

HTML Fundamentals

Basic HTML:

- HTML consists of two components: text and tags
- Tags
 - How to format and display webpages
 - Creates an element on the page
 - Constructed of two elements: core tag and additional attributes
- Text
 - Content of the page
- Attributes
 - Modifiers for a tag or object
 - EX: href on an anchor tag

▼ HTML Skeleton

```
<html>
  <head> //Contains the title of the page, and can link to Javascript
    <title> Title of Page </title>

    <style>
      //where CSS goes
    </style>

  </head>

  <body>

    //This is where we find all the body information

  </body>
</html>
```

Common Tags

```
<strong> //Used to make text bolded
```

```
<em> //Used to emphasize text with italics
```

```
<br> //Creates a line break
```

```
<a> //An anchor tag that is used to create links between pages; needs an HREF to tell it where to go  
<a href="test.html">Home</a>
```

```
<h1> <h2> <h3> <h4> <h5> <h6> //Used to create headings; <h1> is largest and boldest, <h6> is the opposite
```

```
<p> //Used to define a paragraph on a page, can also center with:  
<p style = "text-align: center">  
  
//inherently double space themselves  
//cannot out block elements or other <p> inside them
```

```
<hr> //Used to create a horizontal line across the page; can set it's width:  
<hr style = "width: 90%">
```

```
<img>: //Used to place images on a page; must also contain the src attributes  
  
//src - file name and path  
//alt - alternate text for the image  
//class or id - label for the image  
Common CSS tags:  
<width>  
<height>  
<border-width> //the width in pixels of the border around the image, with  
0 being no border
```

```
<audio> //used to bring audio to a page; audio is embedded in sub tag  
<audio autoplay="1" controls="1" loop="1"> <source type="audio/mpeg" src="song.mp3"></audio>  
  
//autoplay  
//controls  
//loop
```

```
<ul> and <li> //creates an unordered list  
<ul>  
<li> Words </li>  
</ul>
```

```
<ol> and <li> //creates an ordered list
<ol>
<li> Words </li>
</ol>
```

```
<blockquote> //indents and seperates a paragraph of text
```

```
<meta charset="UTF-8">

//will fix strange formatting that comes from different character sets
```

```
<div> </div>
//creates generic boxes that do not have restrictions
```

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

//linking an external stylesheet in the head of an HTML file
```

Form Quicksheet

- Allows you to collect info from users for activities such as survey's and feedback pages
- Can submit to a page but this requires scripting
- Form objects include:
 - Text boxes (input type="text")
 - checkboxes (input type="checkbox")
 -
 - radio buttons (input type="radio" name="reuse" value="what appears")
 - can do multiple by keeping the name the same
 - textareas
 - <textarea name=box>
 - submit/reset buttons
 - <input type="submit" name="passed" value="what appears in box" >
 - <input type="reset" name="passed" value = "what appears in box">

- image submit buttons
- hidden text boxes
- non-functional buttons (used for scripting)

```
<form method="post" action="/CGI-BIN/mailform.cgi">
//action: where is the form sent, who receives and processes it?
//method: Set to =get or =post depending on security concerns
```

```
<input type="text" style="width: 65px" maxLength:"5" name="ZipCode" placeholder="90089"/>
```

//input: core tag for soliciting input from consumer; ranges from textual input to radio to check boxes; use name attribute for form processing and JavaScript

```
<input type="text"> // basic type for getting text info only;
```

```
<input size=""> //defines the physical width of the box
```

```
<input maxLength=""> //defines the max number of characteristics the user can input
```

```
<input value> //makes text already present in the field
```

```
<input name> //sets the name of the form for use in JavaScript
```

```
<input type="email" name="emailaddress"/> //textbox with basic data validation
```

//requires an @ sign and data on either side

```
<input type="url" name="favoritesite"/> //textbox with required http:
```

```
<input type="tel" name="phone"> //textbox for phone #; some browsers don't support data validation, so it would basically just be text
```

```
<input type="color"> //text box with color picker UI
```

```
<input type="date" and type="datetime"> //text box with date picker/calendar UI
```

```
<input type="number" min="10" max="100" value="20" step="5"> //text box with data validation for number and
```

increment/decrement arrows

```
//can also set min and max values
//giving it a value gives it a default
//step sets up how much it increments on click
```

```
<input type="range"> //slider UI for number data; needs an output as
well, and scripting if you want the use to see the value
```

```
<input name="topspeed" type="range" id="rangeinput" value="65"onchange="slidedata.value=this.value"/>
<output name="slidedata"></output>
```

```
<input type="password"> //identical to type text except that letters
are ****
```

```
<input type="checkbox"> //creates a checkbox; values will either be
Yes or No depending on whether the user checks the box;
```

```
<input type="checkbox" checked="1"> //textbox starts checked
```

```
<input type="radio"> //radio buttons a user can select
//can only select one
//create multiple names by listing multiple lines with the same name
```

```
<input type="radio" name="animals" value="dog"/> Dog
<input type="radio" name="animals" value="cat"/> Cat
<input type="radio" name="animals" value="bird"/> Bird
```

```
<input type="reset" value="Start Over"> //creates a button that will clear all the contents
of the form if the user clicks it; lets them start over
```

```
<input type="submit" value="Submit Survey"> //creates a submit button
that causes the form to be submitted when the user clicks it
```

```
//the value explains what is inside the button
```

```
<input type="image" src="button.gif"> //loads an image that when the user
clicks it the user clicks to submit the contents of the form
```

```
//need to provide an src tag
```

```
<input type="hidden"> The incarnation of the input tag is for passing
information along to the form processor; the user never sees the contents
```

of this tag, and is used with the pair of name or value

```
<input type="button" value="Show Survey"> //main use of this tag is JavaScript
```

```
<textarea name="story" style="width: 400px; height:200px;"></textarea>
//creates a large, multi-lined areas of text input
//use rows and cols to define the textarea's physical dimensions
//other attributes include wrap, which defines how text wraps inside
the box
```

```
<select name="colors">
  <option value="red">Red</option>
  <option value="#000077" selected="1">Blue</option>
  <option value="#444444">Gray</option>
</select>

//creates a drop down menu; define an area by opening/closing the select
tag
//each individual drop down item is created using option tags
//include selected="1" to set the default object
```

```
<input name="favsport" type="text" list="sports" id="favsport">
<datalist id="sports">
  <option value = "Hockey">
  <option value = "Baseball">
  <option value = "Foosball">
</datalist>

//creates a drop down menu that you can type in, which can autocomplete
like a google search box
```

```
<input placeholder="user@usc.edu">

//puts a gray, placeholder text in the box, which disappears when a user
enters input
```

```
<input required="1">

//data validation that requires the user to fill out/pick a selection
```

```
<input title="Enter valid email address">

//sets an official title for an object; most often displayed as a
tool tip when hovering over an object
```

```
//also commonly used when an object fails a h5 data validation
```

```
pattern="\d{3} [\-\ ] \d{3} [\-\ ] \d{4}"
```

```
//patterns give a regular expression to give a formula to compare data against
```

```
//the pattern will only validate if a user enters a phone number with dashes
```

```
<input autofocus="1">
```

```
//preselects the form object for the user, such as putting the cursor there to start
```

File Folder Paths/References

```
<a href="images/pic2.jpg">
```

```
//goes from the folder it is saved in to the images folder and gets pic2.jpg
```

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

```
//goes from the folder it is saved in up a folder and finds classpage
```

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

```
//goes up to the highest folder and then starts looking for files
```

```
//would work well on a server but perhaps not on a laptop
```