

HTML5 and CSS



HTML5



What is HTML - Hypertext Markup Language



- Document markup language
 - system for annotating a document
 - Developed in 1989-1991 by Sir Tim Berners-Lee
 - Annotations consist of tags <>
 - Tags define the semantic structure of a page

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
  </head>
```

```
  <body>
```

```
    <h1>Hello World!</h1>
```

```
  </body>
```

```
</html>
```

Hello World!

Tag

- `<h>` - Heading
- `<a>` - Anchor (link)
- `` - Image
- `<div>` - Division (section)
- `` - Span (inline section)

Example

- `<h1>Hello World!</h1>`
- `A Link`
- ` />`
- `<div>Stuff in here</div>`
- `Stuff in here`

Tags Continued

- `` - Unordered List
 - `` - List Item
- `<table>` - Table
 - `<thead>` - Table Head
 - `<tbody>` - Table Body
 - `<tr>` - Table Row
 - `<td>` - Table Data (column)
- ``
 - `Item1`
 - ``
- `<table>`
 - `<thead>`
 - `<tr><td> Col 1 </td></tr>`
 - `</thead>`
 - `<tbody>`
 - `<tr><td> data </td></tr>`
 - `</tbody>`
 - `</table>`

Other Tags

- `<p>` - Paragraph
 - `
` - Line Break
 - `<!-- -->` - Comment
- `<p> Some Text </p>`
 - `<!-- Won't See This! -->`

- Key-value pairs that modify or describe a Tag
- Some are specific to Tag, some apply to all Tags
 - Ex:
 - All tags can have a “class” attribute
 - Only anchor (<a>) has a hyperlink (href) attribute
- Syntax is key=“value”
 - Ex:

```
<a href=“http://www.google.com”> Google </a>
```


CSS 3



What is CSS - Cascading Style Sheets

- Style Sheet Language
 - describes look and feel of a markup document
 - Separation of concerns: Content vs. Presentation
 - Flexibility allows us to display the same content in different formats (media, print, etc)

Selectors - The Cornerstone of CSS

- A selector declares what markup element a style applies to
- Common selectors include element, class, and id
- A group of styles is called a declaration block
- Like C/C++/Java/JavaScript, CSS code is grouped by { }
- Individual styles are called properties (i.e. height, width, color)

Examples of CSS

- Element declarations have no prefix
 - `h1 { font-size: large; }`
 - `<h1>Hello!</h1>`
- Class declarations are prefixed by ‘.’
 - `.header { font-size: large; }`
 - `<h1 class="header">`
 Hello!
 `</h1>`
- Id declarations are prefixed by ‘#’
 - `#hello { font-size: large; }`
 - `<h1 id="hello">`
 Hello!
 `</h1>`

- Styles can be added inline with the style attribute
 - Ex: `<div style="font-size: large;">`
- These styles override any style loaded from a style sheet
- They can be useful for testing, but are dangerous in production

Additional HTML/CSS Resources

- <http://www.html-5-tutorial.com/>
- <http://codecademy.com/>
- <http://www.w3schools.com>