

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 `file` 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 give the equivalent to http header fields:

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

Is treated by a browser as if the response header field:

foo: bar

Was sent. 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" />
```

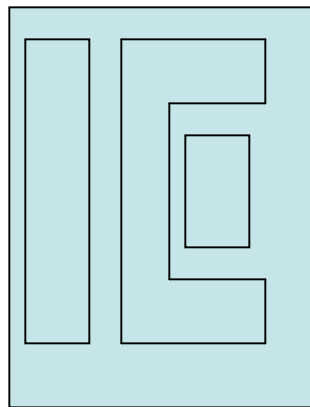
```
<meta http-equiv="refresh"  
  content="10;url=http://www.cs.sjsu.edu/" />
```

The body of a web page

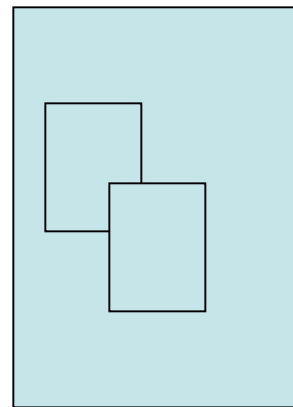
- There are two basic kinds of elements that can appear within the body of a web page.
 - *block* -- level of elements. Basic units of layout
 - *inline* -- controls formatting within blocks.
- A block element is essentially a rectangular region on the web browser screen.
- Just as a sculptor needs to 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

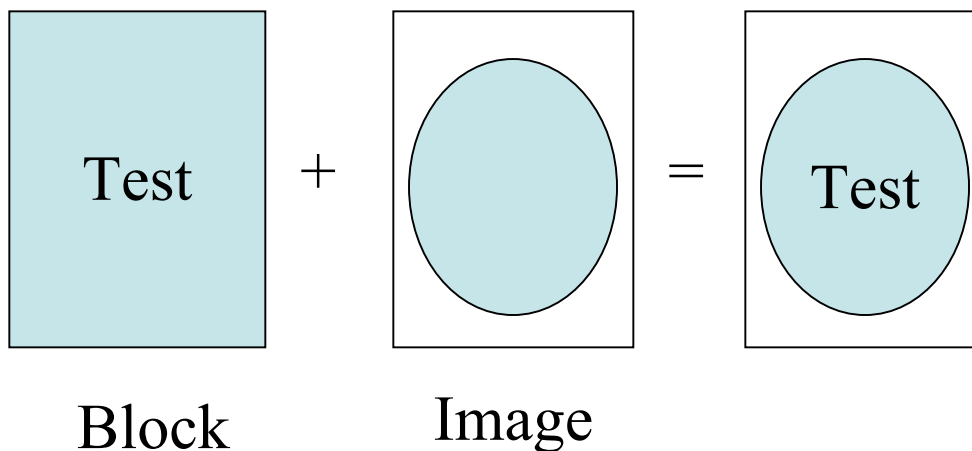


Not Okay

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

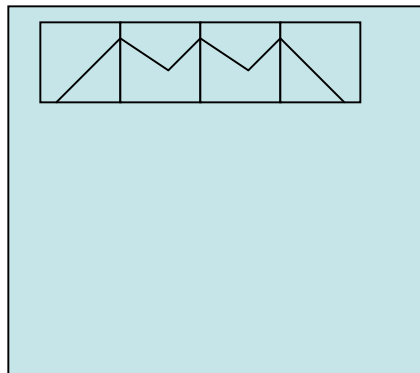
Getting Round Objects and Other Effects

- 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 (effect still used in CSS):



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 interesting 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.
- `` `` -- 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 ``. 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