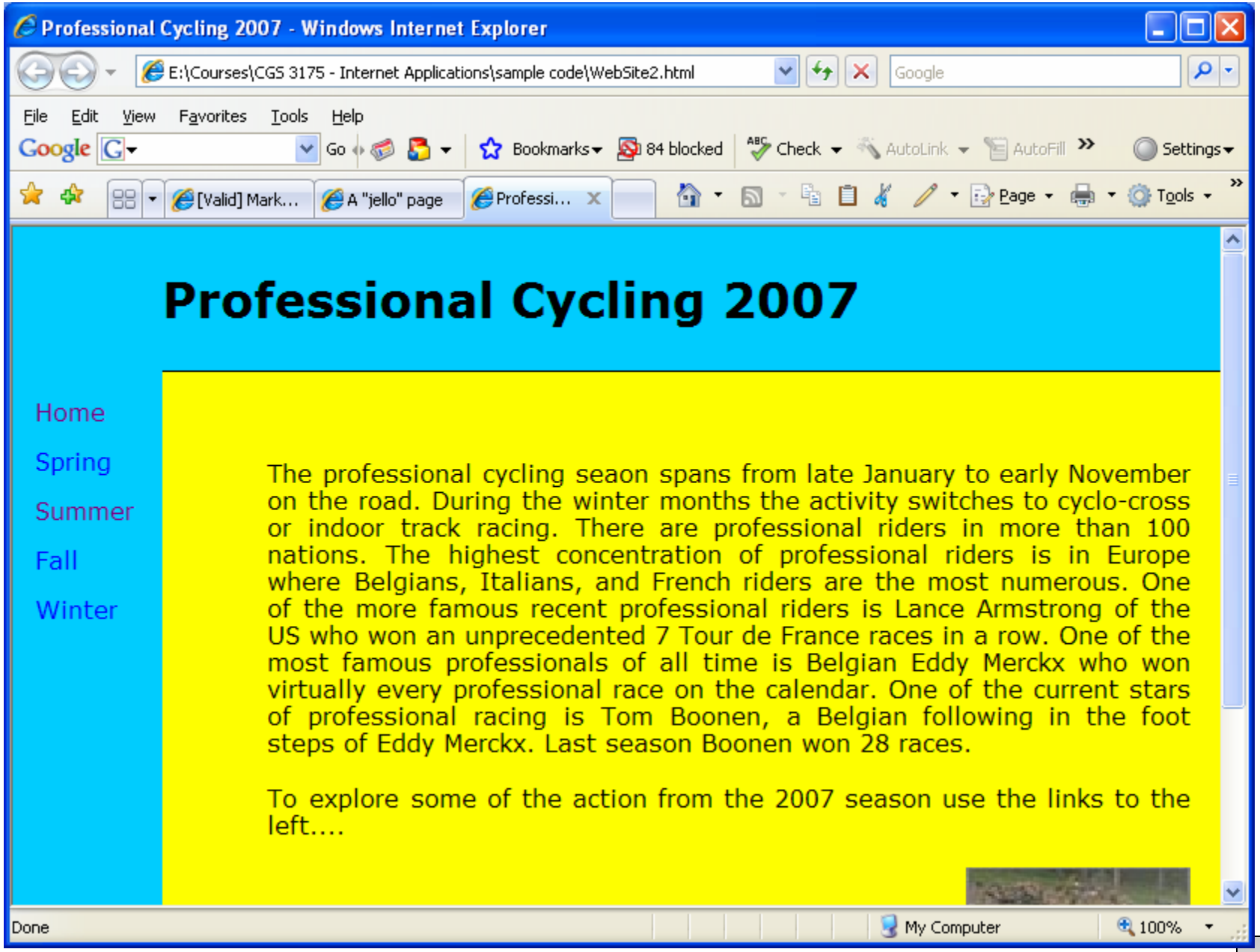
Things to Try Yourself (From Part 2)

15. Using the CSS we just created for content page WebSite2.html, add a background color or image to the right column.

    To add a color background:

    – Modify the CSS code for the `rightcolumn` id to:

```
#rightcolumn {
        background-color:yellow;
}
```

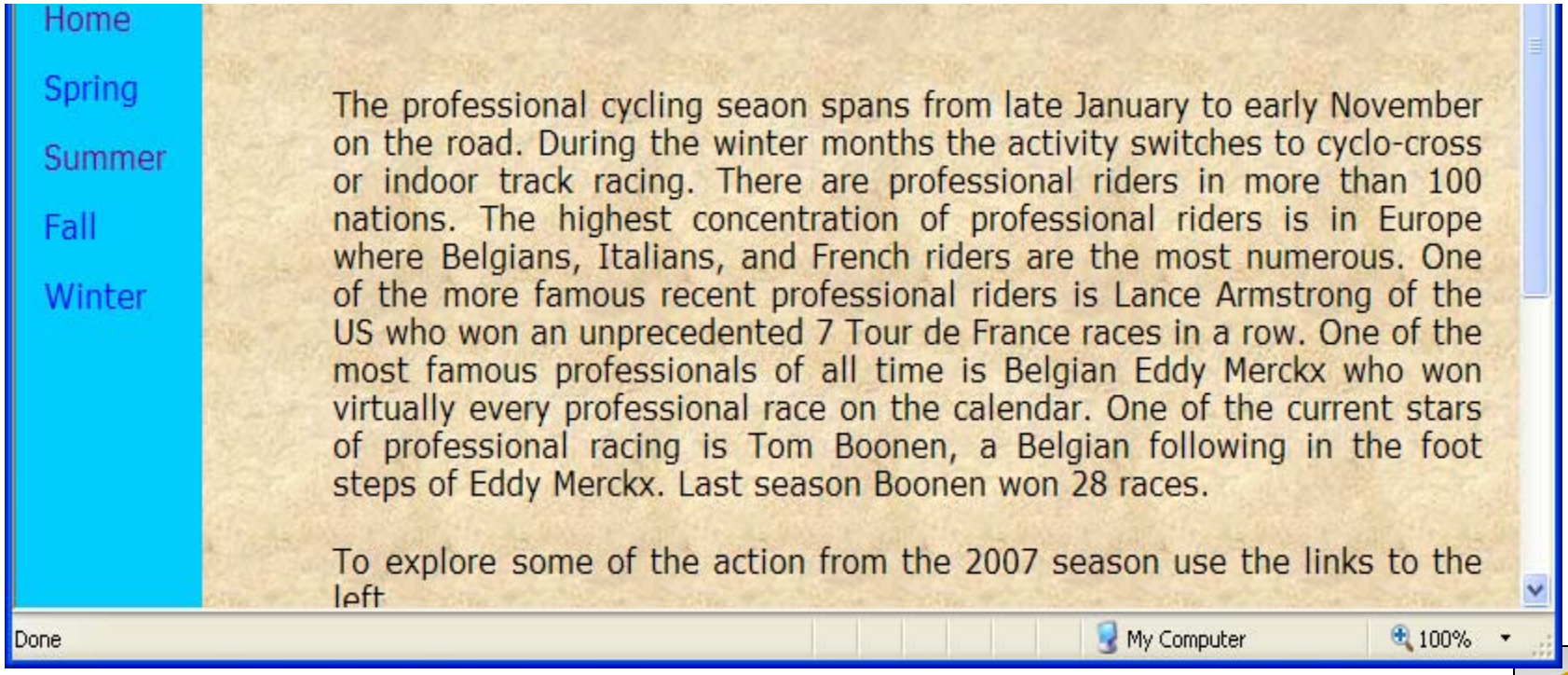

Professional Cycling 2007 - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\WebSite2.html
Google
File Edit View Favorites Tools Help
Bookmarks 84 blocked Check AutoLink AutoFill Settings
[Valid] Mark... A "jello" page Professi...
Page Tools
Professional Cycling 2007
Home
Spring
Summer
Fall
Winter
The professional cycling seaon spans from late January to early November on the road. During the winter months the activity switches to cyclo-cross or indoor track racing. There are professional riders in more than 100 nations. The highest concentration of professional riders is in Europe where Belgians, Italians, and French riders are the most numerous. One of the more famous recent professional riders is Lance Armstrong of the US who won an unprecedented 7 Tour de France races in a row. One of the most famous professionals of all time is Belgian Eddy Merckx who won virtually every professional race on the calendar. One of the current stars of professional racing is Tom Boonen, a Belgian following in the foot steps of Eddy Merckx. Last season Boonen won 28 races.
To explore some of the action from the 2007 season use the links to the left....
Done
My Computer
100%

Things to Try Yourself (From Part 2)

To add a background image:

– Modify the CSS code for the `rightcolumn` id to:

```
#rightcolumn {
                background-image:url(backgroundimage.jpg);
                background-repeat:repeat; }
```



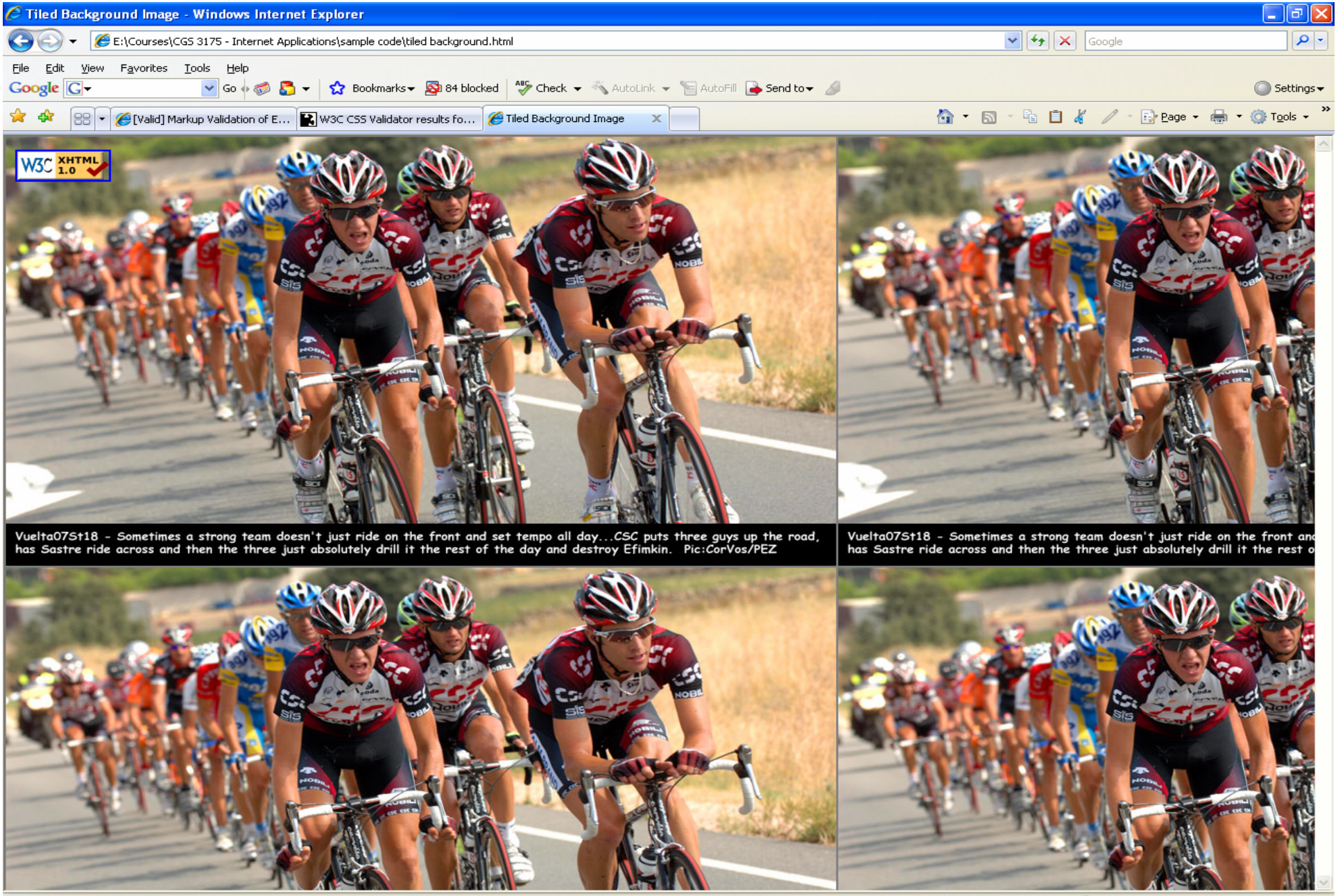
Things to Try Yourself (From Part 2)

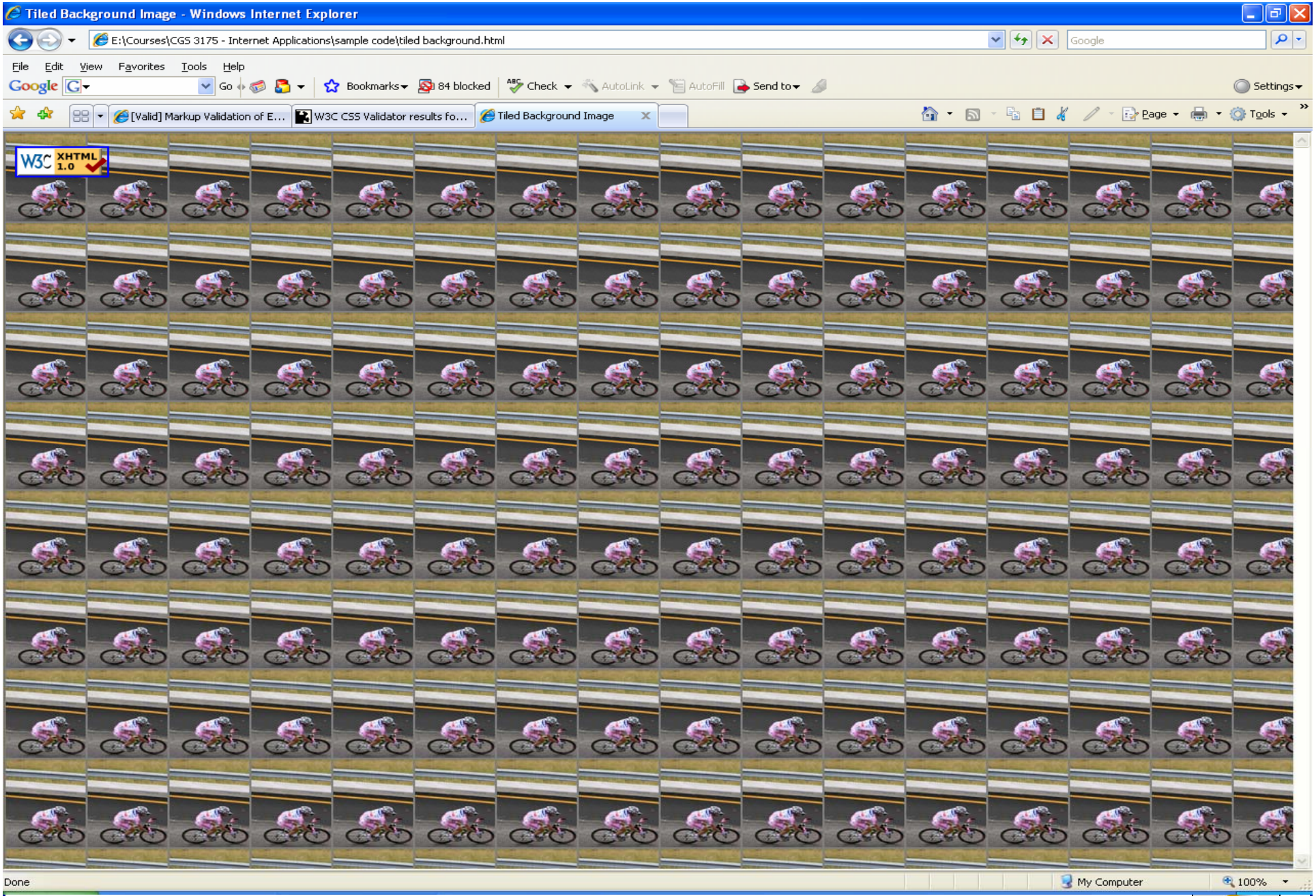
16. Using CSS, create a screen that uses a tiled background image. Try different size images to see different effects.

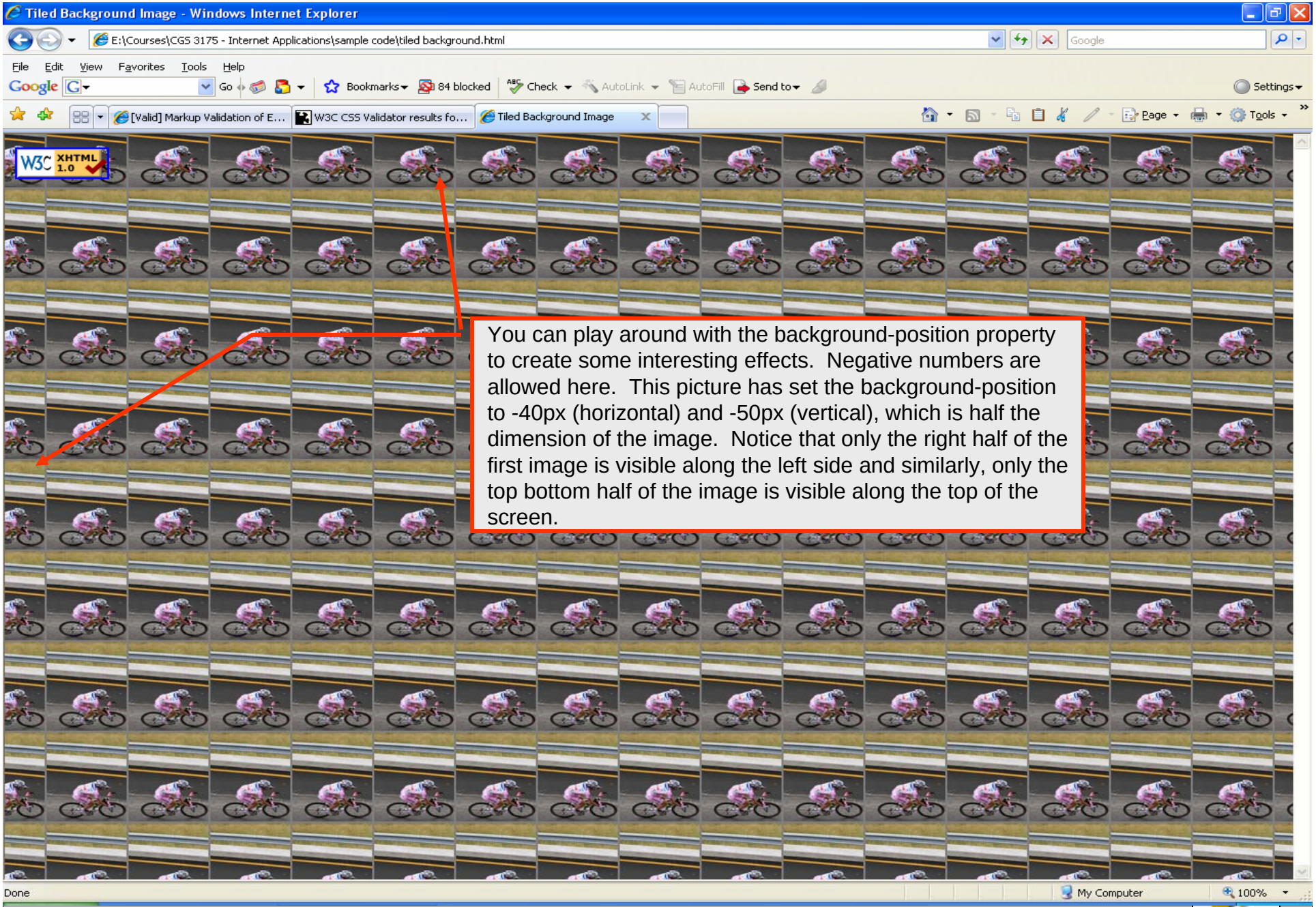
    The code on the next page is an XHTML document that you can use to play around with this. The screen shots on the subsequent two pages show the effects of tiling a relatively large and relatively small image.

Things to Try Yourself (From Part 2)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
   <head>
     <title>Tiled Background Image </title>
     <style type="text/css">
     <!--
        body { background-image:url(vuelta07-1.jpg);
               background-repeat:repeat;
               background-color:black;
        }
      -->
    </style>
   </head>
   <body>
        <p>
         <a href="http://validator.w3.org/check?uri=referer"><img
          src="http://www.w3.org/Icons/valid-xhtml10"
          alt="Valid XHTML 1.0 Strict" height="31" width="88" /></a>
        </p>
   </body>
</html>
```


Tiled Background Image - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\tiled background.html
Google
File Edit View Favorites Tools Help
Bookmarks 84 blocked Check AutoLink AutoFill Send to Settings
[Valid] Markup Validation of E...
W3C CSS Validator results fo...
Tiled Background Image
Page Tools
W3C XHTML 1.0
Vuelta07St18 - Sometimes a strong team doesn't just ride on the front and set tempo all day...CSC puts three guys up the road, has Sastre ride across and then the three just absolutely drill it the rest of the day and destroy Efimkin. Pic:CorVos/PEZ
Vuelta07St18 - Sometimes a strong team doesn't just ride on the front an
has Sastre ride across and then the three just absolutely drill it the rest o
Done
My Computer
100%


Tiled Background Image - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\tiled background.html
Google
File Edit View Favorites Tools Help
Bookmarks 84 blocked Check AutoLink AutoFill Send to Settings
[Valid] Markup Validation of E...
W3C CSS Validator results fo...
Tiled Background Image
Page Tools
W3C XHTML 1.0
Done
My Computer
100%


Tiled Background Image - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\tiled background.html
File Edit View Favorites Tools Help
[Valid] Markup Validation of E...
W3C CSS Validator results fo...
Tiled Background Image
W3C XHTML 1.0
You can play around with the background-position property to create some interesting effects. Negative numbers are allowed here. This picture has set the background-position to -40px (horizontal) and -50px (vertical), which is half the dimension of the image. Notice that only the right half of the first image is visible along the left side and similarly, only the top bottom half of the image is visible along the top of the screen.
Done
My Computer
100%

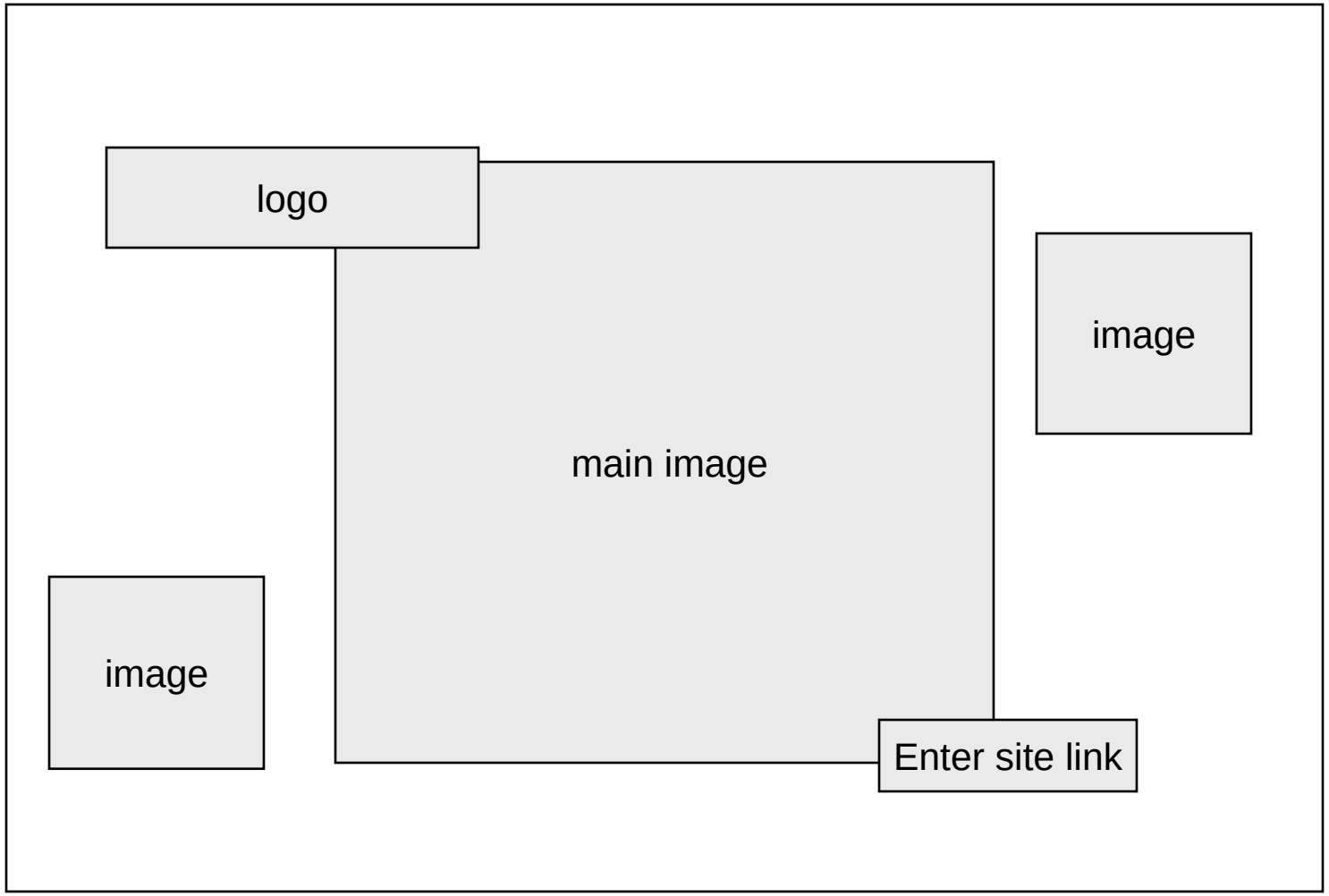
Web Page Layout – Example 3

- We've previously designed two different Web sites containing a splash page and a single content page. The content of the two Web sites was essentially the same, with some difference in the images used, but the presentation was considerably different.
- The differences in presentation were entirely done in CSS. We did not alter in any significant way the content that was included in the Web site, just the way it was presented.
- Example 1 rendered the content page as essentially a single block.
- Example 2 rendered the content page in a two-column format.
- You want to make certain that you clearly understand how CSS was used to render these differences in the style of presentation **and** be able to do the same yourself.

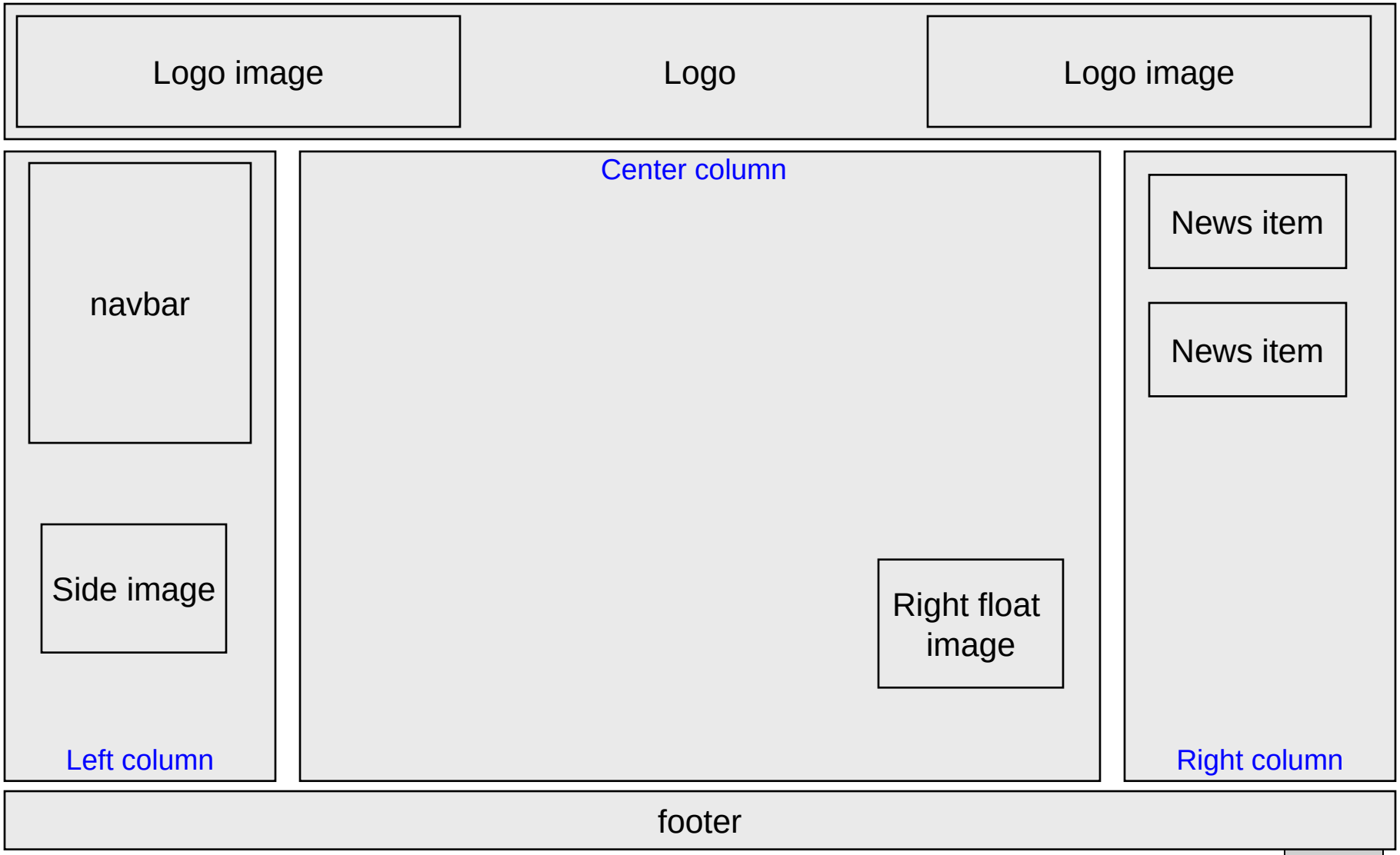
Web Page Layout – Example 3

- For this last example, we'll proceed in much the same fashion, although I will not focus on as many of the details as before, so you'll need to examine both the XHTML and the CSS documents more carefully to understand how things are laid out and implemented.
- We'll use the same basic content as with the two previous examples, but in this case use a three-column layout for the content page.
- The storyboards for our final example are shown on the next two pages.

Storyboarding The Splash Page



Storyboarding The Content Page



The XHTML Document For The Splash Page

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <title>Professional Cycling</title>
   <link rel="stylesheet" href="splash3.css" type="text/css" />
</head>
<body>
  <div id="splashlogo">
   <h1>Professional Cycling 2007</h1>
  </div>
  <div id="image1">
     <img src="romandie07-1.jpg" alt+"Tour de Romandie in the rain 2007" height="200"
width="200" />
  </div>
  <div id="centerblock">
    <img src="mistyday.jpg" alt="Criterium Internationale 2007" height="600" width="700" />
  </div>
  <div id="image2">
    <img src="diluca giro.jpg" alt="Danielo DiLuca in the 2007 Giro d'Italia" height="200"
width="200" />
  </div>
  <div id="enter">
     <a href="WebSite2.html"> Enter Site </a>
  </div>
</body>
</html>
```

Don't forget to validate!

The CSS Document For The Splash Page

```
/* Pro Cycling - Splash Page Style Sheet #3 */
/* MJL - October 2007      */
body { background-color:gray;
}
#image1 {position:absolute;
         left:20px;
         top:450px;
}
#image2 {position:absolute;
         left:980px;
         top:130px;
}
#centerblock {background-color:gray;
              background-position: center center;
              background:no-repeat;
              position: fixed; top:100px; left:250px;
}
#splashlogo {background-color:#33CCFF;
             padding:5px;
             color: #000000;
             position:absolute;
             top:50px;
             left:100px;
             border: 1px solid #000000;
}
#enter {position:absolute;
        background-color: #33CCFF;
        padding:5px;
        left:920px;
        top:675px;
        font-family:Verdana,sans-serif;
            border: 1px solid #000000;
}
```

Don't forget to validate!

Professional Cycling - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\splash3.html
Google
File Edit View Favorites Tools Help
Bookmarks 84 blocked Check AutoLink AutoFill Send to Settings
Professional Cycling
[Valid] Markup Validation of E...
W3C CSS Validator results fo...
Professional Cycling 2007
Page Tools
Professional Cycling 2007
Enter Site
Done
My Computer
100%

The XHTML Document For The Content Page

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Professional Cycling 2007</title>
<!-- this is the three-column version of the  Pro Cycling Website -->
<link rel="stylesheet" href="procyclingstyles-3col.css" type="text/css" />
</head>

<body>
<!--- logo area  --->
  <div id="logo">
     <img class="logoimage" src="petacchi.jpg"  alt="Alessandro Petacchi
winning a sprint" />
      Professional Cycling 2007
     <img class="logoimage" src="petacchi.jpg"  alt="Alessandro Petacchi
winning a sprint" />
  </div>
```

The XHTML Document For The Content Page

```
  <!--- left column elements: navigation area and image --->
  <div id="left">
     <ul class="navBar">
       <li><a class="navBar" href="WebSite3.html">Home</a></li>
       <li><a class="navBar" href="spring.html">Spring</a></li>
       <li><a class="navBar" href="summer.html">Summer</a></li>
       <li><a class="navBar" href="fall.html">Fall</a></li>
       <li><a class="navBar" href="winter.html">Winter</a></li>
    </ul>
    <div id="navbox"></div>
    <img class="sideimages" src="diluca07-1.jpg" width="150" height="150"
alt="Daniel diLuca - 2007 Giro d'Italia" />
  </div>
```

The XHTML Document

```
<!--= right column:  includes two news items --->
  <div id="right">
    <h4>Procycling News</h4>
       <p class="newsitem">The latest news from the world of professional
cycling updated daily is available at: <a
href="http://www.cyclingnews.com">ProCycling News</a>.</p>
       <h4>USA Cycling</h4>
       <div></div>
      <p class="newsitem">To find out more about bicycle racing in the United
States visit USA Cycling at: <a href="http://www.usacycling.org"> USA Cycling
</a>.</p>
  </div>
```

The XHTML Document

```
<!--- center column – includes main content and right floated image --->
  <div id="center">
   <p>The professional cycling seaon spans from late January to early
November on the road.  During the winter months
      the activity switches to cyclo-cross or indoor track racing.  There are
professional riders in more than 100 nations.  The highest concentration of
      professional riders is in Europe where Belgians, Italians, and French
riders are the most numerous.  One of the more famous
      recent professional riders is Lance Armstrong of the US who won an
unprecedented 7 Tour de France races in a row.  One of the most famous
      professionals of all time is Belgian Eddy Merckx who won virtually
every professional race on the calendar.
      One of the current stars of professional racing is Tom Boonen, a
Belgian following in the foot steps of Eddy Merckx.  Last season Boonen won
      28 races.</p>
  <h3>To explore some of the action from the 2007 season use the links to the
left....</h3>
    <img src="peloton1.jpg" width="200" height="150" alt="The pro peloton in
the 2007 Tour de France" id="floatright" />
```

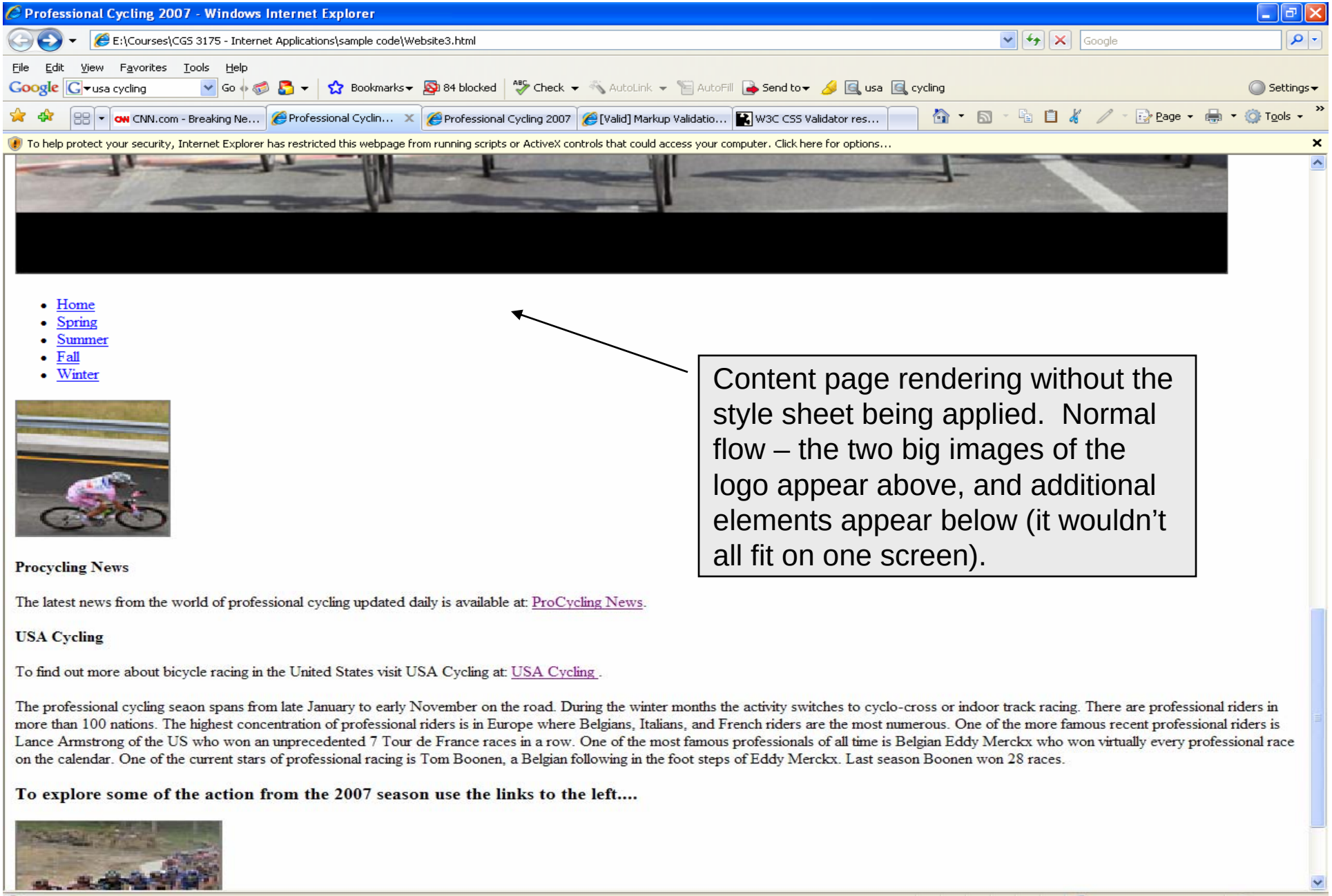
The XHTML Document

```
<!--- footer area – note it is outside of all column areas --->
<div class="footer">Copyright &copy; 2007 Professional Cycling Fan Club  <br
/>
      Last Updated on 10/18/2007

    <div>
    <a href="http://validator.w3.org/check?uri=referer"><img
        src="http://www.w3.org/Icons/valid-xhtml10"
        alt="Valid XHTML 1.0 Strict" height="31" width="88" /></a>
    </div>

   </div>
</body>
</html>
```

Don't forget to validate!



Content page rendering without the style sheet being applied. Normal flow – the two big images of the logo appear above, and additional elements appear below (it wouldn't all fit on one screen).

The External CSS Document

```
/* Procyling Style Sheet - 3-column version */

body {margin:0px;
     font-family:Verdana, Arial, sans-serif;
     background-color:#ffffff;
     color:#006600;
/*     scrollbar-face-color:#cc66cc;
     scrollbar-arrow-color:#006600;
     scrollbar-track-color:#cccccc; */
}

.logoimage {height:150px;
            width:385px;
}

#logo{ color: black;
       background-color:#eeeeee;
       font-size:xx-large;
       font-weight:bold;
       border-bottom: 1px solid #000000;
       height:150px;
       background-image:url(backgroundimage.jpg);
}
```

Providing the background texture between the pictures.

The External CSS Document

```
#left { float:left;
         width:150px;
         height:400px;
         border-top: 1px solid #000000;
        background-color:#eeeeee;
        color:#006600;
}

#right{float:right;
      width:200px;
      background-color:#eeeeee;
      color:#006600;
      border-top: 1px solid #000000;
      height:400px
}

#center {padding:10px 230px 30px 200px;
         border-top: 1px solid #000000;
         color:black;
}

.footer {font-size:xx-small;
         text-align:center;
          clear:both;
}
```

The External CSS Document

```
#navbox { left:0px;
          height:100px;
          clear: both;
}

.navBar{text-decoration:none;
         font-size:large;
        padding:3px;
         margin: 15px;
        list-style-type:none;
        line-height:2;
}

a.navBar:link {color:#006600;
         background-color:#EEEEEE;
}
a.navBar:visited {color:#003300;
         background-color:#EEEEEE;
}
a.navBar:hover {color:#cc66cc;
         background-color:#EEEEEE;
}
.sideimages {margin:0px;
}
```

One of the advantages of using CSS for page layout involves the use of semantically correct code. Writing semantically correct does means using the markup tag that most accurately reflects the purpose of the content. Using the various levels of heading tags for content headings and subheadings, or placing paragraphs of text within paragraph tags (rather than using line breaks) are examples of writing semantically correct code.

This type of coding is a step in the direction to support the Semantic Web. Leading Web developers have promoted the idea of using unordered lists to configure navigation menus. After all – a navigation menu is a list of links – semantically speaking it's a much better fit than coding links in separate paragraphs of using the `display:block` property on `anchor` tags.

So, for this CSS sheet we've styled the navigation menu as an unordered list. You should get in the habit of coding all of your navigation menus in this fashion.

The External CSS Document

```
p { margin:20px 20px 20px 20px;
    text-align:justify;
}

h3 {padding-left:20px;
    color:#cc66cc;
    background-color:#ffffff;
}
#floatright {margin:10px;
             float:right;
}

h4 {padding-bottom: 2px;
    border-bottom:1px solid #000000;
    font-size: medium;
    margin:10px;
    color:#cc66cc;
    background-color:#eeeeee;
}
.newsitem {font-size:small;
           margin:10px;
}
```

Don't forget to validate!

Professional Cycling 2007 - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\Website3.html
Professional Cycling 2007
Home
Spring
Summer
Fall
Winter
The professional cycling seaon spans from late January to early November on the road. During the winter months the activity switches to cyclo-cross or indoor track racing. There are professional riders in more than 100 nations. The highest concentration of professional riders is in Europe where Belgians, Italians, and French riders are the most numerous. One of the more famous recent professional riders is Lance Armstrong of the US who won an unprecedented 7 Tour de France races in a row. One of the most famous professionals of all time is Belgian Eddy Merckx who won virtually every professional race on the calendar. One of the current stars of professional racing is Tom Boonen, a Belgian following in the foot steps of Eddy Merckx. Last season Boonen won 28 races.
To explore some of the action from the 2007 season use the links to the left....
Procycling News
The latest news from the world of professional cycling updated daily is available at: ProCycling News.
USA Cycling
To find out more about bicycle racing in the United States visit USA Cycling at: USA Cycling .
Copyright © 2007 Professional Cycling Fan Club
Last Updated on 10/18/2007
XHTML 1.0
Done
My Computer
100%

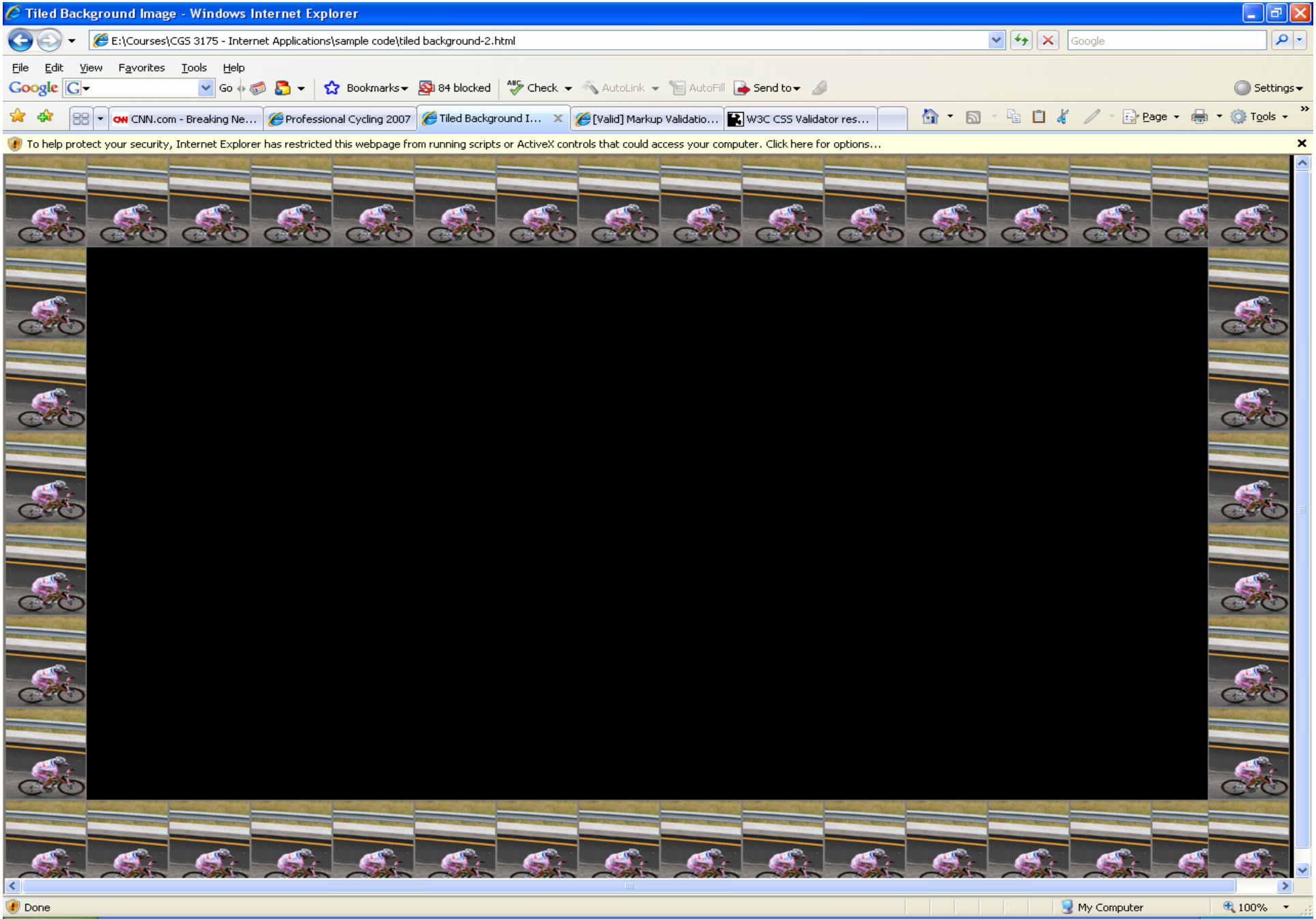
Things to Try Yourself

17. What happens if the CSS for WebSite3 (in this set of notes) is modified as follows:

```
#floatright {margin:10px;
             clear: both;  <!--- new property added --->
             float:right;

 }
```

18. See if you can create a screen that looks like the one on the following page.


Tiled Background Image - Windows Internet Explorer
E:\Courses\CGS 3175 - Internet Applications\sample code\tiled background-2.html
File Edit View Favorites Tools Help
To help protect your security, Internet Explorer has restricted this webpage from running scripts or ActiveX controls that could access your computer. Click here for options...
Done
My Computer
100%