



Simple HTML

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HTML Agenda

- What is HTML?
- HTML Files
- HTML Basic Tags
- Text Blocks
- CSS
- Tables
- Lists
- Forms
- Page Layout Using DIVs



HTML

- HTML stands for HyperText Markup Language
- Files written in HTML are interpreted by Web Browsers, such as Edge, Internet Explorer, Firefox, Chrome, Opera, or Safari, to display web pages
- HTML provides mechanisms for adjusting the page layout, using multimedia items, and interfacing with various web programming languages

CSS (Cascading Style Sheets) are used for text and layout formatting



HTML Files

- HTML files are text files (no formatting)
- HTML files traditionally have a file extension of .htm or .html
- Any editor that creates text files can be used to create HTML that generates a web page. We will be using Notepad++
- There are WYSIWYG editors that allow you to create the look of your Web page and will generate the HTML for you
- Web page design software that creates Web pages using more advanced features of HTML (Dreamweaver, etc.)



HTML Tags (commands)

- HTML/CSS/JavaScript Information
 - <http://www.w3schools.com>
- There are two general types of HTML tags
 - Paired (Container) Tags
 - The HTML tag is applied to the data between the open bracketing command and the closing bracket

<command arguments> data </command>

- Unpaired (Empty)Tags
 - These tags have no data associated with them, they just indicate an action to be executed

<command arguments>

- HTML is not case-sensitive unless inside of quotes



General HTML Tags

Here is a general layout for an HTML document:

```
<!doctype html>  
<html>  
  <head>  
    <title> Document Title </title>  
    <!-- comments are not displayed -->  
  </head>  
  <body>  
    ...  
  </body>  
</html>
```



Text Blocks

- Text that is entered on a page is displayed with a default font and size
- Text without any formatting will contain no line spacing
- There are 6 header styles that will display text on a new line in a particular font format

`<hn> Header </hn>`

where n is an integer from 1 to 6

- Paragraphs can be entered using the `<p></p>` tags. The paragraph tag has a blank line before and after it.

Two stand alone tags that can be used with line spacing are `
`, start the next line (no blank line), and `<hr/>` start a new line with a horizontal line displayed.



Cascading Style Sheets (CSS)

- CSS allows you to define styles (text formatting for example) that can be repeatedly used
- Example structure:

```
<style>
  element1 {format; format; ...}
  element2 {format; format;...}
  ...
</style>
```
- where elements are items like `p`, `h1`, `body`, etc. and formats set color, font, etc.



CSS Example

➤ Sample Embedded CSS:

```
<style>
  p {
    color: purple;
    font-family: Verdana, Arial, sans-serif;
    font-size: 200%;
  }
  h2 {
    color: green;
    font-size: 300%;
  }
</style>
```

➤ Text enclosed in `<p></p>` tags will now be purple using the Verdana font and will be sized at 200%

➤ Text enclosed in `<h2></h2>` tags will now be green and sized at 300%



External CSS Files

- A style sheet can be placed in a separate file so that it can be used to format many web pages
- The style sheet should be given a `.css` extension
- Any number of elements can be formatted in this file:

```
body { background-color: yellow; }  
p { color: red; font-family: Algerian;  
}
```

- This file can then be loaded into an HTML document:

```
<link rel="stylesheet" type="text/css"  
href="test.css" />
```



Text Formatting (Inline CSS)

- To set the font, font size and color of text, a CSS `style="element: value;"` argument is added to the HTML tags. Inline CSS overrides embedded CSS which overrides external CSS.

- To set the font:

```
style = "font-family: 'courier new',  
garamond, sans-serif;"
```

- To set the font size:

```
style = "font-size: 200%;"
```

- To set the font color:

```
style = "color: blue;"
```

- To set all of these for a paragraph

```
<p style="font-family: verdana, arial,  
serif; font-size: 150; color: red">
```

- Bold/italic text: `data` `<i>data</i>`



Hyperlinks

- A hyperlink is used to move from one web page to another or to another document or file
- The tag for making a link is:

```
<a href="url">link text or image</a>
```

Where url can be a local file or Internet web site

- Examples:

```
<a href="http://buffalostate.edu/">Buffalo State</a>
```

```
<a href="sabres.html"></a>
```



Backgrounds and Images

- To add a background color to the page:
`<body style="background-color: orange;">`
- To add an image:
``
- Possible arguments:
`style="width: Npx; height: Npx;"`
`title="text to display when pointed at"`
`alt="text to display if image not found"`
- Example:
``
- To center a tag:
`style="text-align: center;"`
- To align an image:
`style="float: left;"`



Play a sound

- Use the following the play a sound that starts when the page is loaded with the player hidden:

```
<embed src="sound.wav" hidden="true"
autostart="true">
```

- HTML5 introduced the `<audio>` tag:

```
<audio controls>
<source src="horse.ogg" type="audio/ogg">
<source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio tag.
</audio>
```



Tables

Tables can be used to layout data (should not be used to layout pages)

```
<table>
  <thead>
    <tr style="background-color: navy;
    color: white;">
      <th>Month</th>
      <th>Days</th>
    </tr>
  </thead>
  <tbody>
    <tr style="background-color: #CCC;
    color: navy;">
      <td>January</td>
      <td>31</td>
    </tr>
    <tr style="background-color: #DDD;
    color: navy;">
      <td>February</td>
      <td>28/29</td>
    </tr>
  </tbody>
</table>
```



Lists

- HTML provides tags to create three (3) different types of lists:

- Ordered (browser manages numbers)

```
<ol style="list-style-type: decimal;">  
  <li>first list item</li>  
  <li>second list item</li>  
</ol>
```

- Unordered (bullets)

```
<ul style="list-style-type: square;">  
  <li>first list item</li>  
  <li>second list item</li>  
</ul>
```

- Definition

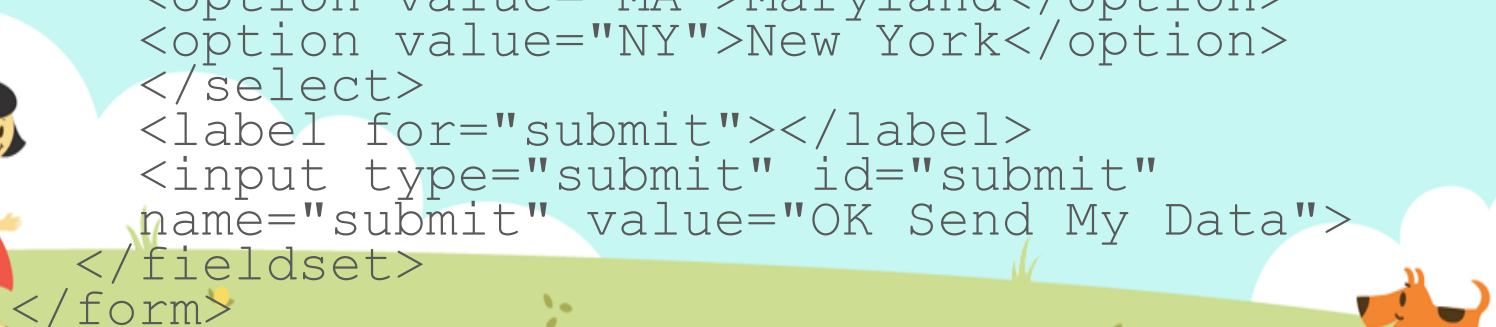
```
<dl>  
  <dt>first list item</dt>  
  <dd>first item definition</li>  
  <dt>second list item</dt>  
  <dd>second item definition</li>  
</dl>
```



Forms

- Forms can be used to collect data:

```
<form id="myForm" name="myForm" method="POST"
  action="mailto:you@your-domain.com">
  <fieldset>
    <legend>Contact Me:</legend>
    <label for="firstName">First Name:</label>
    <input type="text" id="firstName"
      name="firstName" size="15"><br/>
    <label for="lastName">Last Name:</label>
    <input type="text" id="lastName"
      name="lastName" size="15"
      required="required"><br/>
    <label for="state">State/Province:</label>
    <select id="state" name="state">
      <option value="MA">Maryland</option>
      <option value="NY">New York</option>
    </select>
    <label for="submit"></label>
    <input type="submit" id="submit"
      name="submit" value="OK Send My Data">
  </fieldset>
</form>
```



Forms

Forms can be styled with CSS:

```
#myForm {
  margin: 0 auto;
  padding: 2% 0;
  width: 80%;
}
input, label, select {
  display: block;
  float: left;
  margin: 1px 2px;
  text-align: left;
}
input[type=checkbox],
input[type=radio] {
  clear: right;
  display: inline;
  float: left;
  margin: 2px 2px;
  width: auto;
}
```

```
label {
  font-weight: bold;
  text-align: right;
  width: 30%
}
input {
  width: 60%;
}
button{
  float: right;
}
.clear {
  clear: both;
}
fieldset {
  background-color: #CCC;
  color: navy;
  margin: 2px;
  width: 80%;
}
legend {
  color: #F00;
  font-weight: bold;
}
```



Layout

You should use the `<div>` tag for page layout

```
<div id="main">
  <div id="info"
    style="background-color: navy;
    color: white;">
    <p>Jim Gerland</p>
  </div> <!-- id="info" -->
  <div id="details"
    style="background-color: #CCC;
    color: navy;">
    <p>Adjunct Faculty<br>
    Buffalo State College</p>
  </div> <!-- id="details" -->
</div> <!-- id="main" -->
```



Layout

You can use CSS to position and styles your DIVs

```
#main {  
  background-color: #FFF;  
  margin: 1% 8% auto;  
  width: 80%;  
}  
#info {  
  background-color: navy;  
  color: white;  
  margin: 2% auto;  
}  
#details {  
  background-color: #CCC;  
  color: navy;  
  margin: 2% auto;  
}
```

