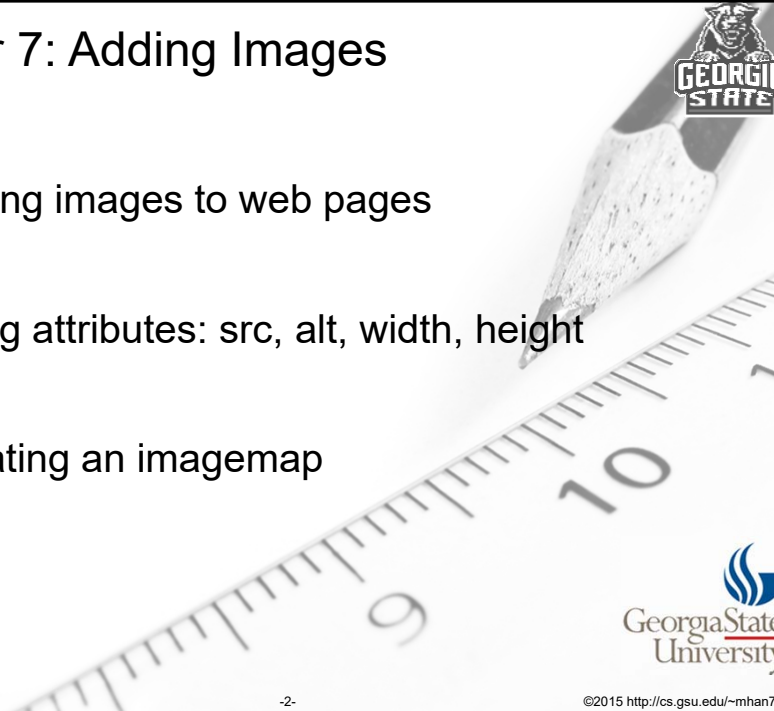# Fundamentals of Website Development
CSC 2320, Fall 2015

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Chapter 7: Adding Images

- Adding images to web pages

- Using attributes: src, alt, width, height

- Creating an imagemap

The img element

- **Inline element, tag: img**
- **Three ways of using:**
  - **As a simple image**
  - **As a link**
  - **As an imagemap**
- **Image format**
  - **Most Browsers only recognize .gif, .jpg, .jpeg, .png**
  - **Provide a link if other image format, downloadable, i.e., .eps, .bmp files**

```
<a href="architecture.eps">Get the drawing</a>
```

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The img element

- Usage:
  - Opening tag : <img /> in XHTML, <img> in HTML
  -
- *src* attribute provides the location of the file
- *alt* attribute provides alternative text that displays if the image is not available.

```
<p>I had been wanting to go to Tuscany <img src="tuscany.jpg" alt="" />
for a long time, and I was not disappointed.</p>
```

I had been wanting to go to Tuscany   for a long time, and I was not disappointed.

Figure 7-1. *By default, inline images are aligned with the baseline of the surrounding text, and they do not cause a line break.*

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The img element

- It's an empty element, no (text) content

- In XHTML, use **<img />**; in HTML, just use **<img>**

- Inline element, behaves like other inlines

- Known as a *replace element*, "content" is replaced by an external file

- By default, the bottom edge of an image aligns with the baseline of text

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src attribute

- src provides the locations of image files

  – Relative path to images   relative URLs+

  – Absolute path to images   absolute URLs

```
<img src="icon.gif" alt="" />
<img src="/images/arrow.gif" alt="" />
<img src="http://www.example.com/images/smile.gif" alt="" />
```

- Tip: save image files in their own directory with folder name images or graphics.
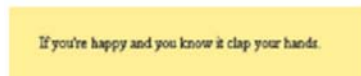
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alt attribute

- Provides alternative text to describe the image

```
<p>If you're <img src="happyface.gif" alt="happy" /> and you know it
clap your hands.</p>
```
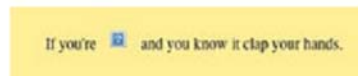
If you're 😄 and you know it clap your hands.

With image displayed

If you're [x] happy and you know it clap your hands.

IE 6 and 7 (Windows)

If you're happy and you know it clap your hands.

Firefox 1.5 and 2; Netscape 7 (Windows and Mac)

If you're [x] and you know it clap your hands.

Safari (Mac)

- Tip: if use same images in multiple places of your website, make sure each img element is pointing to the same image file on the server; images will be cached locally and displayed fast after downloaded
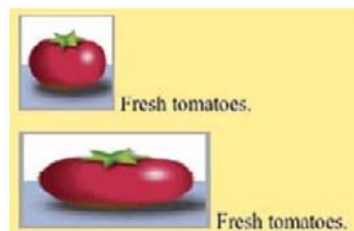

Width and height dimensions

- Indicate the dimensions of image in number of pixels

width="*number*"
Image width in pixels

height="*number*"
Image height in pixels

```
<p><img src="thumbnails/window_100.jpg" alt="view
from the bedroom window" width="75" height="100"
/></p>
```

- Defining width and height will overwrite the original dimensions of images, resulting in a fuzzy and blurring image

Fresh tomatoes.

width="72" height="72"
(actual size of image)

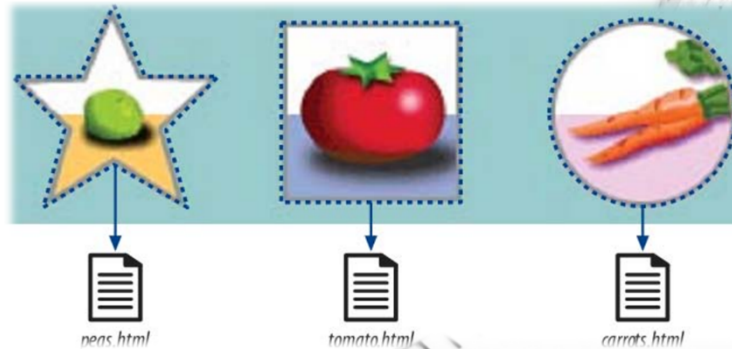Fresh tomatoes.

width="144" height="72"

Imagemaps

- *Single image* with multiple "hotspots", links…

peas.html   tomato.html   carrots.html

- Still one ordinary image, but many places are "hot"

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The parts of an imagemap

- Three components for Client-side imagemaps

- An ordinary image file, pointed within an *img* element
  - **The *usemap* attribute within that *img* element**
  - **A *map* element that contains some *area* elements.**
  - **i.e.,**

```
<img  src="myimage.jpg" usemap="#mapA" />
<map  name="mapA" id="mapA">
  <area  shape="circle" coords="222,30,40" href="apple.html" />
    <area  shape="circle" coords="467,30,20" href="orange.html" />
</map>
```

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Creating the map

- Example:

❶ `<map name="veggies" id="veggies">`

❷

Ⓐ `<area shape="poly" coords="56,5,45,32,18,32,39,52,30,80,56,64,85,82,76,51,97,33,68,31,58,4,55,5" href="peas.html" alt="pea icon" />`

Ⓑ `<area shape="rect" coords="127,9,196,79" href="tomato.html" alt="tomato icon" />`

Ⓒ `<area shape="circle" coords="270,46,37" href="carrots.html" alt="carrot icon" />`

`</map>`

❸ `<p><img src="veggies.gif" width="330" height="90" usemap="#veggies"></p>`

Creating the map

- Example:

❶ This marks the beginning of the map. I gave the map the name veggies. Dreamweaver has used both the name and id attributes to identify the map element. Both attributes have been included in order to be both backward (name) and forward (id) compatible. Within the map element there are area elements representing each hot spot in the image.

❷ Each area element has several attributes: the shape identifier (shape), pixel coordinates (coords), the URL for the link (href), and alternative text (alt). In this map there are three areas corresponding to the rectangle, circle, and polygon that I drew over my image:

Ⓐ The list of x,y coordinates for the polygon (poly) identifies each of the points along the path of the star shape containing a pea.

❸ The img element now sports the usemap attribute that tells the browser which map to use (veggies). You can include several imagemapped images and their respective maps in a single (X)HTML document.

Homework

- Reading through Chapter 7
- **Assignment 2**
- a html exactly named **assignment2.html** containing at least the following elements
  - A heading
  - A paragraph
  - An ordinary image with link
  - An imagemap with two clickable areas/hotsppots, link one to asignment1 and link the other to an available picture
- Send to TA by email as a LastNameFirstName_AS2.zip package
- Due on Sep 23rd 11:59pm

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Questions

Thank You!

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