

# Introduction to Coding

# Separation of Content vs. Style

HTML- Content

- Provides structure and content for a page (including text)

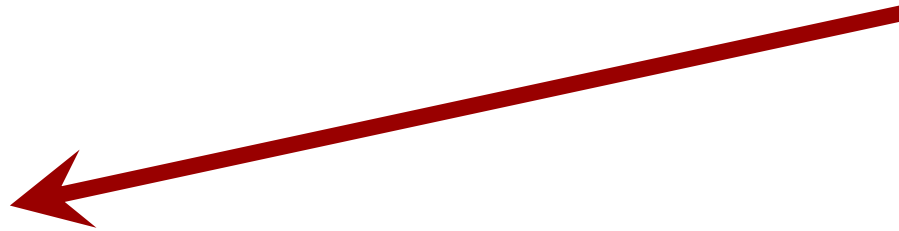
CSS- Style

- List of names/attributes and how they should be displayed

# Before and After

Without CSS the ILLiad page looks like this:

(Everything is displayed with default settings)



ILLiad

Enter your user information below.

Then press the Logon to ILLiad button to continue.

\* Indicates required field

## ILLiad Logon

\* Username

\* Password

[Forgot Password?](#)

[First Time Users](#)

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# Before and After

CSS lets us add colors, font type, sizes, and positions



## ILLiad

Enter your user information below.

Then press the Logon to ILLiad button to continue.

### ILLiad Logon

\* Indicates required field

\* Username

\* Password

Logon to ILLiad

[Forgot Password?](#)

[First Time Users](#)

- Short for “Hypertext Markup Language”
- Programming language to provides structure and content for a page (including text)
- Generally consists of **elements** (enclosed in carets) and **content**.

*<element>Content</element>*

Example: `<p>Welcome to IDS Project</p>`

- Other example of HTML structure

*<element />*

Example: `<input type="submit" value="Submit Information" />`



# Beauty of Elements

- Elements can have *attributes* and *values*

Example: `<a href = "http://idsproject.org">Link to IDS Project</a>`

- Some elements have references to predefined “classes”

Example: `<input type="submit" name="SubmitButton" value="Submit Information" class="f-submit" tabindex="60" />`

- Some elements have references to self defined “classes” or “IDs”. This is where CSS will come into play.

Example: `<span class="req">*</span>`





# Commonly Used Elements

`<p></p>` - creates paragraphs

`<p>Hello!</p>`

`<p>Welcome to IDS Project User Group Meeting!</p>`

Hello!

Welcome to IDS Project User Group Meeting!

`<span></span>` - groups small chunks of code

`<span>Go to IDS Project Website</span>`

Go to IDS Project Website

`<div></div>` - container for large chunks of code

`<div>Today is a beautiful day.</div>`

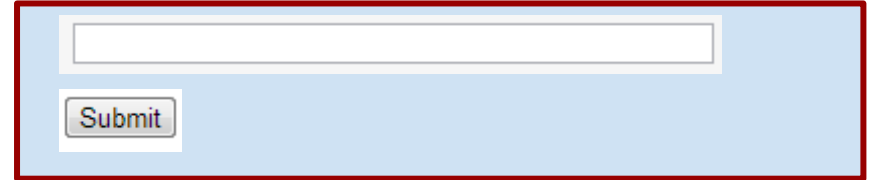
Today is a beautiful day.



`<input></input>`- generally for user input (buttons, text fields)

`<input type="text">`

`<input type="submit" value="Submit">`

A screenshot of a web form element. It consists of a light blue rectangular container. Inside the container, there is a white text input field at the top. Below the input field is a button with the text "Submit" in a grey box.

`<a></a>` - generally used for links

`<a href="http://idsproject.org">`

Go to IDS Project Website`</a>`

A screenshot of a blue hyperlink with the text "Go to IDS Project Website" underlined. The link is set against a light blue background.

`<ul></ul>` initialize an unordered list

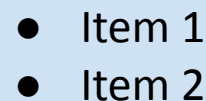
`<li></li>` creates a list item

`<ul>`

`<li>Item 1</li>`

`<li>Item 2</li>`

`</ul>`

- 
- A screenshot of an unordered list with two items. The list is contained within a light blue rectangular box with a red border. The items are "Item 1" and "Item 2", each preceded by a black circular bullet point.



ILLiad

Choose an option from the choices below.

`include_header.html` ←

`include_menu.html` ←

`"ViewOutstandingRequests.html"` ←

- **Logoff klidsky**

---

- **Main Menu**

---

- **New Request**
  - ↳ Photocopy
  - ↳ Book
  - ↳ Book Chapter
  - ↳ Conference Paper
  - ↳ Patent
  - ↳ Report
  - ↳ Thesis
  - ↳ Standards Document
  - ↳ Other (Free Text)

---

- **View**
  - ↳ Outstanding Requests
  - ↳ Electronically Received Articles
  - ↳ Checked Out Items
  - ↳ Cancelled Requests
  - ↳ History Requests
  - ↳ All Requests
  - ↳ Notifications

---

- **Tools**
  - ↳ Change User Information
  - ↳ Change Accounts
  - ↳ Change Password

---

- **About ILLiad**

Outstanding Requests				
Transaction	Type	Title	Author	Status
1	Article	Journal Marine Research: Death of three Loop Current rings	Kirwan, A.D.	Awaiting Document Delivery Processing
2	Article	Journal Marine Research: Death of three Loop Current Rings	Kirwan, A. D.	Awaiting Document Delivery Processing
3	Article	Oceans:		Awaiting Request Processing

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`include_footer.html` ←

- **New Request**
  - ↳ Photocopy
  - ↳ Book
  - ↳ Book Chapter
  - ↳ Conference Paper
  - ↳ Patent
  - ↳ Report
  - ↳ Thesis
  - ↳ Standards Document
  - ↳ Other (Free Text)



```
<ul>  
<li class="first"><a href="#ACTION action="10" form="22">>Photocopy</a></li>  
<li><a href="#ACTION action="10" form="21">>Book</a></li>  
<li><a href="#ACTION action="10" form="23">>Book Chapter</a></li>  
<li><a href="#ACTION action="10" form="24">>Conference Paper</a></li>  
<li><a href="#ACTION action="10" form="25">>Patent</a></li>  
<li><a href="#ACTION action="10" form="26">>Report</a></li>  
<li><a href="#ACTION action="10" form="27">>Thesis</a></li>  
<li><a href="#ACTION action="10" form="28">>Standards Document</a></li>  
<li class="last"><a href="#ACTION action="10" form="29">>Other (Free Text)</a></li>  
</ul>
```

## Changed wording from Photocopy to Article

```

<ul>
<li class="first"><a href="#ACTION action="10" form="22">>Article</a></li>
<li><a href="#ACTION action="10" form="21">>Book</a></li>
<li><a href="#ACTION action="10" form="23">>Book Chapter</a></li>
<!--GCC added-->
<li><a href="#ACTION action="10" form="20" value="GenericRequestDVDVHS">>DVD/VHS</a></li>
<li><a href="#ACTION action="10" form="20" value="GenericRequestAudio">>CD/Cassette/Audio</a></li>
<li><a href="#ACTION action="10" form="20" value="GenericRequestMicroform">>Microfilm</a></li>
<!--<li><a href="#ACTION action="10" form="24">>Conference Paper</a></li>
<li><a href="#ACTION action="10" form="25">>Patent</a></li>
<li><a href="#ACTION action="10" form="26">>Report</a></li>
<li><a href="#ACTION action="10" form="27">>Thesis</a></li>
<li><a href="#ACTION action="10" form="28">>Standards Document</a></li>-->
<li class="last"><a href="#ACTION action="10" form="29">>Other</a></li>
</ul>

```

Added three new options

Used <!-- and --> to comment out things I don't want

### ■ New Request

- ➔ Article
- ➔ Book
- ➔ Book Chapter
- ➔ DVD/VHS
- ➔ CD/Cassette/Audio
- ➔ Microfilm
- ➔ Other

Conference Paper, Patent, Report, Thesis, etc. are now hidden in my Main Menu, and the wording for Photocopy and Other (free text) is changed




# CSS

- Stands for “Cascading Style Sheets”
- Tells the browser what elements on a web page should look like
- Works in conjunction with HTML
  - HTML is the skeleton, CSS is the skin
- A single CSS file can be used for all of the pages in a site
  - This is super convenient!
- For ILLiad, CSS files live in the css folder



# What am I looking at?

By default,  
the ILLiad  
page CSS  
looks like  
this:



```
1  /*
2  LEGAL
3  =====
4  Copyright: Atlas Systems, Inc. 2006 http://www.atlas-sys.com
5  */
6
7  * {margin:0;padding:0}
8  body {padding: 0 0 20px;color:#333;font:83%/1.5 arial,tahoma,verdana
9
10 a.offsite:link, .offsite {padding-right: 12px;background: transparent
11 "images/aoutside.gif") no-repeat 100%;white-space: nowrap;}
12
13 .iconlist {list-style: none;margin: 0px;padding: 0px;}
14
15 /* LINKS */
16 a,a:link,a:link,a:link,a:hover {background:transparent;text-decoration:underline;
17 cursor:pointer}
18 a:link, a:visited {color:#666666}
19 a:hover,a:active {color:#069}
20
21 /* FORMS */
22 form {margin: 0 0 1.5em}
23 input {font-family: arial,tahoma,verdana,sans-serif;margin: 2px 0}
24 fieldset {border: none}
25 label {display:block;padding: 5px 0}
26 label br {clear:left}
```

It only \*looks\* scary,  
but there are things  
that should look  
familiar, like font  
names.

# Application of CSS

- CSS can be applied using a general rule

`.selector {property: value;}`

- Selector can be either:

- Single **HTML element** (applies to all instances of that element)

Example:

`p{background-color:yellow;}` applies to all `<p></p>` in a HTML document

- **class** (applies to group of instances)
- **ID** (applies to single unique instance)

- Classes and IDs are different from HTML element

- IDs and Classes have to be named in the HTML
- These are preceded by a # (ID) or . (Class)
- Classes and IDs must have the same name in both the HTML and CSS



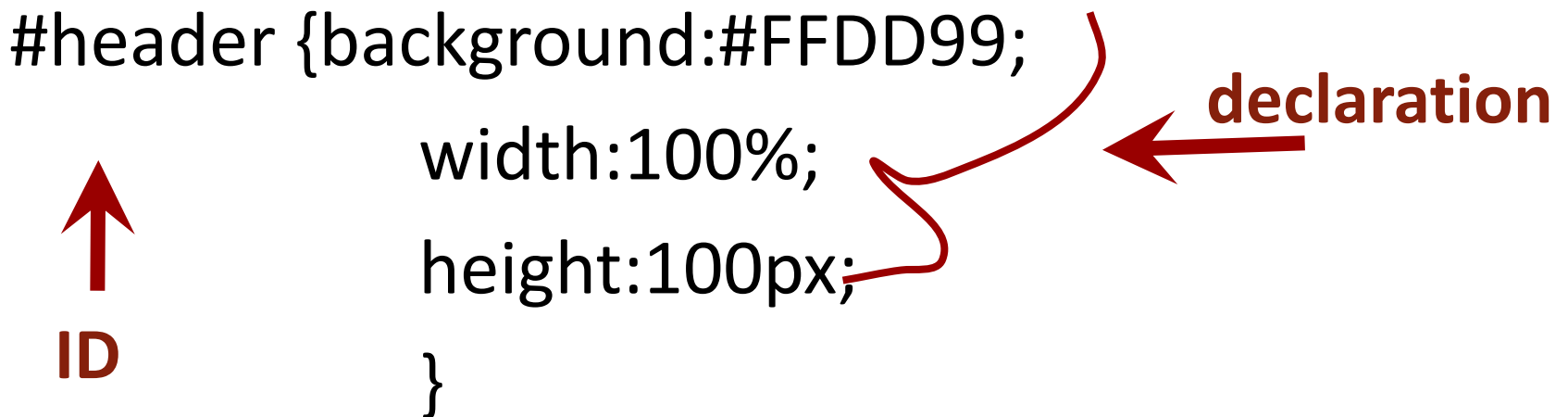
## Making Sense of It All (cont'd)

For each *selector* (ID, Class, or Element), you declare *properties*.

```
#header {background:#FFDD99;  
          width:100%;  
          height:100px;  
          }
```

**ID** ↑

**declaration** ←



This means the ID header will be the the full width of its container, 100 pixels tall, and light orange

# Making Sense of It All (cont'd)

This is a basic page layout:

```
<body>
```

```
<div id="wrap">
```

```
<div id="contain">
```

```
<div id="header">
```

```
<h1>Header text</h1>
```

```
<div  
id="nav">
```

- 1
- 2

```
<div id="content">
```

```
<h1>Header text</h1>
```



The CSS would look like this:

```
body {background:#EFEFEF; font-family:sans-serif; }
```

```
#wrap {margin:auto 20px; width:95%; background:#000066; height:100%}
```

```
#contain {width:95%; margin:auto 20px;}
```

```
#header {height:100px; background:#FFAA66; margin-bottom:10px;}
```

```
#nav {float:left; width:25%; min-height:200px; background:#FFAA66;}
```

```
#content {float:right; width:70%; min-height:200px; background:#FFAA66;}
```



# Making Sense of It All (cont'd)

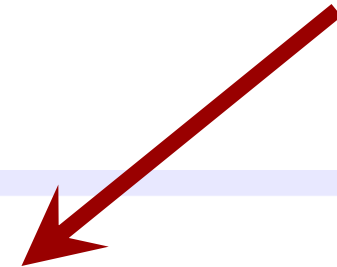
The accompanying  
HTML would look  
like this:

```
<html>
<head>
<link href="test.css" rel="stylesheet"
type="text/css">
</head>
<body>
<div id="wrap">
<div id="contain">
<div id="header">
```

```
<h1>Header Text</h1>
</div>
<div id="nav">
<li>1</li>
<li>2</li>
</div>
<div id="content">
<h1>Header Text</h1>
</div>
</div>
</div>
</body>
</html>
```

# Relationship to HTML

In the <head> portion of the page, you will see links to the CSS files that will govern the look and feel of the page.



```
1 <html>
2 <head>
3 <meta http-equiv="Pragma" content="no-cache">
4 <title>ILLiad Logon</title>
5 <link rel="stylesheet" type="text/css" href="css/main.css" media="screen" />
6 <link rel="stylesheet" type="text/css" href="css/print.css" media="print" />
7 <!--[[if lt IE 6]]>
8 <link rel="stylesheet" type="text/css" href="css/ie6_or_less.css" />
9 <![endif]-->
10 </head>
11 <body id="type-a">
12 <div id="wrap">
13 <div id="header">
14 <span id="site-name">ILLiad</span>
15 <div id="status">Enter your user information below.<br />
16 Then press the Logon to ILLiad button to continue.
17 </div>
18 </div>
19 <div id="content-wrap">
20 <div id="content">
21 <form action="illiad.dll" method="post" name="Logon" class="f-wrap-1">
```

# Relationship to HTML

In the <body> portion, you will see id="name" and class="name", which tells the browser which part of the CSS file to use.

```
1 <html>
2 <head>
3 <meta http-equiv="Pragma" content="no-cache" />
4 <title>ILLiad Logon</title>
5 <link rel="stylesheet" type="text/css" href="css/main.css" media="screen" />
6 <link rel="stylesheet" type="text/css" href="css/print.css" media="print" />
7 <!--[if lte IE 6]>
8 <link rel="stylesheet" type="text/css" href="css/ie6_or_less.css" />
9 <![endif]-->
10 </head>
11 <body id="type-a">
12 <div id="wrap">
13 <div id="header">
14 <span id="site-name">ILLiad</span>
15 <div id="status">Enter your user information below.<br />
16 Then press the Logon to ILLiad button to continue.
17 </div>
18 </div>
19 <div id="content-wrap">
20 <div id="content">
21 <form action="illiad.dll" method="post" name="Logon" class="f-wrap-1">
```



# In the Wild

```
196 /* LAYOUT - HEADER */
197 #header {background-color: #efefef; border-left: 1px solid #CCCCCC;border-right: 1px solid
padding: 6px 0 0 2px;
198 #header #site-name {font: 265% arial;letter-spacing: -.05em;margin:0px 0 0 40px;padding:3px;
color: #000066;border:none}
199 #header #title-name {font: 265% arial;letter-spacing: -.05em;margin:0px 0 0 40px;padding:3px
;color: #000066;border:none}
200 #header #user-name {font: 100% ariel;margin:0px 0 0 0;padding:3px;color:#333333;border:none}
```

For <div id="header"> on the default ILLiad page, these are all the properties that apply

# ID vs. Class

- An ID can be used *once per page*.
- In the CSS IDs are preceded by a #
- ex: #header
- Classes can be used *many times per page*.
- In the CSS classes are preceded by a .
- ex: .default-table

# Reusing Classes



What if I wanted dropshadow on 1000 pictures? I could just make one class called “.dropshadow” and apply that class to every image, instead of writing the style for each image every time.

```
1 .dropshadow {  
2   -moz-box-shadow: 3px 3px 4px #000;  
3   -webkit-box-shadow: 3px 3px 4px #000;  
4   box-shadow: 3px 3px 4px #000;  
5   /* For IE 8 */  
6   -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=4, Direction=135, Color='#000000')";  
7   /* For IE 5.5 - 7 */  
8   filter: progid:DXImageTransform.Microsoft.Shadow(Strength=4, Direction=135, Color='#000000');  
9 }
```





# Basic Properties

background (background color)

color (text color)

width

height

font-family

border

margin (space outside)

padding (space inside)





## A Note on Color

In CSS there are several different ways to specify color.

The ILLiad code uses *hexadecimal* display, so this is actually a color: #333399. *This color.*

Colors can also be written by name or *RGB value*.

W3schools have great resources for color names and values:

[http://www.w3schools.com/tags/ref\\_colornames.asp](http://www.w3schools.com/tags/ref_colornames.asp)



# Testing and Checking

All major browsers have a built-in tool to see what CSS applies to a given element on the page

**IE:** F12

**Firefox:** Ctrl + Shift + I or Right-click on any page element and select **Inspect Element**

**Chrome:** Right-click on any page element and select **Inspect Element**

**Other resources:**

Firebug Plugin (for Firefox): <http://getfirebug.com/>





# Atlas Resources

For webpage editors:

<http://www.atlas-sys.com/illiad72update/oclcilliad72webqrc.pdf>

More Atlas documentation:

<https://prometheus.atlas-sys.com/display/illiad/Customizing+the+Web+Interface>





# Useful Web Resources

## W3Schools

<http://www.w3schools.com/>



## Other Resources

Microsoft Expression Web 4 (Free Version):

<http://www.microsoft.com/en-us/download/details.aspx?id=36179>

Stackoverflow <http://stackoverflow.com/>



Code project <http://www.codeproject.com/>

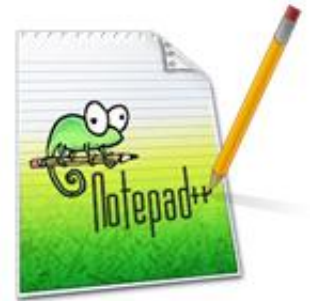
<http://www.colorzilla.com/gradient-editor/>



# Useful Programs

**For HTML/CSS Editing:**

Notepad++ (For Windows) <http://notepad-plus-plus.org/>



**TextWrangler (For Mac)**

<http://www.barebones.com/products/textwrangler/>



**For FTP Uploads/Downloads:**

Filezilla <https://filezilla-project.org/>

