

WEB1100: Lecture 8

Web Development & HCI

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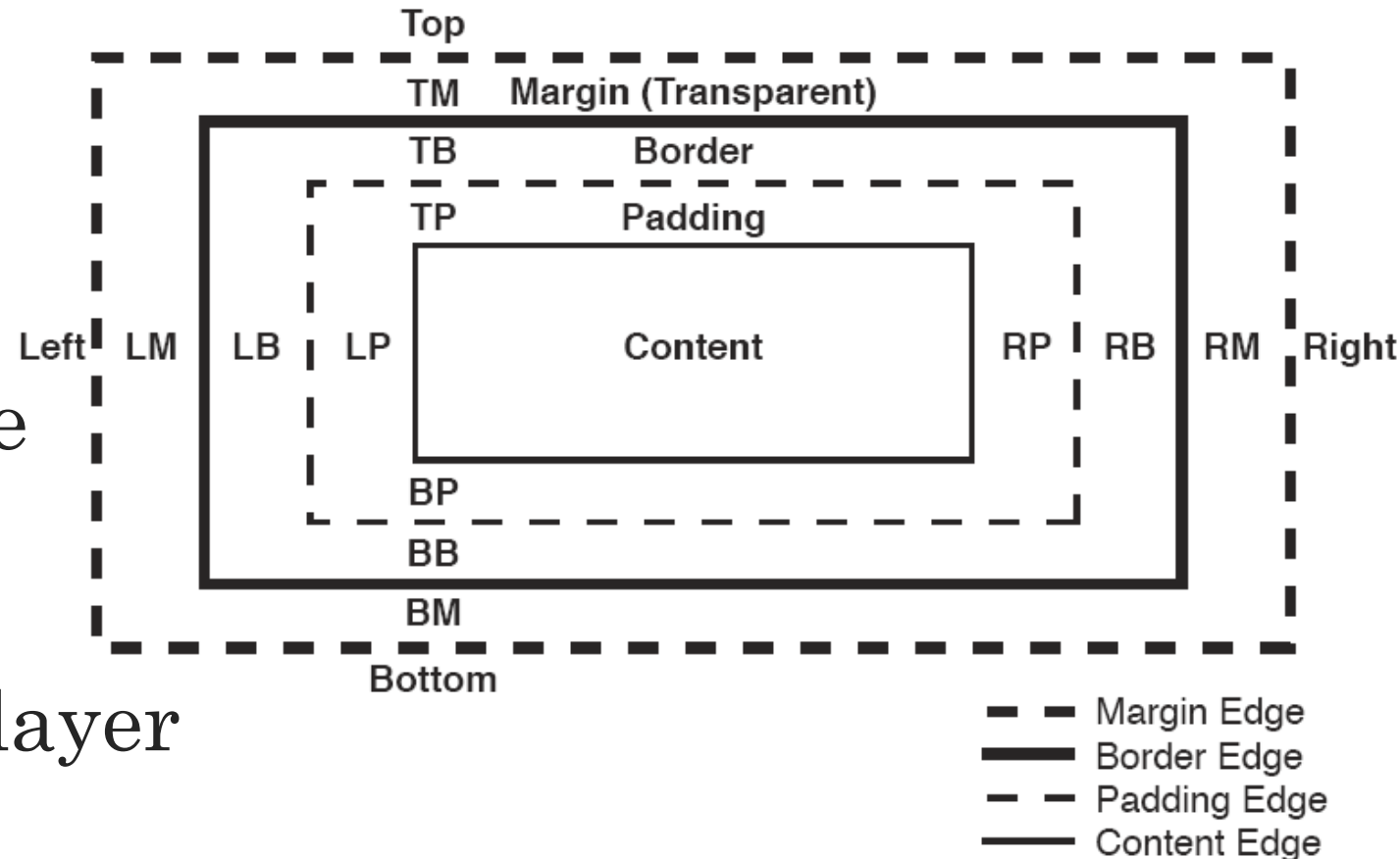


Agenda for today

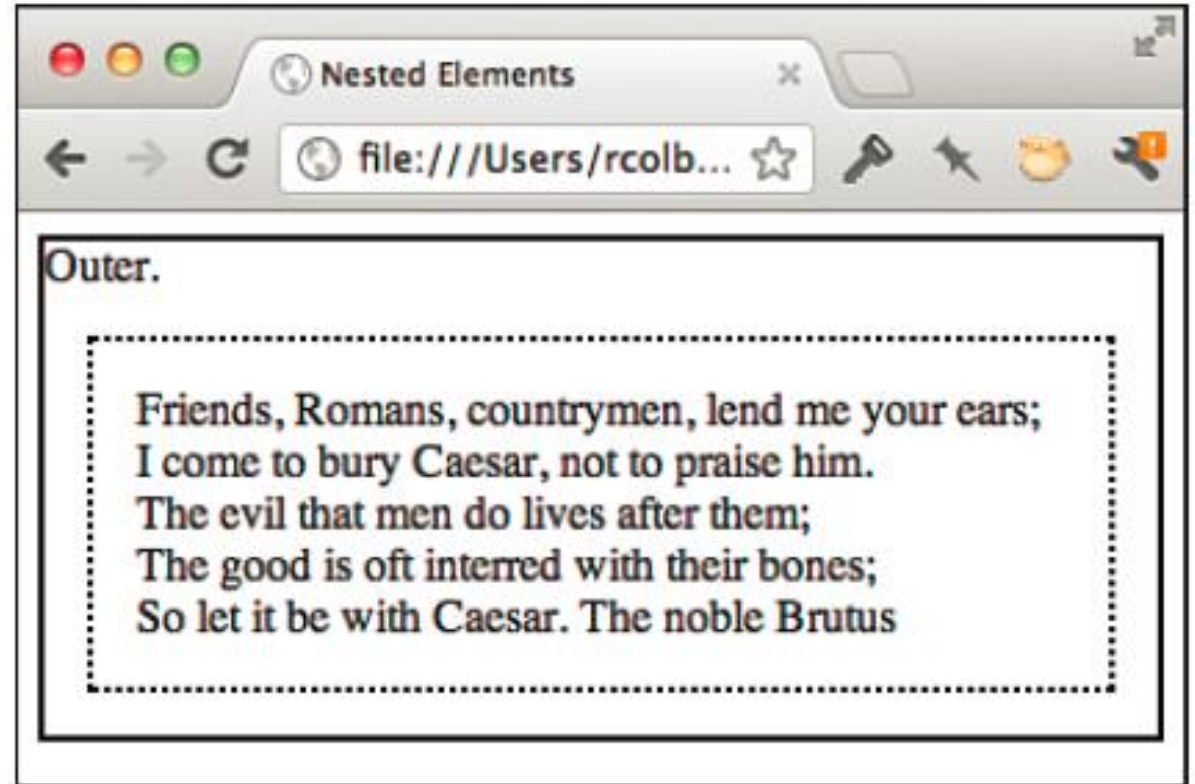
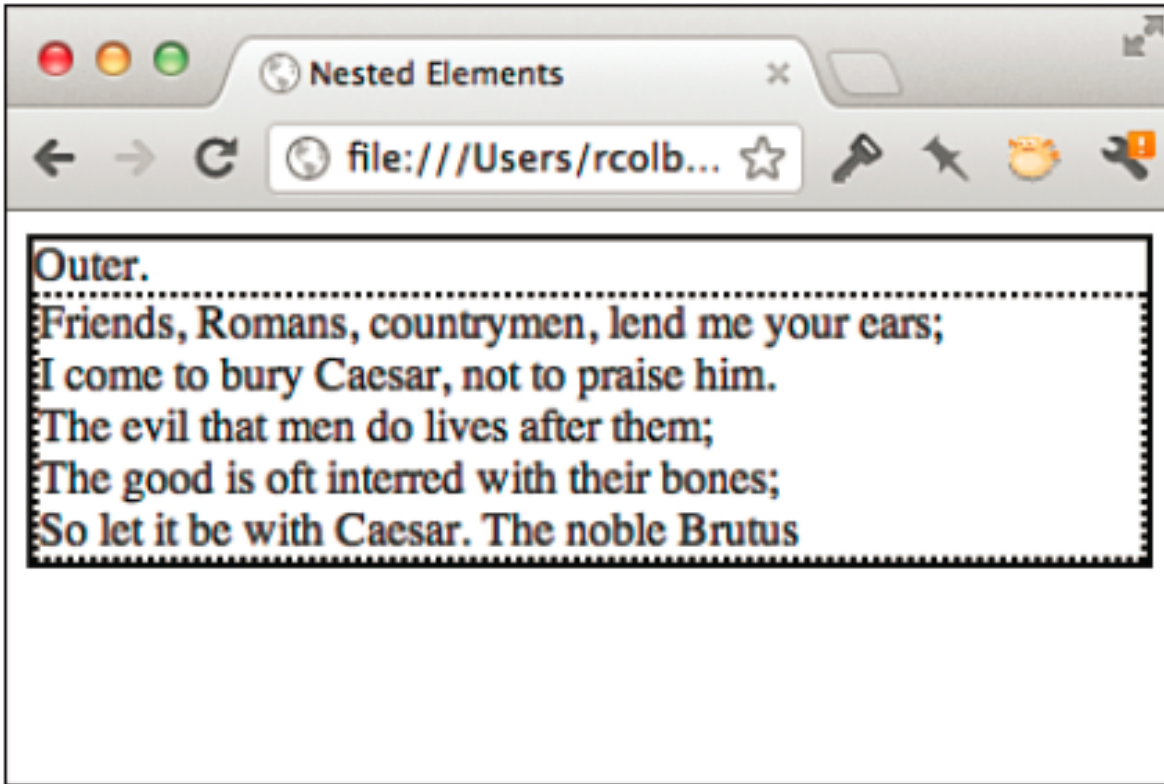
- CSS: box model, image, table, drop-down menus
- HTML page layout with CSS

The Box Model

- Content: the innermost box
- Padding: surrounding of content
- Borders: surrounding the padding
- Margins: the outermost layer



The Box Model



The Box Model

```
<html>
<head>
  <title>Nested Elements</title>
  <style type="text/css">
    .outer { border: 2px solid black; }
    .inner { border: 2px dotted black;
```

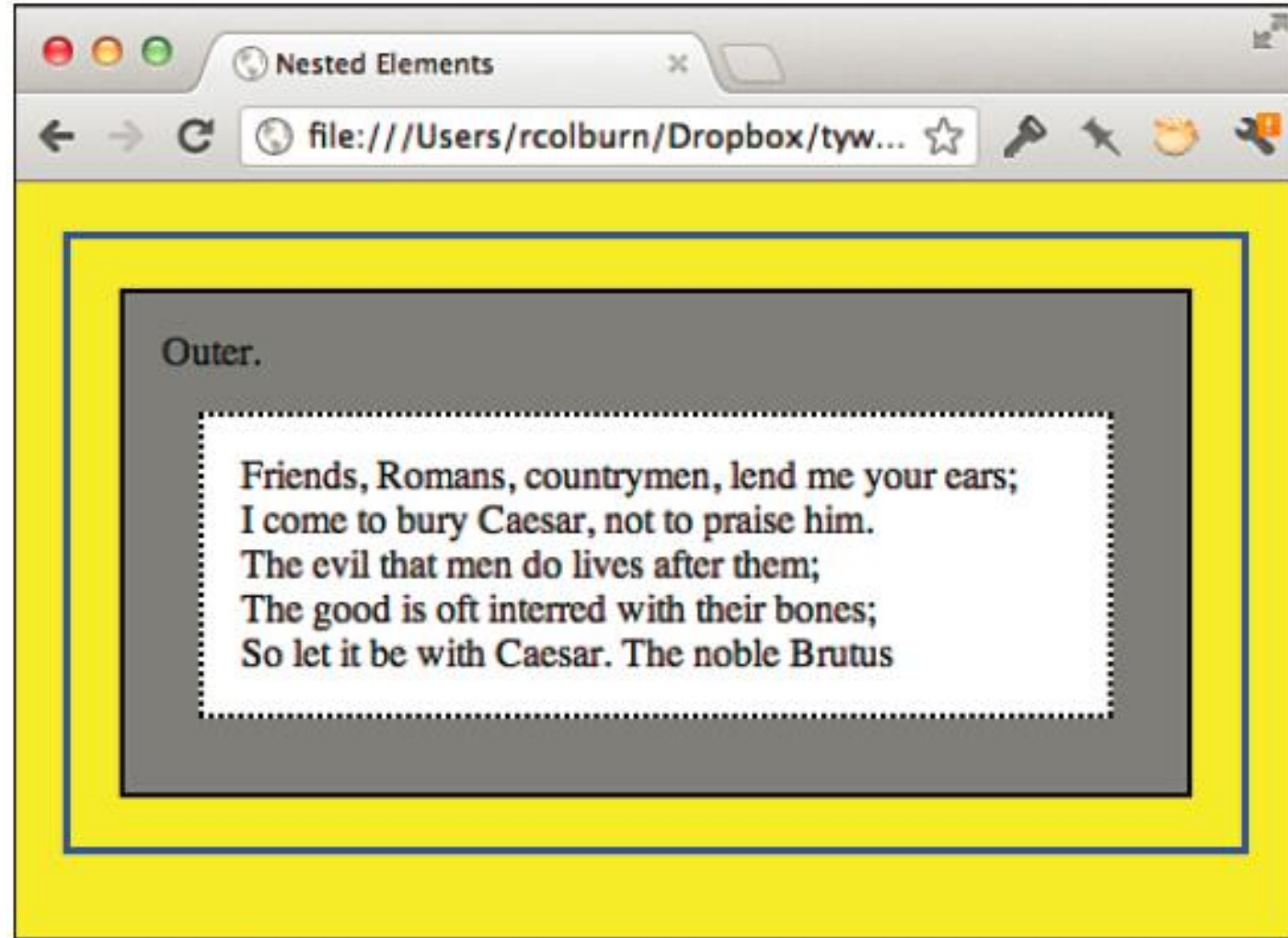


```
        padding: 0;
        margin: 0; }
  </style>
</head>
<body>
  <div class="outer">
    Outer.
    <div class="inner">
      Friends, Romans, countrymen, lend me your ears;<br />
      I come to bury Caesar, not to praise him.<br />
      The evil that men do lives after them;<br />
      The good is oft interred with their bones;<br />
      So let it be with Caesar. The noble Brutus<br />
    </div>
  </div>

</body>
</html>
```

The Box Model

```
.outer { border: 2px solid black;
         background-color: gray;
         padding: 15px; }
.inner { border: 2px dotted black;
         background-color: white;
         padding: 15px;
         margin: 15px; }
body { margin: 20px;
       border: 3px solid blue;
       padding: 20px;
       background-color: yellow;
}
```



Web Images

Four mostly used formats:

- **GIF:** suitable for logos, icons, line art and other simple images
- **JPEG:** suitable for photographic images
- **PNG:** suitable if the quality over the size is the issue
- **SVG:** suitable for responsive web design

Web Images

Basics:










- `` tag: has no closing tag
- ``
- can be used inline or as a navigation icon
- can be placed in the header of a section
- can be placed inside a line of text
- other styling properties can be applied

Building Tables

Basics:

- `<table> ... </table>` tag: holds all table-components
- holds styling properties
- created left to right and top to bottom
- `<caption>.. </caption>` tag: name of the table
- `<tr> </tr>`, `<th> </th>`, and `<td> </td>` tags: rows, headings and data.

Building Tables

	Left	Centered	Right
Top			
Centered			
Bottom			

Building Tables

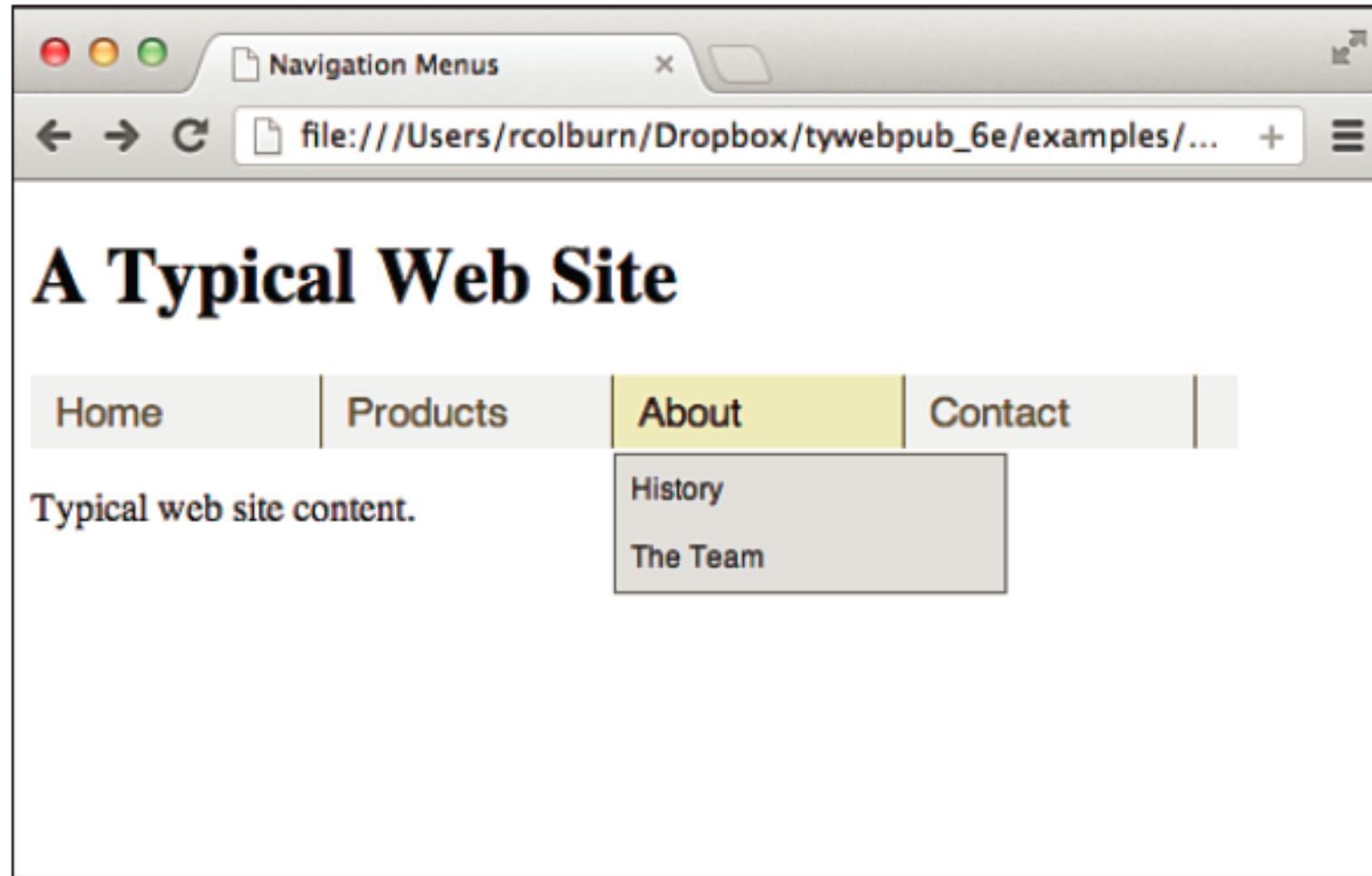
```
<!DOCTYPE html>
<html>
  <head>
    <title>Cell Alignments</title>
    <style>
      td { height: 100px; }
    </style>
  </head>
  <body>
    <table border="1" style="padding: 8px; width: 100%;">
      <tr>
        <th><br /></th>
        <th>Left</th>
        <th>Centered</th>
        <th>Right</th>
      </tr>
      <tr>
        <th>Top</th>
        <td style="text-align: left; vertical-align: top;"></td>
        <td style="text-align: center; vertical-align: top;"></td>
        <td style="text-align: right; vertical-align: top;"></td>
      </tr>
      <tr>
        <th>Centered</th>
        <td style="text-align: left; vertical-align: middle;"></td>
        <td style="text-align: center; vertical-align: middle;"></td>
        <td style="text-align: right; vertical-align: middle;"></td>
      </tr>
      <tr>
        <th>Bottom</th>
        <td style="text-align: left; vertical-align: bottom;"></td>
        <td style="text-align: center; vertical-align: bottom;"></td>
        <td style="text-align: right; vertical-align: bottom;"></td>
      </tr>
    </table>
  </body>
</html>
```

Creating Drop-Down Menus

Basics:

- most common navigation technique
- provides deep navigation
- requires less screen real estate
- CSS becomes the substitute of JavaScript here
- it's a regular nested HTML list
- CSS converts it into dynamic navigation bar

Creating Drop-Down Menus



Creating Drop-Down Menus

```
<!DOCTYPE html>
<html>
  <head>
    <title>Navigation Menu</title>
    <link rel="stylesheet" type="text/css" href="DropDownMenu.css">
    <style >
    </style>
  </head>
  <body>
    <h1>A Typical Web Site</h1>
    <nav id="navigationBar">
      <ul>
        <li><a href="/home.html">Home</a></li>
        <li><a href="/products.html">Products</a>
          <ul>
            <li><a href="/products/a.html">Something Awesome</a></li>
            <li><a href="/products/b.html">Another Awesome Thing</a></li>
            <li><a href="/products/c.html">Our Best Thing</a></li>
            <li><a href="/products/d.html">A Cheap Thing</a></li>
          </ul>
        </li>
        <li><a href="/about.html">About</a>
          <ul>
            <li><a href="/history.html">History</a></li>
            <li><a href="/team.html">The Team</a></li>
          </ul>
        </li>
        <li><a href="/contact.html">Contact</a></li>
      </ul>
    </nav>
    <p>Typical web site content.</p>
  </body>
</html>
```

CSS

Example: The Dunbar Project




```

<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>The Dunbar Project</title>
    <link rel="stylesheet" type="text/css" href="TheDunbarProject.css">
  </head>
  <body>
    <header>
      <h1>The Dunbar Project</h1>
      <h2>In the Shadow of Downtown Tucson</h2>
      <nav id="sitenav">
        <ol><li><a href="index.html">Home</a></li>
        <li><a href="about/">About the Dunbar Project</a></li>
        <li><a href="gallery/">Photo Galleries</a></li>
        <li><a href="donate/">Donate</a></li>
        <li><a href="contact/">Contact</a></li></ol>
      </nav>
    </header>
    <div id="main">
      <article id="content">
        <h3>Welcome to The Dunbar Project Website</h3>
        
        <p>Dunbar School was completed in January 1918, for the
        purpose of educating Tucson's African-American students.
        The school was named after <a href="poet.html">Paul
        Laurence Dunbar</a>, a renowned African-American poet.
        African-American children in first through ninth grades
        attended Dunbar until 1951, when de jure segregation was
        eliminated from the school systems of Arizona. When
        segregation in Arizona was eliminated, Dunbar School
        became the non-segregated John Spring Junior High School,
        and continued as such until 1978 when the school was
        closed permanently.</p>
      </article>
    </div>
  </body>
</html>

```

```
<aside id="sidebar">
  <h3>Dunbar Project</h3>
  <ol>
    <li><a href="plan/">The Dunbar Site Plan</a></li>
    <li><a href="auditorium/">Dunbar Auditorium</a></li>
    <li><a href="history/">School History</a></li>
    <li><a href="proposal/">Project Proposal</a></li>
    <li><a href="donors/">Dunbar Donors</a></li>
    <li><a href="poet.html">About Paul Laurence Dunbar, Poet</a></li>
    <li><a href="links/">Related Links</a></li>
  </ol>
  <h3>Coalition Partners</h3>
  <ol>
    <li>The Tucson Urban League</li>
    <li>The Dunbar Alumni Association</li>
    <li>The Dunbar/Spring Neighborhood Association</li>
    <li>The Juneteenth Festival Committee</li>
  </ol>
  <h3>Individual Members</h3>
  <ol>
    <li>Karen Stendal</li>
    <li>Maung K. Sein</li>
    <li>Ståle Vikhagen</li>
    <li>Veralia G. Sanchez</li>
    <li>Salah U. Ahmed</li>
  </ol>
</aside>
```

```
</div>
</body>
</html>
<footer>
  <p id="note501c3">The Dunbar Project is a 501c(3)
  organization, and your contributions are tax deductible.</p>
  <p id="copyright">Copyright &copy; 2006 by the Dunbar Project. Questions?
  <a href="mailto:webmaster@thedunbarproject.com">Mail the Webmaster.</a></p>
</footer>
```



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Thank You!

Think **Green**, Grow **Green**, Live **Green**