

# CSS Continued

# Kinds of Selectors

- Descendant selector
  - Override the type, class and id selector styles
  - Typically with two elements where the second is a descendant

- Examples

```
li a {font-size: 2em}
```

```
#header h2 {font-weight: normal;}
```

```
#content h2 {font-weight: bold;}
```

# Kinds of Selectors

- Universal selector
  - Applies to all elements in context
  - Example: `* {font-family: arial, Helvetica; }`
- Pseudo-elements
  - Allows you to style an item that is not marked by elements
  - Two pseudo-elements `:first-letter`, and `:first-line`

# Child Selectors

- A child selector matches when an element is the child of some element. A child selector is made up of two or more selectors separated by ">".
- Example

```
body > p { line-height: 1.3; }
```

sets the style of all p elements that are children of body:

```
div ol > li p { color: tan; }
```

What does this do?

# Adjacent Sibling Selectors

- The selector matches if E1 and E2 share the same parent in the document tree and E1 immediately precedes E2, ignoring non-element nodes (such as text nodes and comments)
- Syntax: E1 + E2, where E2 is the subject of the selector
- Example

math + p { text-indent: 0 }

h1 + h2 { margin-top: -5mm }

# Attribute Selectors

- Match elements which have certain attributes defined in the source document
- Syntax:
  - [att] - For when the element sets the att attribute, value doesn't matter
  - [att=val] - For when the attribute is set to val specifically
- Examples:

```
h1[title] { color: blue; } //<h1 title = "heading">
```

```
span[class=example] { color: blue; }
```

- `a[title] { }`
- `.myPrefStyle{ }`
- `#mySchedule { }`
- `div.myPrefStyle{ }`

- `a[title] { }`
  - Anchor elements with a title attribute
- `.myPrefStyle{ }`
  - Any elements with the class myPrefStyle (same class name can appear in many elements)
- `#mySchedule { }`
  - An element with id mySchedule (only one element on the page)
- `div.myPrefStyle{ }`
  - A div with the class myPrefStyle



## Other Examples

- `div#mySchedule{ }`
- `div table { }`
- `input[type = "submit"] { }`

# Other Examples

- `div#mySchedule{ }`
  - A div with the id mySchedule
- `div table { }`
  - A table with a div ancestor
- `input[type = “submit”] { }`
  - An input element with a type attribute that has the value submit

# Box Model

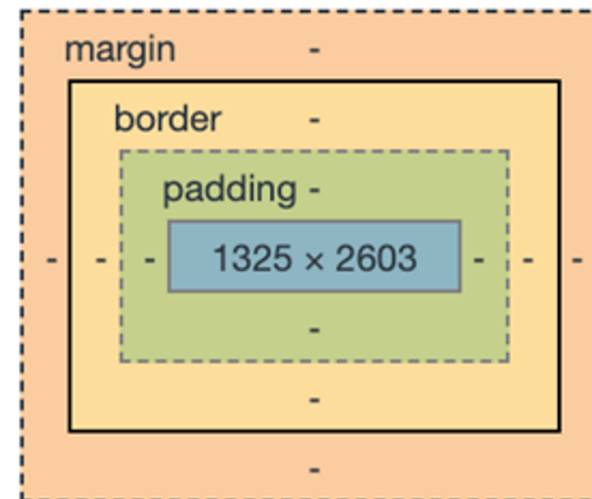
# CSS Box Model

- Refers to margin, border, padding and content HTML element components
- Allows us to define space between elements
- Cheat Sheet:
  - Content: What lies in the middle of the box
  - Padding: What immediately surrounds the content
  - Border: Surrounds the padding and represents the border of the box
  - Margin: Surrounds the border

# CSS Box Model

- Cheat Sheet:

- Content: What lies in the middle of the box
- Padding: What immediately surrounds the content
- Border: Surrounds the padding and represents the border of the box
- Margin: Surrounds the border



# Pro Tips for Box Model

- You may adjust the individual padding/margin properties:
  - padding-bottom, padding-left, padding-top, padding-right
  - margin-bottom, margin-left etc.
- Margin, border, padding and background are not inherited properties (children will reset)

# Background Properties

- background-color
- background-image: location (url) of image
- background-repeat: how image repeat
  - Possible values for repetition
    - no-repeat : one instance of the image
    - repeat : tile
    - repeat-y : repeats on the y-axis
    - repeat-x : repeats on the x-axis
- background-attachment :
  - indicates attachment of the image to the containing element.
  - Possible values are:
    - scroll : default value
    - fixed : image will stay stationary as the scrolling takes place

# Background Properties

Example: [background.html/css](#) &&  
[backgroundStretch.html/css](#)

- Background-position
  - Possible values (some combinations are valid)
    - top, bottom, center, left, right
- Background-size
  - Possible values
    - auto auto - retains the original size
    - 000px 000px
    - x% y%
    - contain | cover | ...
- Background images can be used in elements other than body (e.g., div)
  - There is a shorthand property for backgrounds
    - background: lightblue url("campusBldg.jpg") no-repeat fixed center;



# Choosing Fonts

- Specify a particular font
  - font-family: arial;
  - Works if the font is available on user's machine
- Specify a generic family
  - font-family: serif;
  - Choices include: serif, sans-serif, monospace, cursive, fantasy
- specify a list of fonts
  - will be attempted in order
  - font-family: foobar, arial, sans-serif;

# Google Fonts

- Google supports a set of nice fonts anyone can link in HTML docs
- <https://fonts.google.com/>
- Choose fonts and put a link in HTML
- Use the fonts with “font-family” CSS property