

# EECS 183, Week 13

## HTML

Composed of opened and closed tags that begin with < and end with >.

```
<!DOCTYPE html>

<html>
  <head>
    <title>hello</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

## HTML tags

html, body

```
<h1>Heading</h1>
```

```
<h2>Subheading</h2>
```

```
<!-- This is a comment -->
```

```
<p>You can add paragraphs and <span>group parts of text on a line</span>. Here's some
<b>bolded text</b> and here's some <i>italicized text</i>. And here's a link to
<a href="https://eecs183.org">EECS 183 website</a>.</p>
```

```
<ul>
```

```
  <li>• First list item</li>
```

```
  <li>• Second list item</li>
```

```
  <li>• Third list item</li>
```

```
</ul>
```

```
<div>
```

```

```

```
</div>
```

```
<table>
```

```
  <thead>
```

```
    <tr>
```

```
      <th>cell</th>
```

```
      <th>cell</th>
```

```
      <th>cell</th>
```

```
    </tr>
```

```
  </thead>
```

```
  <tbody>
```

```
    <tr>
```

```
      <td>cell</td>
```

```
      <td>cell</td>
```

```
      <td>cell</td>
```

```
    </tr>
```

```
  </tbody>
```

```
</table>
```

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## CSS

Include a CSS file (e.g., `styles.css`) in the `<head>` tag of the HTML file with

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

In the HTML file, add `id` or `class` attributes to elements.

```
<div id="content">
  <p class="description-text">some description</p>
</div>
```

In the CSS file, add rules for a category of elements, or elements with specific `id` or `class` attributes:

```
/* This is a comment */

h1 {
  font-weight: 300;
}

#content {
  margin-top: 10px;
}

.description-text {
  font-size: 14px;
}
```

## CSS properties

See more at <http://www.w3schools.com/cssref/>.

Property	Description	Some possible values
<code>color</code>	Color of text	red, #3e9dc1, rgb(62, 157, 193)
<code>background-color</code>	Background color of element	red, #3e9dc1, rgb(62, 157, 193)
<code>background-image</code>	Background image of element	url("path/to/image.png")
<code>font-size</code>	Font size of text	12px, 1.2em, smaller
<code>font-family</code>	Font family of text	Helvetica, "Helvetica Neue", sans-serif
<code>font-weight</code>	Weight of text	300, 400, 600, bold, bolder, lighter
<code>text-align</code>	Horizontal alignment of text	left, center, right
<code>height</code>	Height of element	100px, 50%
<code>width</code>	Width of element	200px, 40%
<code>margin-top</code>	Outer top spacing of element	0, 10px
<code>padding-left</code>	Inner left spacing of element	0, 20px
<code>text-decoration</code>	Line decoration of text	none, underline, overline, line-through

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## JavaScript

Include a JavaScript file (e.g., `scripts.js`) in the `<head>` tag of the HTML file with

```
<script src="scripts.js"></script>
```

## jQuery

jQuery is a popular library that simplifies certain things in JavaScript. Include it in the `<head>` tag of the HTML file with

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.0/jquery.min.js"></script>
```

Include this block of code to execute code once the HTML document loads in the browser.

```
$(document).ready(function() {  
    // print "hello world" to the console in the browser  
    console.log("hello world!");  
});
```

Using jQuery, you can easily access a category of HTML elements, or elements with specific `id` or `class` attributes. Then you can change their styling:

```
$("p").css("color", "red");
```

Or show and hide elements:

```
$("#error-message").show();  
$(".some-button").hide();
```

Or set and get text contents of an element:

```
$("#error-message").text("Invalid password");  
var message = $("#error-message").text();
```

Or set and get values of input fields:

```
var name = $("#name-input").val();  
$("#name-input").val("");  
console.log("hello, " + "!");
```

You can also add event handlers to observe events and execute functions when they happen:

```
$("#some-button").click(function() {  
    $("#content").css({  
        color: "blue"  
    });  
});
```

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## Hosting on umich.edu

Request IFS storage at <https://eecs183.org/ifs>

Head to <https://mfile.umich.edu> and upload HTML, CSS, JavaScript and any other files to Public/html.