

# XHTML

CS174

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# Outline

- The head of the document
- The body of the document
  - Generalities -- Block versus Inline elements
  - Common block tags
  - Common inline tags

# The head of an XHTML document

- At a minimum the *head* of an html document needs to have within it a `<title></title>`.
- Additional allowable tags include:
  1. `link` -- associate another document with this current document. Might want to do this to associate a stylesheet or to give a `favicon.ico`  
Ex: `<link rel="shortcut icon" href="http://www.cs.sjsu.edu/faculty/pollett/favicon.ico" />`
  2. `base` -- specify a base directory for all references on the page:  
Ex: `<base href="http://www.my.com/stuff/" />`  
Now a link `<a href="file.html" >file</a>` would have the implicitly base address in front of it.
  3. `script` and `style` -- we'll talk about these next week
  4. `meta` -- specifies information about this page. Let's look at this more

# Kinds of Meta Information

```
<meta name="Authors" content="who wrote the page" />
```

```
<meta name="description" content="how I would like the  
search engines to describe my page. Only Ask.com seems  
to use this." />
```

```
<meta name="keywords" content="cool site" /> <!--Key  
terms search engines should index this site with.
```

```
Unfortunately, not supported except maybe by inktomi -->
```

```
<meta name="ROBOTS" content="comma separated list of  
what would like crawler to do" /> <!-- Example commands  
NOINDEX, NOFOLLOW, can also do in a robots.txt file--  
>
```

# More Meta Information

You can also use meta tags to give http header fields:

```
<meta http-equiv="foo" content="bar" />
```

shows up as a header field:

```
foo: bar
```

For example:

```
<meta http-equiv="Content-type" content="text/html;  
  charset=iso-8859-1" />
```

```
<meta http-equiv="Expires" content="Wed, 30 Aug 2006  
  14:25:27" />
```

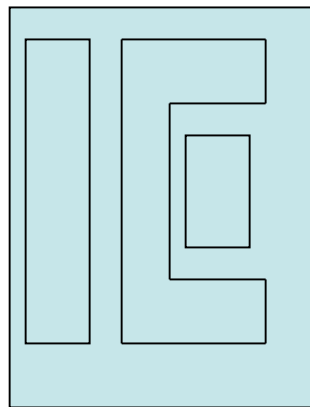
```
<meta http-equiv="refresh"  
  content="10;url=http://www.cs.sjsu.edu/" />
```

# The body of a web page

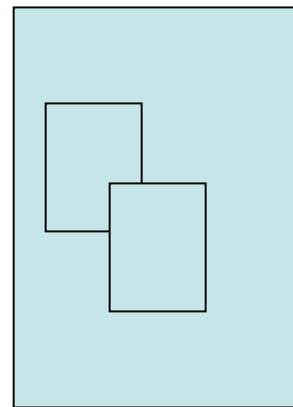
- There are two basic kinds of elements that can appear within the body of a web page.
  - *block* -- level of elements. Basic units of layout
  - *inline* -- controls formatting within blocks.
- A block element is essentially a rectangular region on the web browser screen.
- Just as a sculptor needs to know how to fashion surfaces depending on the medium like marble or wood -- you too, will need to know how to generate more sophisticated shapes using this basic element.

# More on Block level elements

- In the original HTML, the layout of block level elements was non-overlapping:



Okay

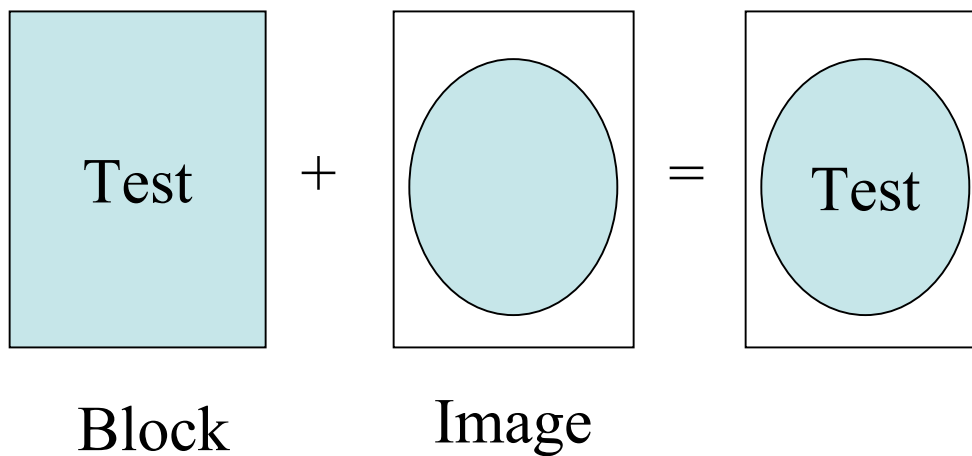


Not Okay

- In Netscape 3 layers were introduced to allow overlapping layouts. Nowadays the block level elements can be overlaid using styles.

# Getting Round Objects and Other Effects

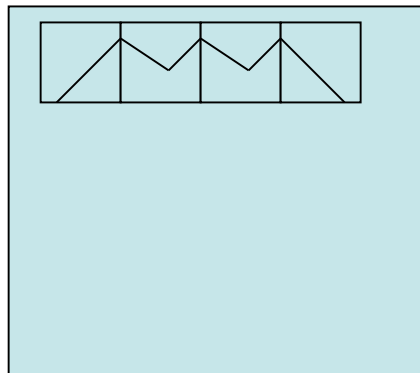
- From the earliest days of the web, people used tricks with background images and foreground images and the width and height attributes of the `img` tag to achieve more fixed spacing, rounded objects, lines, gradients, etc.
- For example, if your block level element allowed you to specify a background image:





# More effects

- A single white pixel image could have its width and height scaled to achieve a region of white space; a single black pixel could be stretched to make lines.
- A single line with a color gradient could be stretched to apply a background color gradient to an element.
- You might also align images around a block level element to make interest borders:



- Nowadays, these techniques are semi-frowned upon as some of them can be achieved with styles.

# What tags can go into the body of a web page?

- `<h1></h1>` - `<h6></h6>` -- heading tags to give a heading title for a section. These must be properly nested.

`<h1>heading1</h1>`

`<h1>heading1</h1>`

`<h2>heading 2</h2>`

`<h3>heading 2</h3>`

`<h3>heading</h3>`

`<h2>heading</h2>`

`<!--this is okay -->`

`<!--this is not okay -->`

- `<div></div>` -- used to specify a related section of text.
- `<p></p>` -- used to specify a paragraph
- `<blockquote></blockquote>` -- used to indent large quotations.
- `<ul></ul>` `<ol></ol>` -- unordered and ordered lists. Has a type tag to specify things like circle, square bullets,, A, I, a, i 1. Elements in list are specified with `<li></li>`. There are also `<dl></dl>` definition lists.
- `<form></form>` -- used to make a web form
- `<table></table>` -- used to make a table in a web page.

| more on these  
| in a moment

# More HTML tags

- These next tags might appear within many of the block level tags of the last slide:

- Anchors:

`<a href="http://www.somewhere.com">somewhere</a>`.

For WAI compliance should always separates links with at least a little text, like a period. You might also want to indicate if a link is offsite or is to a non HTML document.

Links within pages are given with `<a href="#relative link">somewhere in this page with id="relative link"</a>`

- Images:

``

- Span: allows you to style a region of text or to specify a tooltip for a region of text.

`<span title="what you see when you mouse hover">This section of text</span>`

- Presentation elements: `<br />` --line break, `<hr />` --horizontal rule, `<big></big>`, `<small></small>`, `<b></b>`, `<u></u>`, `<i></i>`, `<tt></tt>`, `<sub></sub>`, `<sup></sup>`

# XHTML Entities

- These provide a way to describe special characters or characters, such as &, <, > which are used to describe the XHTML document itself.
- Below are some characters and their corresponding entities:

&	&amp;
<	&lt;
>	&gt;
(space)	&nbsp;
“	&quot;
$\Sigma$	&Sigma;

# Introduction to Tables

- A table consists of a bunch of *rows* each of which is made up of data *cells*.
- A table may or may not have a border.
- It also may or may not have a caption.
- The first row of a table can (but doesn't have to) be used to specify the headings for the columns.
- Each additional row might specify the heading of that row.
- The summary attribute of a table should be used for WAI compliance
- Example:

```
<table border="border" summary="This is a table of how grades will be  
broken down">  
  <caption>grade table</caption>  
  <tr><th>Item</th><th>Value</th></tr>  
  <tr><th>1.</th><td>Homeworks</td><td>50%</td></tr>  
  <tr><th>2.</th><td>Exams</td><td>50%</td></tr>  
</table>
```