



MIS3690 WEB TECHNOLOGIES

BABSON COLLEGE
TOIM DIVISION



IRREGULAR TABLES

EXTERNAL STYLE SHEETS AND IN-LINE STYLES

ADVANCED STYLE SELECTORS



TODAY

- We will walk through the design of this page.




Table - Microsoft Internet Explorer - [Working Offline]

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

The Truth about Elephants



A baby elephant hanging out with its mom, aunts and great-aunts, and maybe even its grandmother

Why is it so easy for them? Are they better parents? Do they just not worry about every little detail? I've never known a gorilla to read and study carefully seventeen books on bringing up baby gorillas. And they seem to know just what to do. They never worry about spoiling their little gorilla babies. They never worry about not having enough time with them. Now, don't get me wrong, I'd rather be human than a gorilla any day. Just imagine having to sit in a zoo. Forget discrete nursing... (Did you figure out yet that while gorillas were on my mind, I could only find a picture of an elephant?)

It's hard to tell what goes through a baby elephant's mind when its mom is trying to put it to sleep. Do you think baby elephants wake up in the middle of the night and cry? Do their moms and dads take turns getting up with them to rock them back to sleep? How *do* you rock an elephant, anyway?

And what about gorillas? Today in the paper there's a story about a new gorilla that was just born in Franklin Park. Its mom is holding on to it just like any proud human mom. And I have to wonder if they go through as much trauma as that human mom when it comes to sleep, and food, and diapers, and running into the street.

LET'S ANALYZE THIS "ELEPHANT" TABLE

- To design the "elephant" table, some thinking is required.
- Most important – when designing the table, figure out how the text content is organized.
 - The first row spans all the columns!
 - The first cell in the second row spans 2 columns and contains the elephant image.
 - The second cell spans 3 rows and contains text (the last paragraph)!
 - The first cell in the third row spans 2 columns and has the "caption".
 - The third row does not have any other cells!
 - The fourth row has two cells with text – the first cell has the first paragraph and the second has the second paragraph.

CS07-INCLASS

- We need the following files:
 - elephant.jpg, elephanttext.txt,
- Create CS07-InClass.htm in VSCode and we are set to go.....

```
<table>
  <tr>
    <th colspan="3">The Truth About Elephants</th>
  </tr>
  <tr>
    <td colspan="2"> </td>
    <td rowspan="3">Copy the entire paragraph starting with "Why is it so easy
    ...</td>
  </tr>
```

- Two rows done and 2 more to go!!

CS07-INCLASS (CONT.)

```
<tr>
  <td colspan="2">Copy the small paragraph starting with A baby elephant
hanging out with...</td>
</tr>
<tr>
  <td> Copy first para starting with Its' hard to tell...</td>
  <td > Copy second para starting with Today in the newspaper...</td>
</tr>
</table>
```

- Save the file as "CS07-InClass.htm". Take a look using Chrome.

LETS' STYLE IT...

- Style it with External Style Sheet
- Keep CS07-InClass.htm open and saved.
- Create a new file, CS07-InClass.css, and save it to the same folder
- Type the style definitions in this empty file, CS07-InClass.css
- For the "table" tag:
 - Set width of the table to 500px;
 - Set the right and left margins to "auto";
 - Set the font to Arial;
- `tr, td {border: 1px solid black; padding: 3px; vertical-align: top;}`
- `img { width: 100%;}`

LINKING AN EXTERNAL CSS TO HTM FILE

- In your HTM file (CS07-InClass.htm), add the following in the <head> section, above the <style type="text/css"> tag.

```
<link rel="stylesheet" type="text/css" href="CS07-InClass.css" />
```

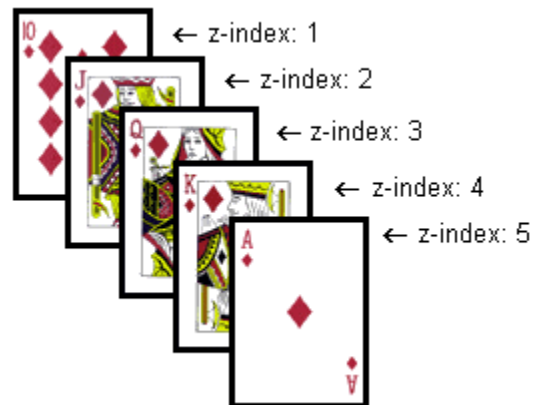
- do not copy and paste from PowerPoint.
- You can continue to keep the <style type="text/css"> and </style> tags. This can contain additional CSS definitions (INTERNAL styles)!

MORE STYLES – IN YOUR CSS FILE

- Let us challenge you....
 - Set the cell with the image to be 70% width
 - Set the last column to be 30% width
 - Set the cell with the caption to be 70% width
 - Set the first cell in the last row to be 35%
 - Set the second cell to be 35%
 - Set the background for the page using any image
 - You can also set the background for the table – use a color instead of an image.

STYLING OPTIONS

- **overflow:** choice, where choice is **visible**, **hidden**, **scroll**, or **auto**
 - Allows you to display content (say, a paragraph) in a separate smaller scrollable window within your web page
- You can set **background-color**, **width**, **height** of that window and float it right/left on a page.
- **Z-index: value**
 - When two elements overlap on a page, the element with a higher z-index value will appear over the element with the lower z-index value
 - We tried this in class last week.



ADDING TO CS07-INCLASS.HTM

- Create two horizontal rules below your table in CS07-InClass.htm
- Copy the paragraph from MoreaboutElephants.txt to CS07-InClass.htm, below the horizontal lines.
- Define `<p>` and `</p>` tags around the paragraph
- Define `class="scroll"` for this paragraph in the opening `<p class="scroll">` tag.
- In your CSS file, CS07-InClass.css, define the following:

```
p.scroll {  
    Background-color: lime;  
    Width: 250px; height: 300px;  
    Overflow: scroll;  
    Padding-right:10px;  
    Padding-left:10px;  
}
```

- Save both files and view it in Chrome and commit/push to GitHub

IN-LINE STYLES

- These are CSS definitions defined in the <tag> associated with specific elements in your HTML file.
- It combines HTML tags and CSS definitions in the SAME LINE, hence in-line.
- E.g.,

```
<p style="color:red; font-family:Arial;"> My paragraph goes here  
</p>
```

```
<hr style="width:60%; color:green; height:10px" />
```

DIV AND SPAN

- DIV tag is used to style whole sections of a page in a particular way
 - E.g., the font in the top-half of a page must be Arial
 - E.g., the background color of the bottom-third of the page must be yellow!
- Enclose the specific section of the page using `<div>` and `</div>` tags
- You can `id` or `class` the `<div>` tag and style it like you would style any other tag.

DIV - EXAMPLE

```
<body>
```

```
  <div id="one">
```

```
    Some HTML tags
```

```
    More HTML tags
```

```
  </div>
```

```
  <div id ="two">
```

```
    Lots more HTML
```

```
  </div>
```

```
<style type="text/css">
```

```
  div#one {font-family:Arial;  
  color:Blue; font-weight: bold;  
  background-color:green;}
```

```
  div#two {font-family:Cursive;  
  color:red; background:  
  url(me.jpg) repeat fixed  
  center;}
```

```
</style>
```

SPAN

- Typically used like DIV, except for specific small parts of the page (unlike DIV, that is used to create large sections)
- E.g., Certain words in a paragraph are italicized.
- E.g., first letter of certain words are in larger font.
- While DIV is typically used with ID, SPAN is typically used with CLASS

SPAN - EXAMPLE

<body>

<p>

There are lots of `words ` in this paragraph. All occurrences of the ` word "word" ` will be in blue font and in italics.

</p>

■ In the style section:

```
span.bw {font-style:italic;
color: blue;}
```


CS07-INCLASS-2.HTM

- Open the file CS05-InClass.htm – the one with the quotes that you modified last class.
- Save it as CS07-InClass-2.htm.
- Set the background color of the section that contains the heading "Quote One from Winston Churchill" together with the quote itself to **Yellow**.
- Set the background color of the section with Quote Two (the heading and the quote), **green**.
- Set the background color of the section with Quote Three (heading, the sub-heading and the quote), **lime**.
- Increase the font-size of the W and C in each occurrence of Winston Churchill to 1.5em.
- Save it, view it in Chrome and commit/push CS07-InClass-2.htm to GitHub.



ADVANCED SELECTORS



SAME STYLE, MULTIPLE TAGS

- Separate tag selectors with commas

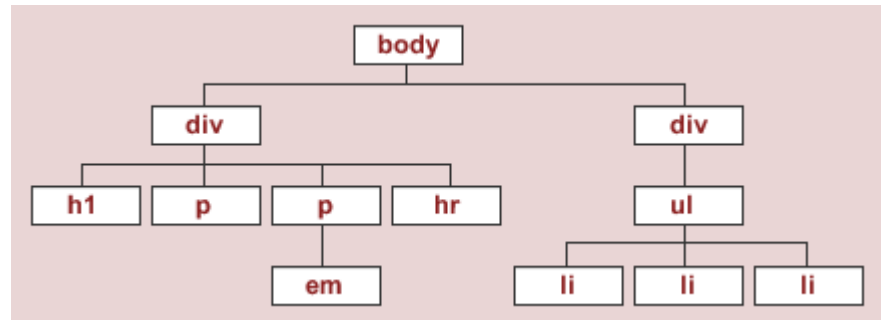
- Examples:

```
h2, h3, h4 {padding: 1em}
```

```
p#bio, p#trailer, h4 {font-size: 8pt}
```

THE DOCUMENT TREE

```
<body>
  <div id="content">
    <h1>Heading here</h1>
    <p>Lorem ipsum dolor sit amet.</p>
    <p>Lorem ipsum dolor <em>sit</em> amet.</p>
    <hr>
  </div>
  <div id="nav">
    <ul>
      <li>item 1</li>
      <li>item 2</li>
      <li>item 3</li>
    </ul>
  </div>
</body>
```

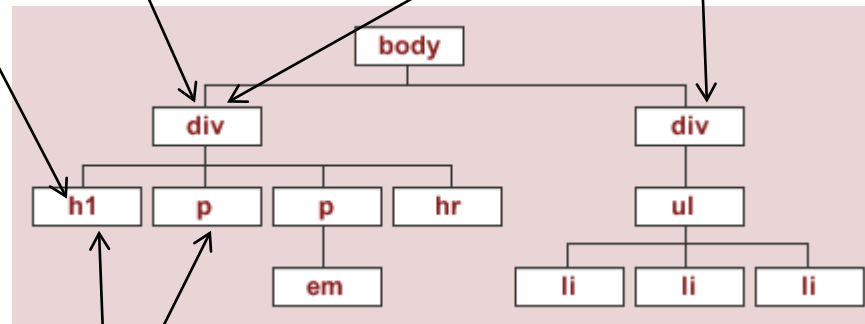


■ Source: http://css.maxdesign.com.au/selectutorial/document_tree.htm

DOCUMENT TREE RELATIONSHIPS

div is a parent of h1
h1 is a child of div

These are
siblings



div is an ancestor of li
li is a descendent of div

These are
siblings

Also note:

A parent is automatically an ancestor
A child is automatically a descendent

DOCUMENT TREE STYLES

■ Descendent selectors

- Separate with a space

```
div#x p {font-size:12pt}
```

(applies to all p's inside the div whose id is x)

```
ol ul li {color:red}
```

(applies to all li's in any uls that are in ols)

■ Child selectors

- Separate with > sign

```
div#x > p {margin-left: 5px}
```

(applies to all p's whose parent is div with id of x)

DOCUMENT TREE STYLES

- Adjacent siblings

- Separate with + sign

`h2 + h3 {color: blue}`
(applies to h3s following h2s)

- First child

- Follow with `:first-child`

`p:first-child {font-size:10pt}`
(applies to any p that is the first child of some parent)

- `:first-child` (applies to any first child)

PSEUDO-ELEMENT STYLES

- `:first-line` (applies to first line of text)
 - `p:first-line {color:green}`
- `:first-letter`
 - `h1:first-letter {font-size: 125%}`

LINK STYLES

- `a:link` (applies to normal links)
- `a:visited` (applies to visited links)
- `a:hover` (affects a link when cursor is placed above it)
- `a:active` (applies to active links)

ADVANCED SELECTOR ACTIVITY

- Please try and play with these advanced selectors in any of your old files including your index page and your list of work page.