HTML Primer

Basics of HTML for those who haven’t used it before.

HTML

• HyperText Markup Language
• Like all programming languages, simply a plain text file
• Unlike other languages, no variables or commands.
• HTML is merely a way of formatting a document.

Tags

• Formatting is accomplished through the use of ‘tags’. Tag begins with a less-than sign (<) and ends with a greater-than sign (>).
• Many tags have a ‘begin’ tag and an ‘end’ tag.
• End tags have same contents as corresponding begin tag, but start with a front slash (/)
• Examples:
  – <html>…</html>  <h1>…</h1>  <p> <hr>  
  <a>…</a>  <table>…</table>  <font>…</font>
Attributes

• Some tags have key=value pairs known as attributes. They describe or modify what the tag is doing.
• Examples:
  – <a href=http://www.rpi.edu>…</a>
  – <font color="blue">…</font>
  – <tr align="center">…</tr>

Format of an HTML Document

• Entire document enclosed by <html>…</html>
• Followed by two sections: head and body
  <html>
  <head>…</head>
  <body>…</body>
  </html>
• By the way, white space of any kind is completely ignored by HTML parser (ie, web browser)

Head Section

• Contains info about the document. Most common/important: title
  <head>
  <title>My HTML Document</title>
  </head>
• “My HTML Document” will appear in title bar of Netscape, IE, Opera, etc…
Body Section

• Contains all text displayed in web browser window.
• <br> - line break
• <p> - paragraph break (equivalent to 2 <br>s)
• <center>…</center> Center-align all contained text
• <font>…</font> - Set font properties for contained text.
  Use attributes
  – color="..." (color name, or hex number representation)
    • color="blue" or color="0000ff"
  – size=... (either absolute point size, or relative change)
    • size=12 or size="+4"
  – face="..." (name of font type – Courier, Times New Roman)
  – Use only attributes you want to.

Links

• We’ve seen these from HW2.
• <a href="...">...</a>
• Make contained text link to value of href attribute.

Tables

• 4 necessary tags to create a table:
• <table>…</table>
  – contains entire table
• <tr>…</tr>
  – contains one row of a table
• <td>…</td>
  – contains one cell of a table
• <th>…</th>
  – contains a table column heading
Table example

```html
<table>
<tr>
<th>Name</th><th>ID</th>
</tr>
<tr>
<td>Paul</td><td>123</td>
</tr>
<tr>
<td>Justin</td><td>456</td>
</tr>
</table>
```

- Creates following table:

<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul</td>
<td>123</td>
</tr>
<tr>
<td>Justin</td>
<td>456</td>
</tr>
</tbody>
</table>

Table Example continued

Lists
- Three kinds: un-ordered, ordered, definition
- Ordered:
  ```html
  <ol>
  <li>...</li>
  <li>...</li>
  </ol>
  ```
  - Creates a numbered list. (ala HW FAQs online)
Lists

• Unordered
  <ul>
  <li>…</li>
  <li>…</li>
  </ul>
• Creates a bulleted list (ala announcements on course webpage)

• Definition
  <dl>
  <dt>…</dt>
  <dd>…</dd>
  <dt>…</dt>
  <dd>…</dd>
  </dl>
• Creates a definition list (ala Letter grade ⋆ number grade list on course home page)
• <dt>…</dt> contains term
• <dd>…</dd> contains definition.

Macros

• Some text is part of HTML itself, so you can’t use it in your document.
  – special ‘macro’ sequences for this text
• &lt;  ‘less than’ <  
• &gt;  ‘greater than’ >  
• &amp;  ‘ampersand’ &  
• &quot;  ‘quotes’ ”  
• &nbsp;  ‘non-breaking white space’ ́
HTML on RCS and CS

• to make your HTML documents visible to the world, place them in your public_html directory on RCS. Then go to http://www.rpi.edu/~yourID/yourfile
• on the CS machines, put your documents in your public.html directory, make sure they’re world-readable, and go to http://www.cs.rpi.edu/~yourID/yourfile

For more information…

• www.htmlgoodies.com
• www.w3schools.org
  (and others)