

CGS 3175: Internet Applications Fall 2007

Web Page Layouts - Part 2

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



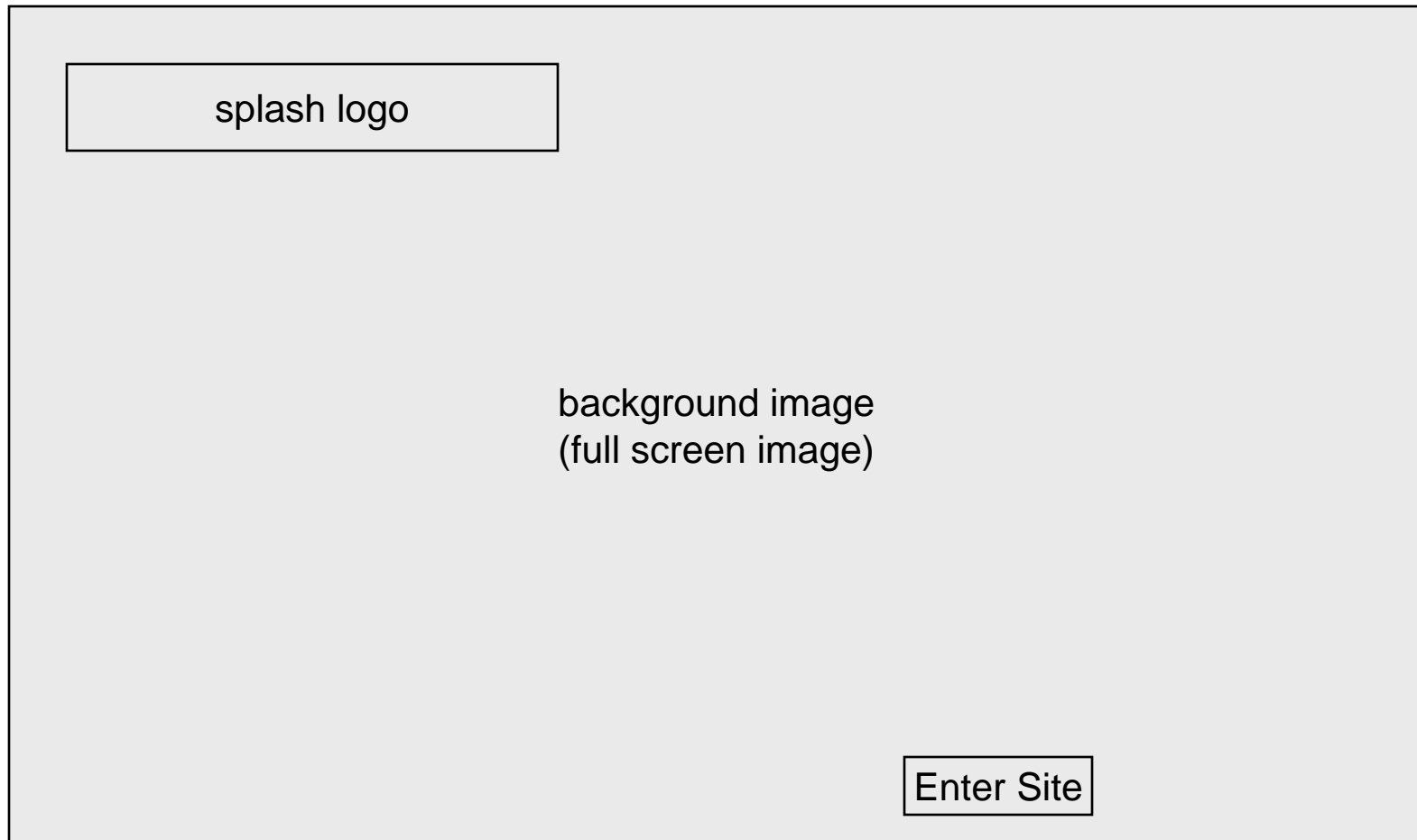
Web Page Layout – Example 2

- In the previous set of notes, we constructed a Web site consisting of a splash page and a single content page.
- In this set of notes we'll construct another Web site using the same basic design of a splash page and a single content page but use CSS to change the layout for the content page.
- We'll also design a new splash page just to illustrate some additional features of CSS.
- The content page will feature a two-column layout, which is a common design for a Web page, where the left column is used for navigation and the right column for the logo and content.
- As before, we'll storyboard both pages of the layout.



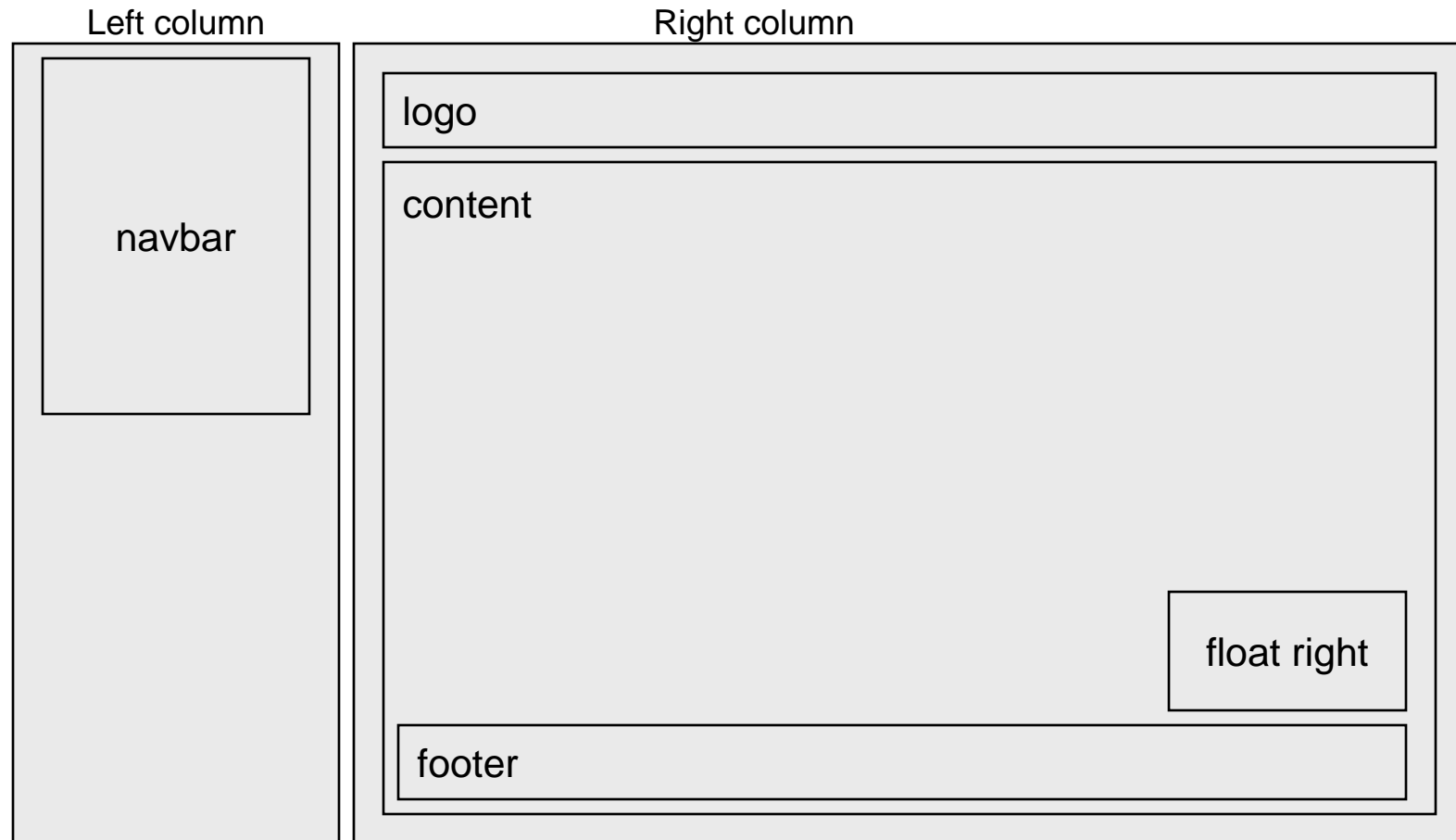
Step 1: Storyboarding The Splash Page

- The first step is to storyboard the splash page.



Step 2: Storyboarding The Content Page

- The second step is to storyboard the content page.



Step 3: Code The XHTML Document

- Once the layout for the splash page is created and you know what elements will appear on the page, its time to code the XHTML document that will allow the browser to render the elements on the splash page.
- The main difference between the new splash page and the one from Example 1 is that the new one uses a full screen background image rather than the three smaller images. Otherwise, the content of the new splash page is the same as for the previous one consisting of a background image, the splash logo and a link to enter the rest of the Web site.
- Start with our basic XHTML document template and save it with the new name of `splash2.html`.



Step 3: Code The XHTML Document

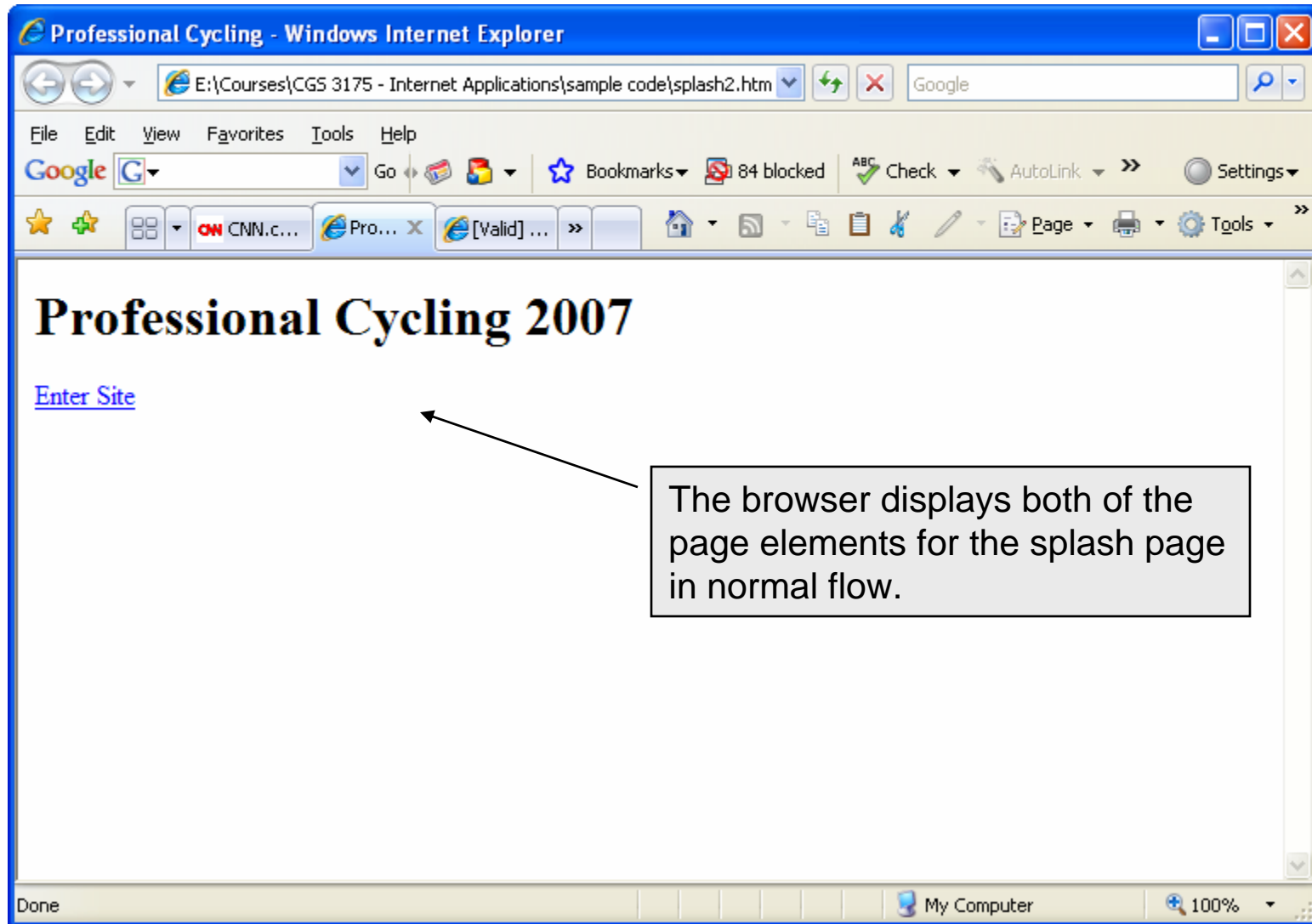
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">

<head>
    <title>Professional Cycling</title>
</head>
<body>
    <div id="splashlogo">
        <h1>Professional Cycling 2007</h1>
    </div>
    <div id="enter">
        <a href="WebSite2.html"> Enter Site </a>
    </div>
</body>
</html>
```

Notice that the XHTML document does not mention the image that we will use as the background for the splash page. This is because the image will apply to the <body> element, i.e., the entire body of the document, so it will be defined in the CSS document.



Step 3: The XHTML Document - Rendering



Step 4: Code The CSS Document

- Now that we've successfully created the XHTML document and have verified its correctness (don't forget the validation step!), we now need to focus on creating the external style sheet that will format the page layout we originally planned on the storyboard.
- We'll call the external CSS `splash2.css`.
- We are basically reusing the splash logo and enter link from the previous version, so the main difference is the background image.
- You can refer to the CSS Reference Manual notes for more specific details on background images, but most of the important ones will appear in this CSS document.
- The important thing to remember about setting the background image is that it will apply to the entire element to which it is attached. Since we want a full screen background image on our splash page, we'll apply the background image to the `<body>` element of the splash XHTML document.



Step 4: Code The CSS Document

- Focusing on the new component (the background image) Let's focus on the new component:

```
body{ background-image:url(petacchi.jpg);  
      background-position: center center;  
      background-repeat:no-repeat;  
      background-color:#000000;  
}
```

- The background image is set using the `background-image` property in CSS. Notice that the URL of the image is specified without using quote marks. The `background-position` property sets the horizontal and vertical position of the image, in this case using the text values `center`. The `background-repeat` property is used to tile images, in this case no tiling (repetition) occurs.



Step 4: The CSS Document

```
/* Pro Cycling - Splash Page Style Sheet #2 */
/* MJL - October 2007 */

body{ background-image:url(petacchi.jpg);
      background-position:center center;
      background-repeat:no-repeat;
      background-color:#000000;
}

#splashlogo {background-color:#33CCFF;
             padding:5px;
             color: #000000;
             position:absolute;
             z-index:4;
             top:50px;
             left:100px;
             border: 1px solid #000000;
}

#enter {position:absolute;
        background-color: #33CCFF;
        padding:5px;
        z-index:5;
        left:800px;
        top:750px;
        font-family:Verdana,sans-serif;
        border: 1px solid #000000;
}
```



Step 4: Modify The XHTML Document

```
<?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="splash2.css" type="text/css" />
</head>

<body>
  <div id="splashlogo">
    <h1>Professional Cycling 2007</h1>
  </div>
  <div id="enter">
    <a href="WebSite2.html"> Enter Site </a>
  </div>
</body>
</html>
```

Modify the XHTML document (if you haven't already done it) to link to the external CSS document we just created.



Professional Cycling - Windows Internet Explorer

E:\Courses\CGS 3175 - Internet Applications\sample code\plash2.html

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Professional Cycling 2007



Enter Site

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Step 5: Code The XHTML Content Document

- Using the storyboard for the content page, its time to code the XHTML document that will allow the browser to render the elements on the content page.
- Again, start with our basic XHTML document template and add the necessary page elements to create a new XHTML document called `WebSite2.html`.
- The page elements for this XHTML document consist of the left column, right column, logo, navigation bar, content area, a right-floating image, and a footer.
- As we did in Example 1, each of these page elements will be coded to use ids and classes in CSS which will configure a number of properties for the various elements, including the padding, border, font-family, and so on.



Step 5: Code The XHTML Document

- Starting from the template document – the first thing you probably want to do is create the left and right columns:

```
<div id="leftcolumn">  
</div>  
<div id="rightcolumn">  
</div>
```

- Notice that there really isn't much to do with creating the columns as far as the XHTML is concerned. Most of the column definition is in the CSS document.
- However, notice that both the left and right columns contain nested boxes. The left column contains the navigation bar, and the right column contains several boxes: the logo, content, footer, and right floating image. Since these are nested boxes, both the left and right column `<div>` tags will include nested `<div>` tags for the elements belonging to that column.
- Let's modify the left column first to include the navigation bar.



Step 5: Code The XHTML Document

```
<div id="leftcolumn">
  <div class="navBar">
    <a class="nav" href="WebSite2.html">Home </a>
    <a class="nav" href="Spring.html">Spring </a>
    <a class="nav" href="Summer.html">Summer </a>
    <a class="nav" href="Fall.html"> Fall </a>
    <a class="nav" href="Winter.html">Winter </a>
  </div> <!-- end navBar div element -->
</div> <!-- end leftcolumn div element -->
```



Step 5: Code The XHTML Document

- Next, we'll add the page elements to the right column in a similar fashion.

```
<div id="rightcolumn">
  <div id="logo">
    <h1> Professional Cycling 2007 </h1>
  </div>
  <div class="content">
    <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>Explore some of the action from the 2007 season....</p>
    
    <div class="footer">
      Copyright &copy; 2007 Professional Cycling Fan Club<br />
      Last Updated on 10/16/2007
    </div>
  </div>
</div>
```



Professional Cycling 2007 - Windows Internet Explorer

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Home
Spring
Summer
Fall
Winter

Professional Cycling 2007

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.

Explore some of the action from the 2007 season....



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All of our page elements are rendered in normal flow since the style sheet has not yet been created to deal with the presentation. Thus, we don't see the columns yet.



Step 5: Code The Content Page

- Finally, let's add the footer area to the content page.

```
<div class="footer">  
Copyright &copy; 2007 Professional Cycling Fan Club<br />  
Last Updated on 10/11/2007  
</div>
```

- Again you might check the content when viewed through a browser (see the next page). Remember that it is as yet unformatted.



Step 5: Final XHTML Document

```
<?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>
<!--
    <link rel="stylesheet" href="procylingstyles-2col.css" type="text/css" />
-->
</head>
<body>
<div id="leftcolumn">
    <div id="navbox"></div>
        <div><a class="navbar" href="WebSite2.html"> Home </a></div>
        <div><a class="navbar" href="Spring.html"> Spring </a></div>
        <div><a class="navbar" href="Summer.html"> Summer </a></div>
        <div><a class="navbar" href="Fall.html"> Fall </a></div>
        <div><a class="navbar" href="Winter.html"> Winter </a></div>
    </div>
<div id="rightcolumn">
<div id="contentlogo">
    <h1>Professional Cycling 2007</h1>
</div>
<div class="content">
    <p>The professional cycling season spans from late January to early November on the
        road. During the winter months
```

Link to the external CSS document that we will create next.

Notice <div> element nesting.



Step 5: Final XHTML Document

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 class="footer">

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</div>

</div>

</div>

</body>

</html>



Step 6: CSS For The Content Page

- Now that we've successfully created the XHTML document for the content page and have verified its correctness (don't forget the validation step!), we now need to focus on creating the external style sheet that will format the content page layout we originally planned on the storyboard (see page 4).
- In our first example, we decided to combine all of the CSS rules for both the splash page and the content page into a single CSS document. This time, we will create separate CSS documents for the splash and content pages. The reason for this is that there are no styles in common between the two pages, so rather than include CSS properties in one CSS document that pertain to two XHTML documents, we'll keep separate CSS documents for each XHTML document. So we'll create an external style sheet named `procylingstyles-2col.css` for presenting the content page XHTML document.
- Again, working from the top to bottom and left to right in our content page, we will first create the layout rules for the left column, then the right column.



Step 6: Code The External Style Sheet

- Let's create the body style and the columns first.

```
body {  
    font-family: Verdana, Arial, sans-serif;  
    margin:0px;  
}  
  
#leftcolumn {  
    float:left;  
    width:100px;  
    background-color:#00CCFF;  
    color:#000066;  
    height:550px;  
}  
  
#rightcolumn {  
}
```

Set the properties for the left column so that it floats to the left with a 100 pixel width and 550 pixel height.

No special properties are needed for the right column. I've created an id as a placeholder to make it easier to add properties in the future for this area. For example, we might want to add a background color or border.



Step 6: Code The External Style Sheet

- Let's create the navigation area for the left column.

```
.navbar {text-decoration:none;
margin:15px;
display:block;
}
#navbox {left:0px;
height:100px;
}
.nav {padding: 5px;
background-color:#00CCFF;
color:#000066;
text-decoration:none;
font-family:Verdana, Arial, sans-serif;
width:90px;
text-align:center;
}
a.nav:link {color:#000066;
background-color:#00CCFF;
}
a.nav:visited {color:#000000;
background-color:#00CCFF;
}
a.nav:hover {color:#ffffff;
background-color:#00CCFF;
}
```

This is an “empty” box used to force the navigation elements down inside the left column, rather than starting at the very top.

All of the other navigation classes are exactly the same as the ones we developed in the first example.



Step 6: Code The External Style Sheet

- Let's create the left column first.

```
.nav {padding: 5px;
      background-color:#00CCFF;
      color:#000066;
      text-decoration:none;
      font-family:Verdana, Arial, sans-serif;
      width:90px;
      text-align:center;
}

a.nav:link {color:#000066;
            background-color:#00CCFF;
}

a.nav:visited {color:#000000;
              background-color:#00CCFF;
}

a.nav:hover {color:#ffffff;
            background-color:#00CCFF;
}
```



Step 6: Code The External Style Sheet

- Now let's format the right column elements. The right column contains the main content area, the right floated image, and the footer area.

```
#contentlogo{background-color:#00CCFF;
    color: #000000;
    font-size:x-large;
    border-bottom: 1px solid #000000;
    padding:10px;
}

.content {font-family:Verdana,Arial, sans-serif;
    margin:20px;
    padding:20px 0px 0px 150px;
    text-align:justify;
}

.floatright {float:right;
}

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

- This completes our external CSS, so verify its correctness and then see what our new Web content page looks like when rendered in a browser.



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Professional Cycling 2007

- Home
- Spring
- Summer
- Fall
- Winter

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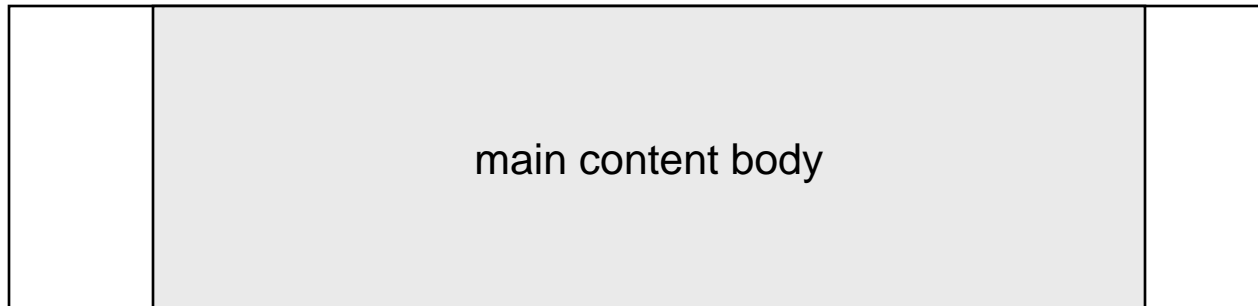
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Things to Try Yourself

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



15. Using the CSS we just created for content page `WebSite2.html`, add a background color or image to the right column.
16. Using CSS, create a screen that uses a tiled background image. Try different size images to see different effects.

