CSI 703 Basic Web Visualization Elements

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# Full page

<p>This is a paragraph!</p>

<p>We can break a line in a paragraph with a self-closing <br /> br tag. </p>

<img src="http://dataviscourse.net/2015/assets/i/utah.svg" alt="Utah Logo"/>

Include an image. The src attribute defines a link to the image, the alt attribute is used to provide a short description to the image.

Headers are defined with h1-h6 tags:

<h1>HTML Tags</h1>

<h2>A second level header</h2>

Provides header structure to your text. h1 is the most important heading, h2 is less important, etc.

<h2>Lists</h2>

<ol>

<li>Elements in</li>

<li>an ordered</li>

<li>list</li>

</ol>

<ul>

<li>Elements in</li>

<li>an unordered</li>

<li>list</li>

</ul>

<h2>Table</h2>

Here is a table:

<table border="1">

<tr>

<th>Column 1 header</th>

<th>Column 2 header</th>

</tr>

<tr>

<td>Cell 1</td>

<td>Cell 2</td>

</tr>

</table>

<h2>Structuring HTML</h2>

<div> div tags are a division of a page, which are</div>

<div>often used to provide structure to HTML. divs are block elements, i.e., they break lines.</div>

<span>span is similar to div, but works as an inline element, </span>

<span>i.e., it can be used in the same line.</span>

<h2>Forms</h2>

Forms consist of an enclosing form tag and may contain input, textarea and other tags.

<form>

<input type="text" value="default text"/> <br /><br/>

<textarea> forms are used to accept user input or submit the input, has attributes type and label which

specify type of form input element. </textarea> <br />

<input type="submit">

</form>

<!-- HTML also has a comment tag. This is used to add text to your document that will not be displayed in the browser and is useful to document the page, or to temporarily remove something. –>

# Altered Full page

<p>This is a paragraph!</p>

<p>We can break a line in a paragraph with a self-closing <br /> br tag. </p>

<img src="http://brand.gmu.edu/wp-content/uploads/assets/primarylogo/PC/GMURGB.jpg" alt="Utah Logo"/>

Include an image. The src attribute defines a link to the image, the alt attribute is used to provide a short description to the image.

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<input type="submit">

</form>

<!-- HTML also has a comment tag. This is used to add text to your document that will not be displayed in the browser and is useful to document the page, or to temporarily remove something. –>

# Sample of STRONG

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Simple CSS</title>

<style>

strong {

background-color: red;

}

strong {

font-size: 300%;

}

</style>

</head>

<body>

Here is some text <strong>and this part is strong.</strong>

</body>

</html>

# Sample text formatting

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Simple CSS</title>

<style>

.important {

font-weight: bold;

}

.footnote {

font-size: 75%;

}

</style>

</head>

<body>

<div class="important">Some text</div>

<div class="footnote">Some other text</div>

<div class="important footnote">And this is an important footnote!</div>

</body>

</html>

# More Text formatting

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Simple CSS</title>

<style>

#firstline {

font-weight: bold;

color: blue;

}

#secondline {

font-size: 110%;

}

#important {

text-shadow: 2px 2px #ff0000;

}

</style>

</head>

<body>

<div id="firstline">Some text</div>

<div id="secondline">Some other text</div>

<div id="important">And this is an important footnote!</div>

</body>

</html>

# Strong example2

<strong>This is an HTML element.</strong>

# Page formatting with CSS

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Simple CSS</title>

<style>

#sidebar {

width: 30%;

height: 200px;

float: left;

background-color: #b0c4de;

}

#main {

width: 70%;

height: 200px;

float: right;

background-color: steelblue;

}

#footer {

width: 100%;

background-color: forestgreen;

}

</style>

</head>

<body>

<nav id="sidebar"><h1>Menu</h1>

<ul>

<li>Home</li>

<li>Papers</li>

<li>Students</li>

</ul>

</nav>

<main id="main">This is the main part of the page with all the content!</main>

<footer id="footer">And here we have a footer</footer>

</body>

</html>

# CSS Text Formatting

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Simple CSS</title>

<style>

/\* This is a css child selector. Only DIRECT children match \*/

p > b {

color: blue;

}

/\* This is a descendant selector. Every time a b is nested within a div this matches \*/

div b {

color: green;

}

</style>

</head>

<body>

<p>Here is text <b>and this is bold within a paragraph.</b></p>

<p>Here is another <span>example <b>with something bold</b></span> but this is not highlighted in blue. </p>

This next <b>few words are also bold</b> but not within a paragraph.

<div>Here is an example <span>of a <b>bold text</b> that is highlighted by a descendant selector. A child selector doesn't match here.</span></div>

</body>

</html>

# SVG Circle

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="400" height="200">

<circle cx="200" cy="100" r="50"

style="fill:yellow; stroke:brown; stroke-width:5px"/>

</svg>

</body>

</html>

# SVG Ellipse

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="400" height="200">

<ellipse cx="200" cy="100" rx="100" ry="50"

style="fill:blue; stroke:green; stroke-width:5px"/>

</svg>

# SVG Lines

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

<style>

.lines {

stroke: black;

}

</style>

</head>

<body>

<svg width="400" height="200">

<line class="lines" x1="30" y1="30" x2="200" y2="80"/>

<line class="lines" x1="30" y1="50" x2="150" y2="120"/>

</svg>

</body>

</html>

# SVG Path

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="400" height="200">

<path style="stroke:blue; fill:none" d="M 10 10 L 50 10 L 50 50 L 100 50 L 100 10 C 150 50 150 50 150 10"/>

<circle cx="150" cy="50" r="2"

style="fill:red"/>

<circle cx="150" cy="10" r="2"

style="fill:red"/>

</svg>

</body>

</html>

# SVG Ordering example

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="400" height="300">

<!-- Rectangle on top -->

<ellipse cx="200" cy="100" rx="100" ry="50"

style="fill:steelblue"/>

<rect x="50" y="50" width="200" height="100"

style="fill:orangered"/>

<!-- Ellipse on top -->

<rect x="50" y="160" width="200" height="100"

style="fill:orangered;"/>

<ellipse cx="200" cy="210" rx="100" ry="50"

style="fill:steelblue;"/>

</svg>

</body>

</html>

# Grouping

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="200" height="200">

<circle cx="50" cy="50" r="10"/>

<circle cx="80" cy="80" r="10"/>

<circle cx="110" cy="50" r="10"/>

<circle cx="140" cy="90" r="10"/>

</svg>

</body>

</html>

# Transformation of SVG Grouping

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title></title>

</head>

<body>

<svg width="200" height="200">

<g transform="translate(0, 200) scale(1, -1)">

<circle cx="50" cy="50" r="10"/>

<circle cx="80" cy="80" r="10"/>

<circle cx="110" cy="50" r="10"/>

<circle cx="140" cy="90" r="10"/>

</g>

</svg>

</body>

</html>