

# **IIST 361 - Web Development**

Class 3 – Lecture notes

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# Team projects

- Team projects – description
- 5 teams formed

# Designing with Images

- HTML
  - Frames
  - Tables
  - Images
  - Backgrounds
- Dreamweaver
- Photoshop
  - Working with layers in Photoshop (ex. In class ~ 30 min)
  - Creating a banner, logo for your homepage “index.html” (ex. In class ~ 30 min)
  - Image maps (ex. In class)
  - Digital matrix (homework assignment 3)

# HTML Frames

- With frames, you can display more than one HTML document in the same browser window. Each HTML document is called a frame, and each frame is independent of the others.
- The disadvantages of using frames are:
  - The web developer must keep track of more HTML documents
  - It is difficult to print the entire page.

```
<frameset cols="25%,75%">  
  <frame src="frame_a.htm">  
  <frame src="frame_b.htm">  
</frameset>
```

- Examples:
  - [Mixed frameset](#)
  - [Inline frame](#)

# HTML Tables

- Tables are defined with the `<table>` tag.
- A table is divided into
  - rows (with the `<tr>` tag)
  - each row is divided into data cells (with the `<td>` tag).
- The letters `td` stands for "table data," which is the content of a data cell.
- A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, etc.
  - E.g. Insert table, code/design view (in Dreamweaver)

# HTML Images

## The Image Tag and the Src Attribute

- In HTML, images are defined with the `<img>` tag.
- The `<img>` tag is empty, which means that it contains attributes only and it has no closing tag. To display an image on a page, you need to use the `src` attribute. `Src` stands for "source". The value of the `src` attribute is the URL of the image you want to display on your page.
- The syntax of defining an image: ``
- The URL points to the location where the image is stored.  
An image named "boat.gif" located in the directory "images" on "www.w3schools.com" has the URL:  
`http://www.w3schools.com/images/boat.gif`.
- The browser puts the image where the image tag occurs in the document. If you put an image tag between two paragraphs, the browser shows the first paragraph, then the image, and then the second paragraph.
  - E.g. [http://www.w3schools.com/html/tryit.asp?filename=tryhtml\\_images](http://www.w3schools.com/html/tryit.asp?filename=tryhtml_images)

# HTML Backgrounds

## Backgrounds

The <body> tag has two attributes where you can specify backgrounds. The background can be a **color** or an **image**.

- e.g. [http://www.w3schools.com/html/tryit.asp?filename=tryhtml\\_bodybgimg](http://www.w3schools.com/html/tryit.asp?filename=tryhtml_bodybgimg)

## Bgcolor

- The bgcolor attribute specifies a background-color for an HTML page.
- The value of this attribute can be a hexadecimal number, an RGB value, or a color name:

```
<body bgcolor="#000000">
```

```
<body bgcolor="rgb(0,0,0)">
```

```
<body bgcolor="black">
```

- The lines above all set the background-color to black.

# HTML Backgrounds

## Backgrounds

- The background attribute specifies a ***background-image*** for an HTML page.
- The value of this attribute is the URL of the image you want to use.
- If the image is smaller than the browser window, the image will repeat itself until it fills the entire browser window.

```
<body background="clouds.gif">
```

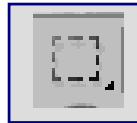
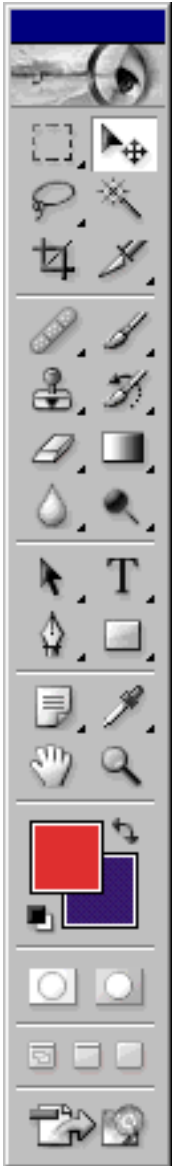
```
<body background="http://www.w3schools.com/clouds.gif">
```

- The URL can be relative (as in the first line above) or absolute (as in the second line above).

\* Note: The **bgcolor** and background attributes in the <body> tag are not recommended in the latest versions of HTML (HTML 4 and XHTML).

According to the World Wide Web Consortium (W3C) Style sheets (CSS) should be used instead (to define the layout and display properties of HTML elements).

# Photoshop – tools



The **MARQUEE** tool - makes rectangular, elliptical, single row, and single column selections.



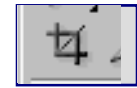
The **MOVE** tool – The move tool lets you drag a selection or layer to a new location in the image.



The **LASSO** Tool - allows you to make freehand selection borders.



The **MAGIC WAND** tool – lets you select an area based on tonal range and color value without having to trace its outline.



The **CROP** tool – the move tool lets you drag a selection or layer to a new location in the image.



The **SLICE** tool – dividing an image into slices lets you selectively optimize it for Web viewing. This tool will be considered in more advanced classes.



The **BRUSH** tool - lets you paint the current foreground color on an image. The two options available by clicking the arrow are:  
1 *Brush tool* – creates soft strokes of color.  
2 *Pencil tool* - creates hard-edged freehand lines.



The **CLONE STAMP** tool – with this tool you can take a sample from an image and apply it to another part of the same image.

[More tools](#)

- Photoshop – working with layers
  - In class exercise ~ 30 minutes

# Photoshop - banner

The most popular formats



Leaderboard (728 x 90)



Full Banner (468 x 60)



Half Banner (234 x 60)

1. There are different formats known as standard banner size.
2. The standards evolved from guidelines several market leaders worked out in early days.
3. Of course, everybody is free to define their own formats.
4. It is recommended to design your banners in standard (most popular) formats.
5. The size of units is defined in pixel - width x height.
6. Set the values of your image to the respective format when you start designing your banner.
7. You may identify other formats surfing the web.
8. Have a look at your favorite websites to get some impressions what banner size they are using.

Source: <http://www.bannercreator.nu/banner-size.html>

# Photoshop - Creating a banner for your homepage

## [Sample banner for IST 361](#)

### **Exercise (in class ~ 30 minutes)**

- Open up Adobe Photoshop CS3
- File new, create an image framework that is 728 by 90 pixels
- Select a color for Background Contents “White”
- Add a layer and change the background color
- Add a gradient
- Add some text
- Change the color of the text, font and font size (be creative!)
- Add an image (resize if necessary), align it to the left
- Center the text
- Save as JPEG (name it “banner”)
- Add banner to your “index.html” (use <img> tag in Dreamweaver)
- **Show me the results!**

# Image maps

- What is an image map?
  - A graphic with several areas that are linked to URLs or other web pages is called an **image map**.
  - The areas on an image map that are linked are called **hotspots**.
  - Image maps are most useful when they involve a graphic made up of distinct parts.
  - Examples
    - geographic map <http://www.worldatlas.com/aatlas/world.htm>
    - Banner <http://www.albany.edu/cci/>
- When you insert an image map, you create a hotspot area and then define a link that opens when a user clicks the hotspot area.
- You can create multiple hotspot areas, but they are part of the same image map.

# Image maps – try it yourself – in class exercise

- In the Document window, select the image.
- In the Property inspector, click the expander arrow in the lower-right corner to see all properties.
- In the Map Name box, enter a unique name for the image map.
- To define the image map areas, do one of the following:
  - Select the circle tool and drag the pointer over the image to create a circular hotspot.
  - Select the rectangle tool and drag the pointer over the image to create a rectangular hotspot
  - Select the polygon tool and define an irregularly shaped hotspot by clicking once for each corner point. Click the arrow tool to close the shape.
- In the hotspot Property inspector’s Link box, click the folder icon to browse to and select the file you want to open when the user clicks the hotspot, or type the URL path.
- In the Target field, select
  - `_blank`, which loads the linked file into a new, unnamed browser window.
    - Note: The target option isn’t available until the selected hotspot contains a link.
- In the Alt box, type alternative text for display in text-only browsers
- Repeat steps 4 through 7 to define additional hotspots in the image map.
- Save your file and upload it on your “itsunix” ist361 folder.
- **Show me the results in the class!!**

- Assignment 3 – see description on the course page, follow the instructions.
- Questions?/Problems –see me during office hours.
- Next class – designing with CSS
  - Team 1 – meet me after class to discuss your ideas about the team project.