

*The Basics of*  
Cascading Style Sheets (CSS)

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# Introduction

- What?
- Why?

# Presentation Summary

- What is CSS?
- CSS & HTML
- The Box Model
- Style Sheet Implementation
- CSS Rule Structure
- HTML & DIVs
- Common CSS properties
- CSS Cascade and Inheritance
- Resources

# What is CSS?

- Abbreviation
- File extension
- Rules for content display

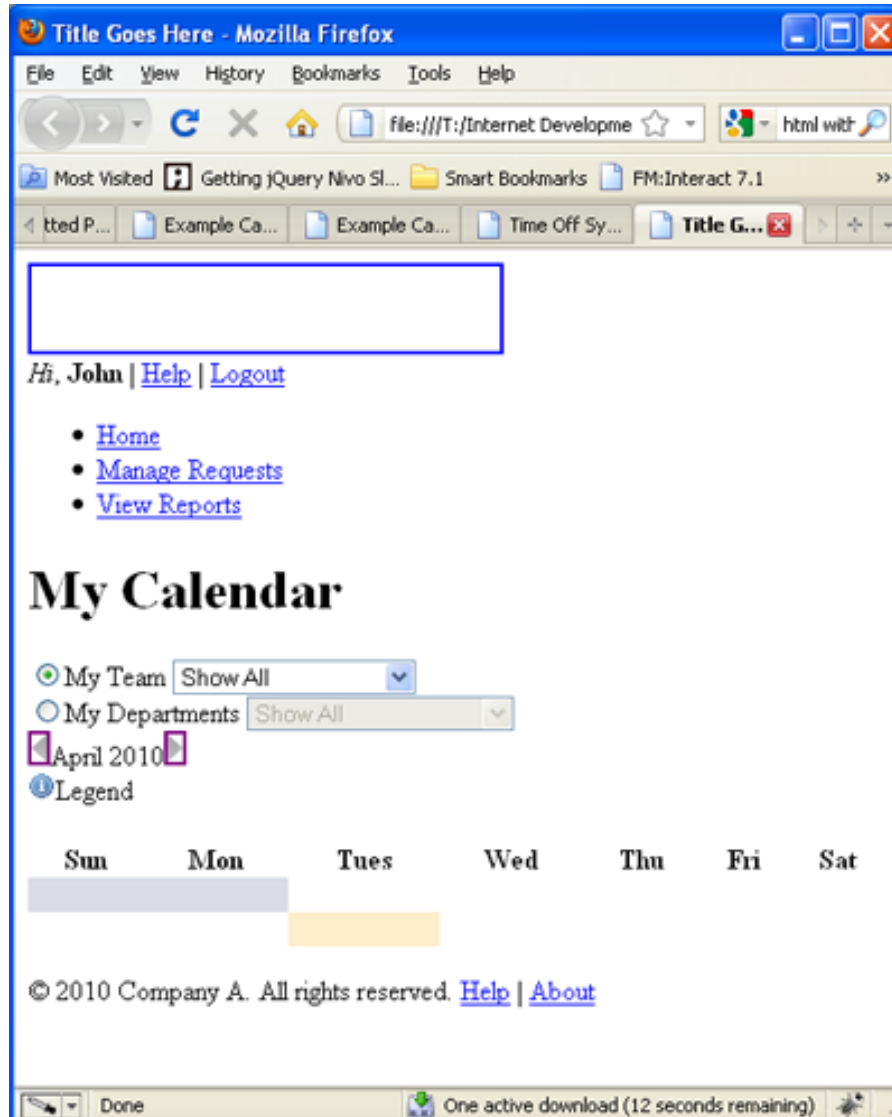
## Style.css

```
/* Styles for mysite.com*/  
body {  
  font-family:Arial;  
  background: #000;  
}  
#container {  
  text-align:left;  
  width:1020px;  
}  
#header {  
  height:232px;  
}  
#footer {  
  width: 100%;  
  padding: 0 10px;  
  margin-bottom: 10px;  
}
```

# Why CSS?

- Separates structure from presentation
- Provides advanced control of presentation
- Easy maintenance of multiple pages

# HTML Without CSS



# HTML & CSS

- HTML = structure
- CSS = *style*

# Attaching a Style Sheet

## 1. External Style Sheet

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

## 2. Internal Style Sheet

```
<style type="text/css">
h1 {color: red}
</style>
```

## 3. Inline Style

```
<p style="color: red">Some Text</p>
```

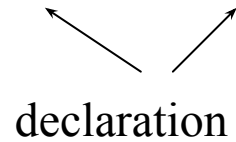


# Media

- all
- braille
- embossed
- handheld
- print
- projection
- screen
- speech
- tty
- tv

# CSS Rule Structure

```
selector {property: value;}
```



# Selectors

```
body { property: value; }  
h1 { property: value; }  
em { property: value; }  
p { property: value; }
```

# More selectors

- \*
- body p
- li > ul
- p:first-child
- h3 + p

With attributes

- input[checked]
- input[type="radio"]
- p[lang|"en"]

# selectors with classes and IDs

- `span.warning`
- `div#main-content`
- `body.has-css3 div#gradient-box`

# Grouping Selectors

Group **different selectors** with the same declaration on one line.

```
h1 {color: yellow;}  
h2 {color: yellow;}  
h3 {color: yellow;}
```

*Example of grouping selectors (both are correct):*

```
h1, h2, h3 {color: yellow;}
```

# Properties and Values

```
body {background: purple;}  
h1 {color: green; }  
h2 {font-size: large;}  
p {color: #ff0000;}
```

```
body {  
background: purple;  
color: green;  
}
```

# Units of lengths

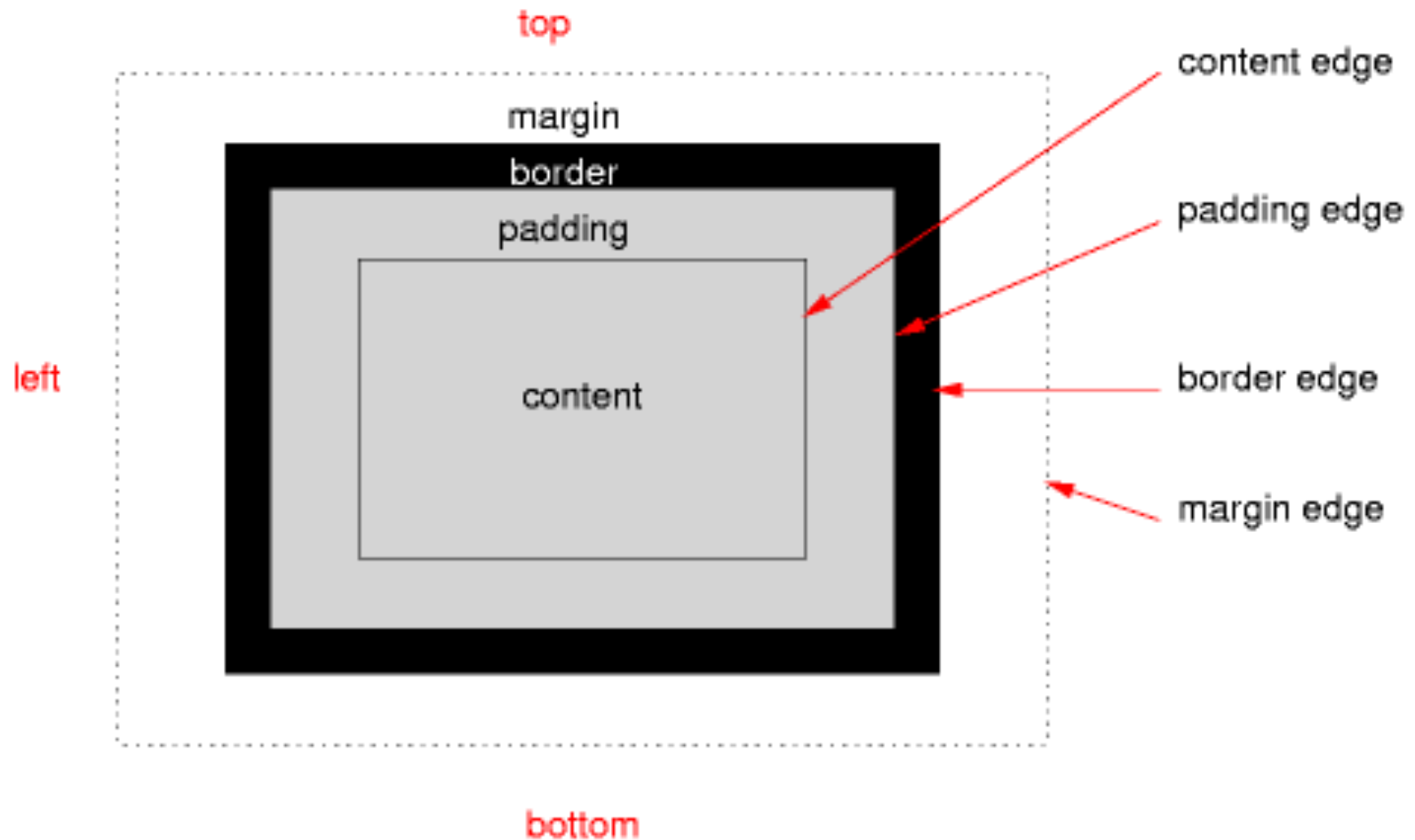
- Relative
  - em
  - ex
  - %
  - px
- Absolute
  - in
  - cm
  - mm
  - pt
  - pc



# Comments in CSS

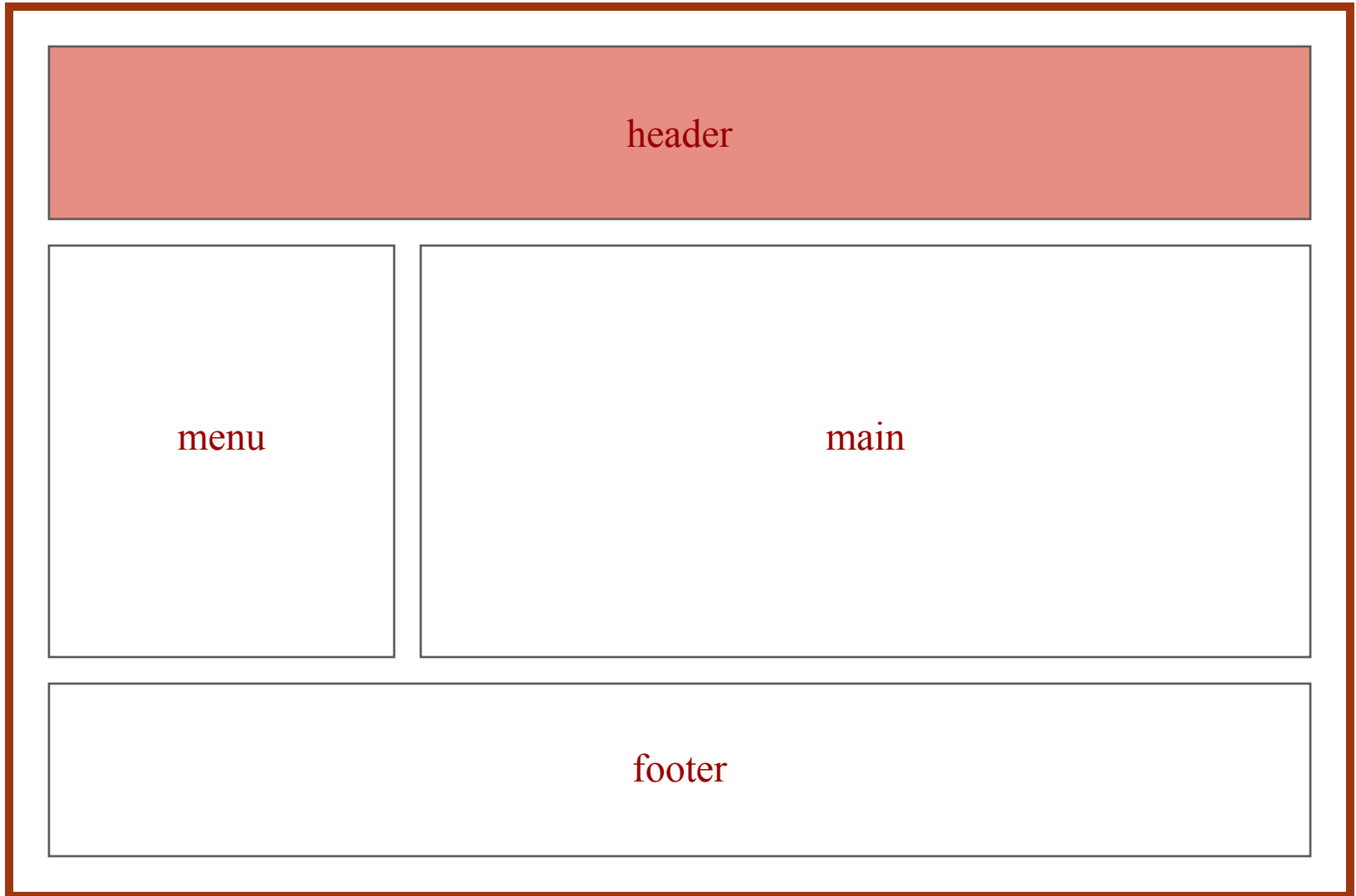
```
p {background-color: #ff0000;}  
/*Directi Branding*/
```

# The Box Model



# Typical Web Page (Browser)

Container





# Typical Web Page (CSS)

```
#container {property: value;}  
#menu {property: value;}  
#main {property: value;}  
#footer {property: value;}
```

# IDs and Classes

*HTML Code:*

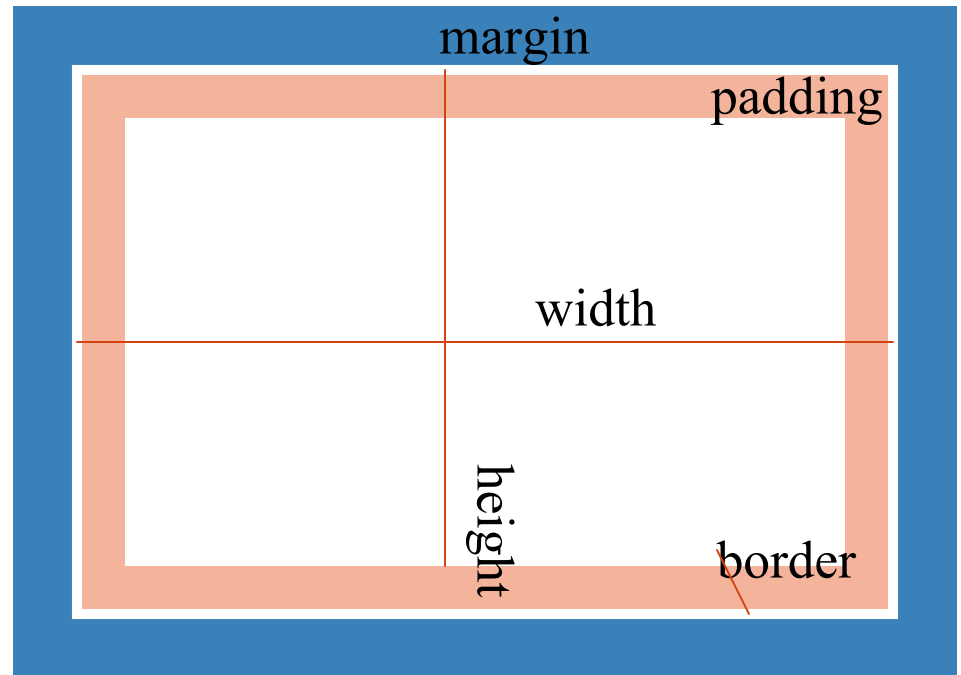
```
<h1 id="mainHeading">Names</h1>  
<p class="name">Joe</p>
```

*CSS Code:*

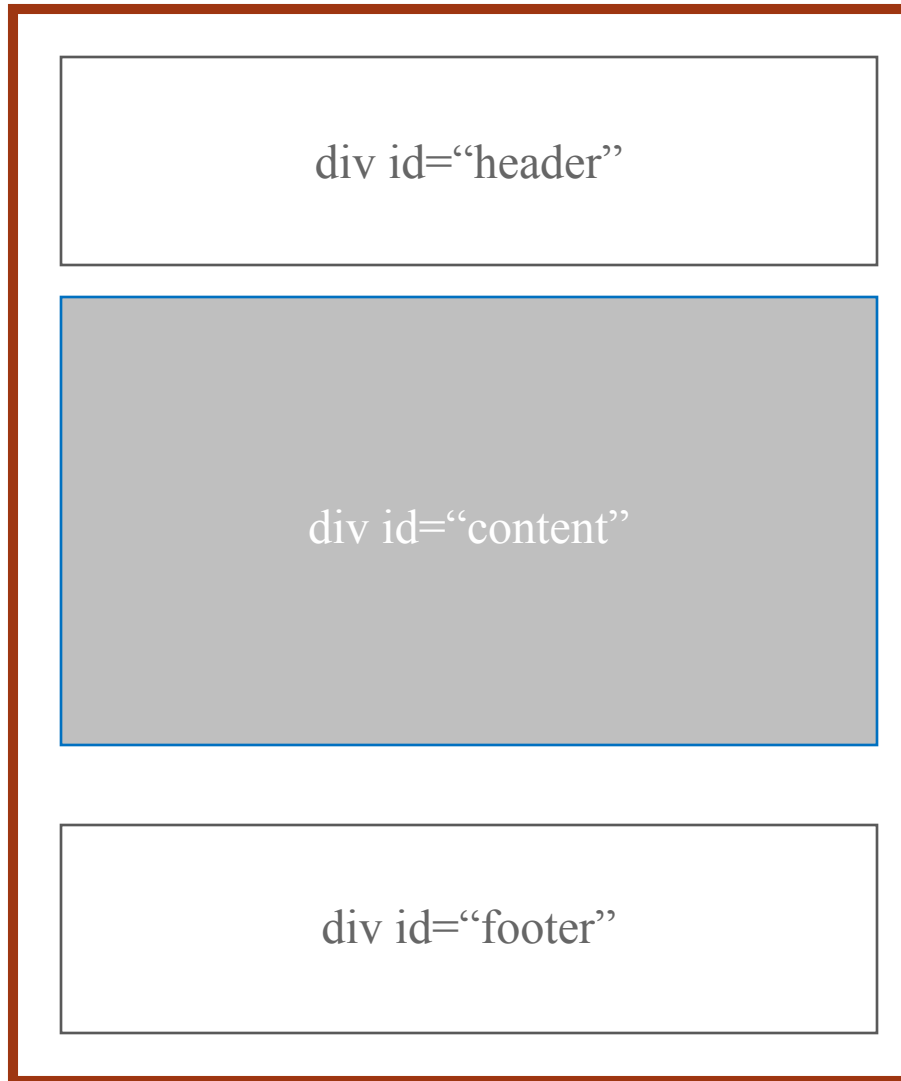
```
#mainHeading {color: green}  
.name {color: red}
```

# CSS Box Properties

- height
- width
- padding
- margin
- border
- float
- clear



# HTML



# CSS

```
#content {  
background-color: #ccc;  
margin-bottom: 10px;  
border: 1px dashed blue;  
color: #fff;  
width: auto;  
}
```



div id="box"

```
#box {width="50px"}
```

```
#box {width="50em"}
```

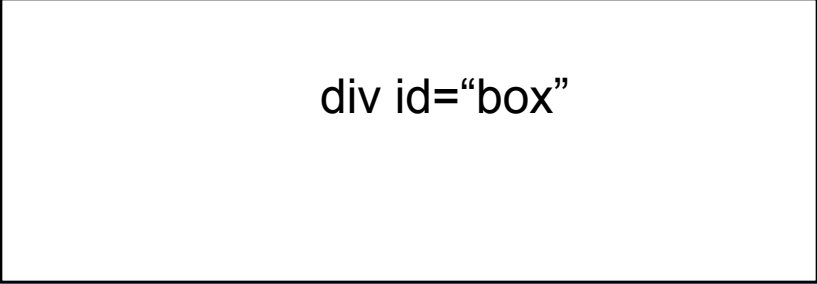
```
#box {width="100%"}
```

```
#box {width="auto"}
```

```
#box {height="auto"}
```

# Float: (left, right)

Float property makes elements float to the right or left of the screen, positioned where they are in the HTML. Floating allows word wrapping.



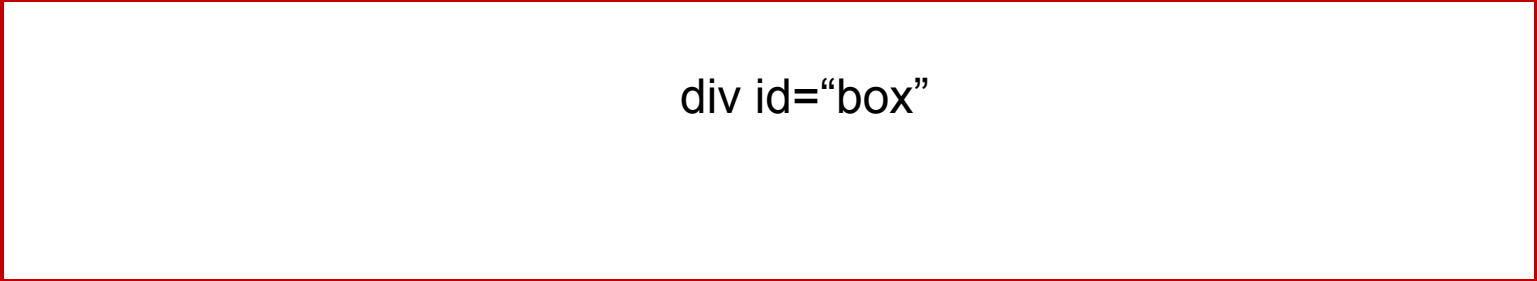
div id="box"

Here is some text which wraps around the box floated to the left.

```
#box {float:left; margin-right: 10px;}
```



# Border (top, right, bottom, left)



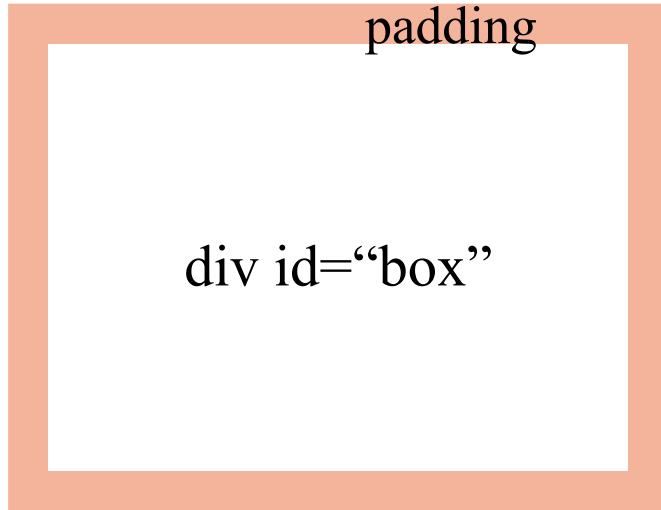
div id="box"

```
#box {  
border-top: 1px dotted red;  
border-bottom: 1px dotted red;  
border-left: 1px dotted red;  
border-right: 1px dotted red;  
}
```

```
#box {  
border: 1px dotted red;
```

```
#box {  
border-color: red;  
border-style: dotted;  
border-width: 1px;
```

# Padding (top, right, bottom, left)



```
padding: 10px;
```

```
Padding: 10px 10px;
```

```
padding: 10px 10px 10px 10px;
```

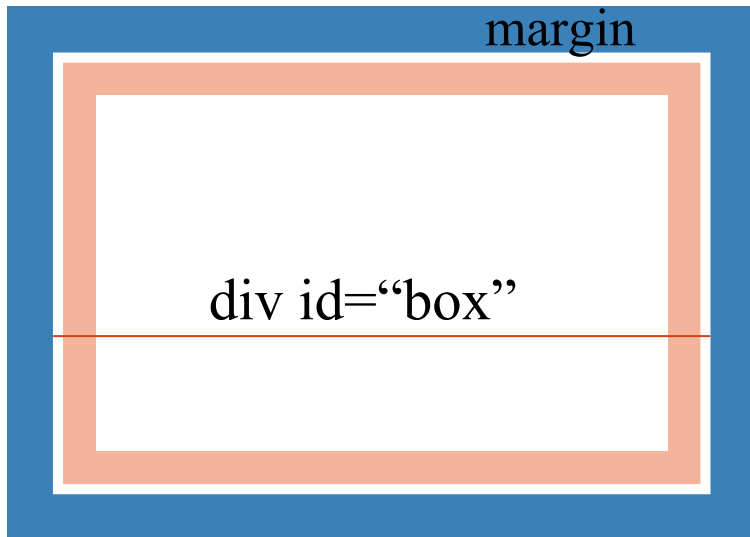
```
padding-left: 10px;
```

```
padding-right: 10px;
```

```
padding-bottom: 10px;
```

```
padding-top: 10px;
```

# Margin (top, right, bottom, left)



```
margin: 10px;
```

**or**

```
margin: 10px 10px;
```

**or**

```
margin: 10px 10px 10px 10px;
```

**or**

```
margin-left: 10px;
```

```
margin-right: 10px;
```

```
margin-bottom: 10px;
```

```
margin-top: 10px;
```

# Positioning schemes

- `static` (Normal flow)
- `relative` (Relative to normal flow)
- `absolute` (Relative to containing block)
- `fixed` (Relative to viewport)

# Text Properties

## **MAIN HEADING**

Gravida lacinia velit. Vivamus tortor  
enim, tincidunt at, pellentesque ut,  
iaculis eu, quam.

```
.mainHeading {  
  color: red;  
  letter-spacing: 5px;  
  word-spacing: 15px;  
  line-height: 1em;  
  text-transform: uppercase;  
  text-decoration:  
underline;  
  text-align: left;  
  font-family: Verdana,  
Arial, sans-serif;  
  font-size: 12px;  
  font-style: italic;  
  font-weight: bold;  
}
```



# pseudo-classes vs pseudo-elements

`a:hover`

`a:active`

`div:first-child`

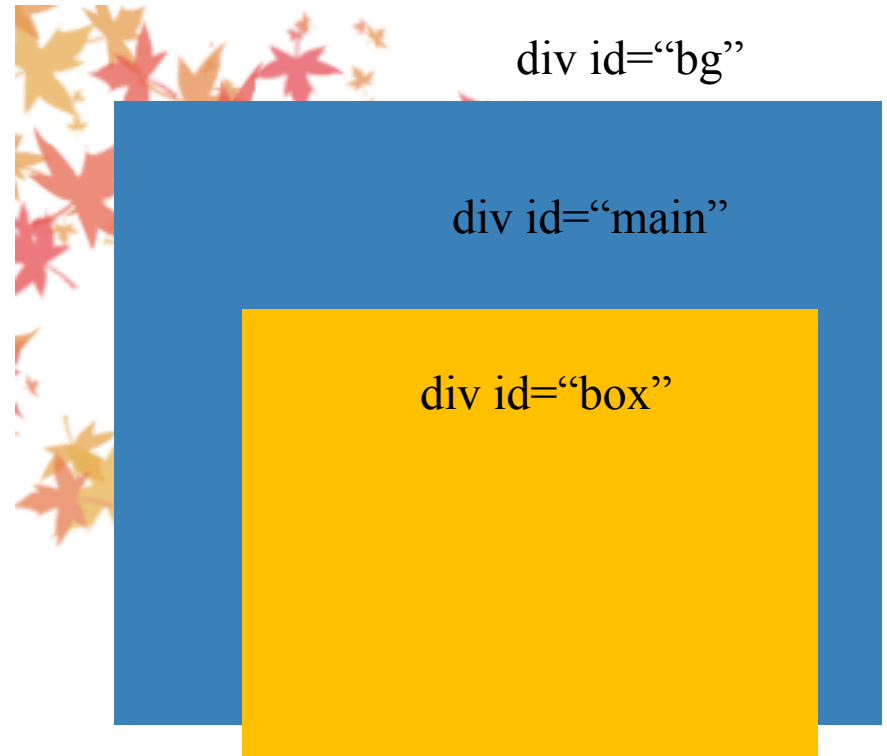
`p:first-line`

`p:first-letter`

`div::after`

`::selection`

# Layering



```
#bg {background:url(leaves.jpg) no-repeat top left}  
#main {background-color: red}  
#box {background-color: yellow}
```

# Background Images

Properties for working with images include:

- `background-image`
- `background-repeat`
- `background-position`
- `background-attachment`

# Background-Image

The background-image property sets an image in the background of an element.



Background images and colors are layered.



If not transparent, the last one listed in the CSS file is visible.

```
li {  
  background-image:url (flower.jpg);  
  padding-left: 10px;  
}
```

# Background-Repeat



The background-repeat property sets an image in the background of an element and tiles, or repeats, it. Tiling is the default.

```
li {  
background-image:url (flower.jpg) ;  
background-repeat:no-repeat;  
}
```

- Possible Values >
- repeat
  - repeat-x (horizontal)
  - repeat-y (vertical)
  - no-repeat

# Image Positioning

The background-position property positions the image using either combined keywords (top, bottom, left, right, and center); length values; or percentage values.

```
background-position: right top;  
/*can also use number values*/
```

```
background-attachment: fixed;  
/*can also use 'scroll'*/
```

left  
top

center  
top



left  
bottom

center  
bottom

right  
bottom

The background-attachment property fixes or scrolls an image in the browser window. Values include *fixed* and *scroll*.

# The Power of Cascade

You can have multiple rules which target the same element!

**So, which one wins?**

The cascading order:

- Origin
- Specificity
- Latest
- What's !important, what's not?

# Inheritance

```
<body style="font-family: Arial">  
  <p>This text will be Arial as well</p>  
</body>
```



# What we haven't seen

Many things:

- Transitions and animations
- Transformations (2D and 3D)
- Gradients
- Regions
- more...

# Resources

- [developer.mozilla.org/en/CSS/](http://developer.mozilla.org/en/CSS/)
- [reference.sitepoint.com/css](http://reference.sitepoint.com/css)
- [www.w3.org/TR/CSS/](http://www.w3.org/TR/CSS/)

People to follow:

- Chris Coyier ([css-tricks.com](http://css-tricks.com))
- Nicole Sullivan ([stubbornella.com](http://stubbornella.com))
- Nick La ([webdesignerwall.com](http://webdesignerwall.com))
- Smashing Magazine - Design ([www.smashingmagazine.com/category/design/](http://www.smashingmagazine.com/category/design/))

Thank You