

HTML Continued

Structure, Structure, Structure

Python Practice

Create a generic Die class that allows users to pass a list of values, that serve as the Die's sides.

The model is:

Die
currentValue
possibleValues
roll()

Blockquote

specifies a section that is a quote!

- Browsers typically add some indention to items in a blockquote.

```
<blockquote>”The rain in Spain falls mainly on  
the plane.”</blockquote>
```

HTML Practice

Create a new web page about you! Add:

- an avatar
- a quote from you
- small paragraph about you
- a nested bullet list of your interests

Essentially, a 2002 Facebook page about you!

Use your pages from Friday to help remember tags.

Comments

<!-- Comments go within these brackets.

The browser will ignore everything inbetween these brackets, no matter how many lines.

There's no simple 1 line comment.

The double -'s are super important to close!

-->

Text Styling

Traditionally, one would use HTML tags to assign styles to text.

```
<font color="red">Red Text</font>
```

Nowadays, you *always* use CSS.

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

CSS

- Cascading Style Sheet
 - A language for defining styles (color, size, etc) of HTML elements.
- Can be embedded inline, defined at the top of a document, or imported
- “Cascade” is in reference to how styles can be inherited, overridden, and inherited across multiple CSS definitions

For now, let's just do inline

But don't get comfy!!

Inline styles should only be used as a last resort in styling!

Adding *style*

- The *style* attribute is an attribute of nearly every HTML element.
- It allows you to set various *style declarations* on the element.
- Every element has different *properties* that can be defined in the style attribute
- Only valid *properties* and *values* will work, others are ignored

style=" "

- style *declarations* are added in a ; separated list within the style attribute

```
<p style="color: red; font-size: 15pt">
```

Sized Red Text!</p>

- declarations are made up of *properties* and *values*

```
color: red;
```

color

- specifies the color of text within the element
- the default value is set by the browser
- possible values:
 - a named color – red (only 147 colors are named)
 - color rgb value – rgb(255,0,0)
 - color hex code – #FF0000 (most common method)
 - color hsl value – hsl(0,0%, 78%)

hex codes

- define the color by red, green, and blue values

`#[red][green][blue]`

- each bracket is a 2 digit number representing that color's levels in the defined color

`#66cdaa`

- Letters are used to allow for higher numbers

`#[102][205][170]`

rgb() codes

- values for red, green, blue are expressed as numbers from 0 to 255 in a comma separated list

`rgb(red,green,blue)`

`rgb(102,205,170)`

hsl codes

- introduced in CSS3 (the latest version of CSS)
- define colors in hue, saturation, lightness

`hsl(hue, saturation, lightness)`

`hsl(0, 0%, 78%)`

opacity and alpha channels

- CSS3 intros the opacity property, and the rgba and hsla code standards, which allows for transparent colors!
 - the 'a' added to the end stands for alpha
- opacity and alpha channels are a value from 0 to 1

color: rgba(0,0,0,0.5)

is the same as

color: rgb(0,0,0)

opacity: 0.5

Colors!!!

- There are over 16 Million colors. Only ~16,000 of those can be displayed on a monitor.
- 216 of those have been deemed “web-safe”
 - http://www.w3schools.com/tags/ref_colorpicker.asp
- Really, though, you can display a lot more than 216 today

Color Websites

- <http://paletton.com/>
 - Very involved color picker that helps you pick colors and related shades.
 - For the more.. involved developer
- <http://www.colourlovers.com/palettes>
 - Community made selection of colors and palettes
 - For the less involved developer
- http://www.w3schools.com/tags/ref_colorpicker.asp
 - boring ol' w3c's web-safe color picker

What else can we do with color?

- background-color:
 - defines the background color of an element
 - most elements support this
- border-color:
 - defines the color of the element's border
 - most elements support this, but the border needs to have a size declared for it to appear
 - border-size: 1px

Add a little Color!

Using your new knowledge of color, add some color to your web page.

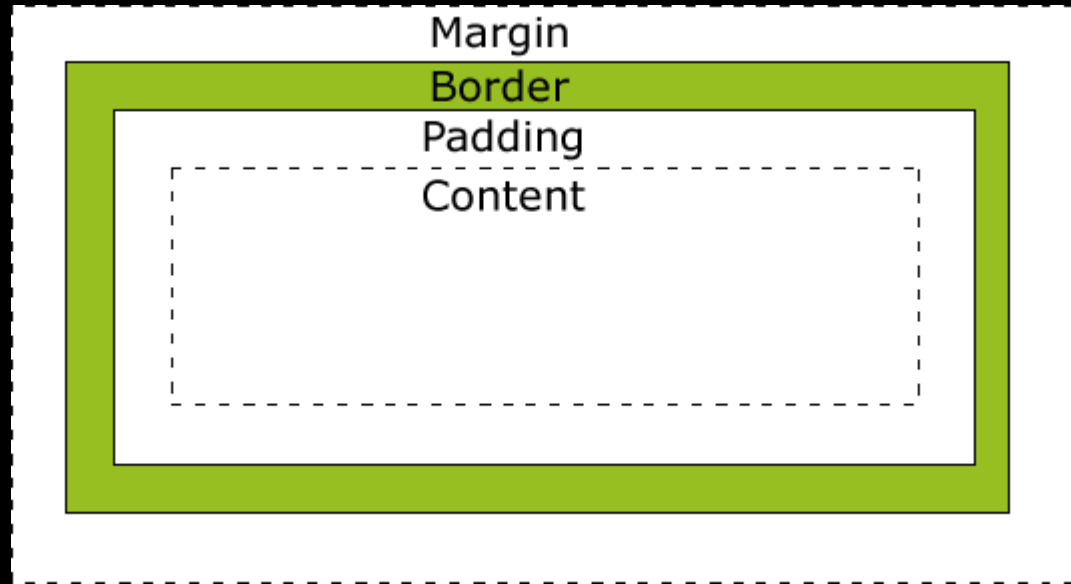
If you need some help picking a scheme, use the color websites mentioned.

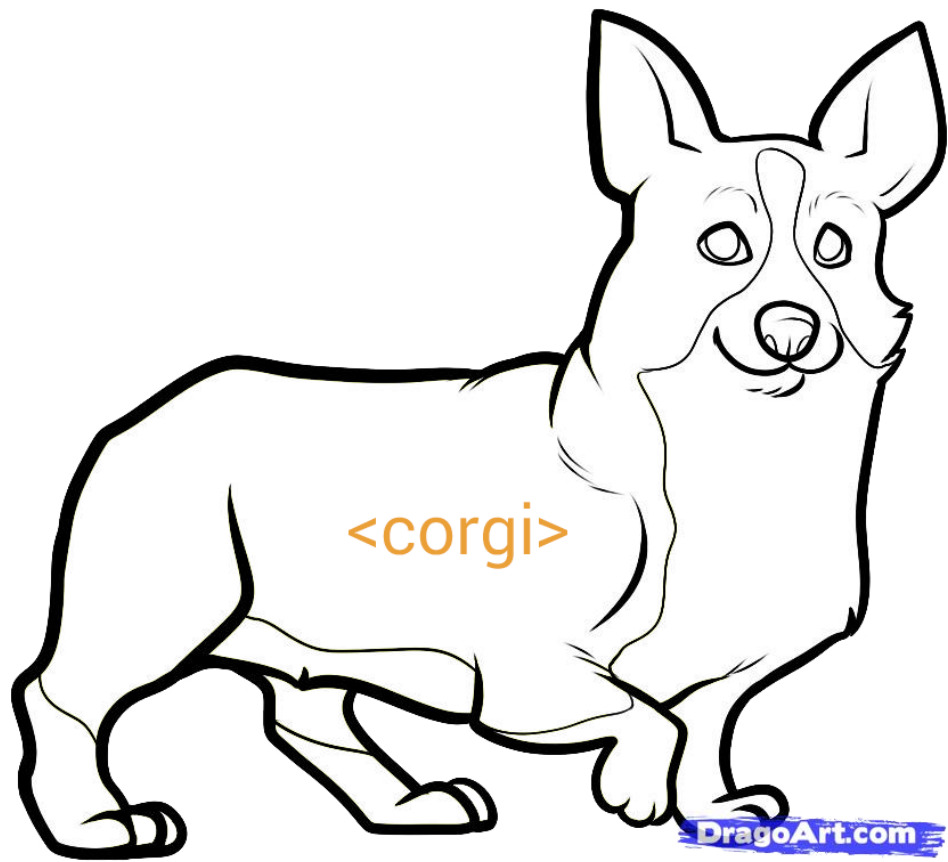
Font Properties

Elements that have the potential to contain text have style properties that define what that text looks like.

- font-size (em > pt > px)
- font-family (family names in comma separated list)
- font-style (**font-style: oblique;**)
- font-weight (bold = 700)
- text-decoration (none, underline, line-through)

Anatomy of an Element/Box Model





padding

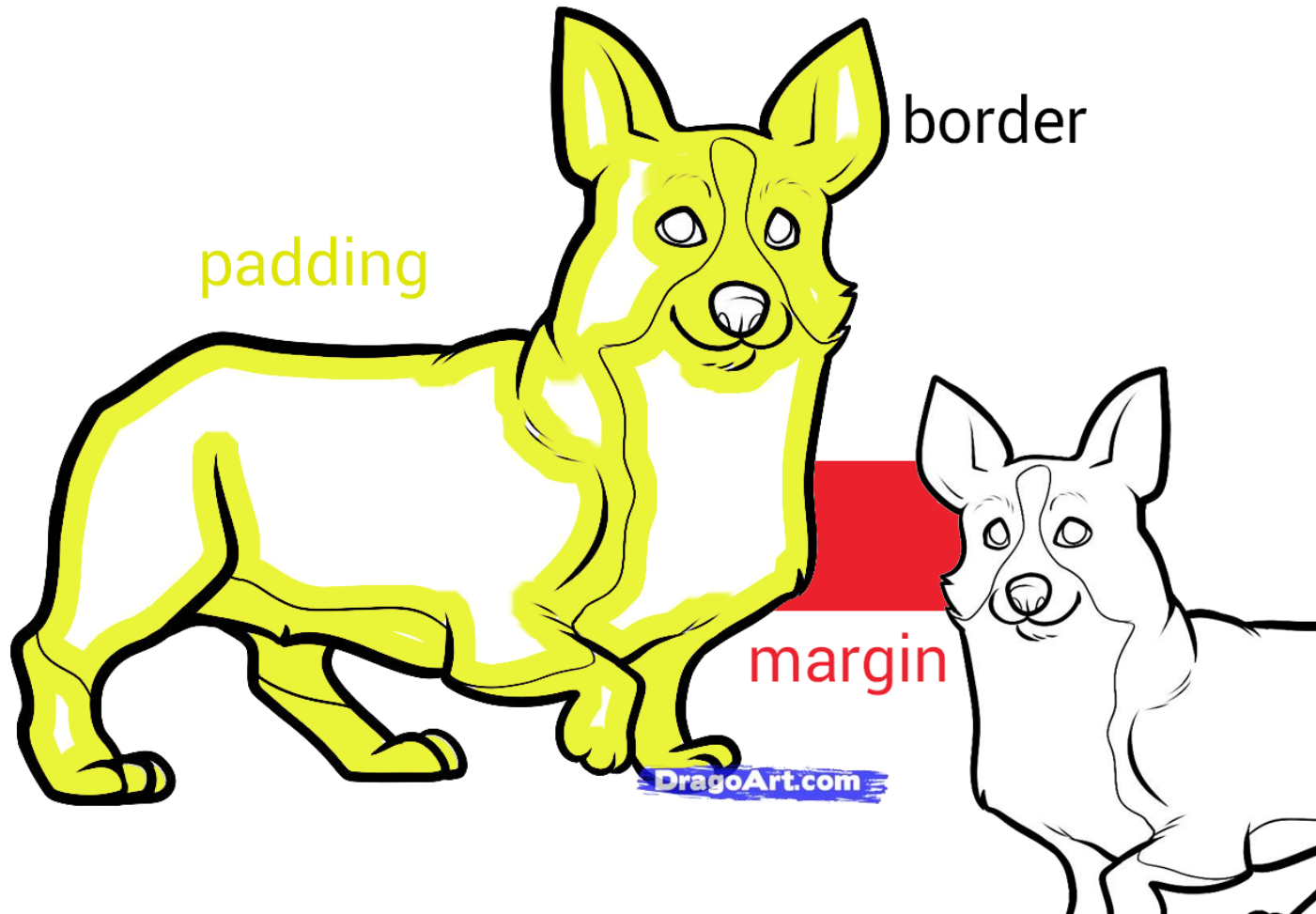


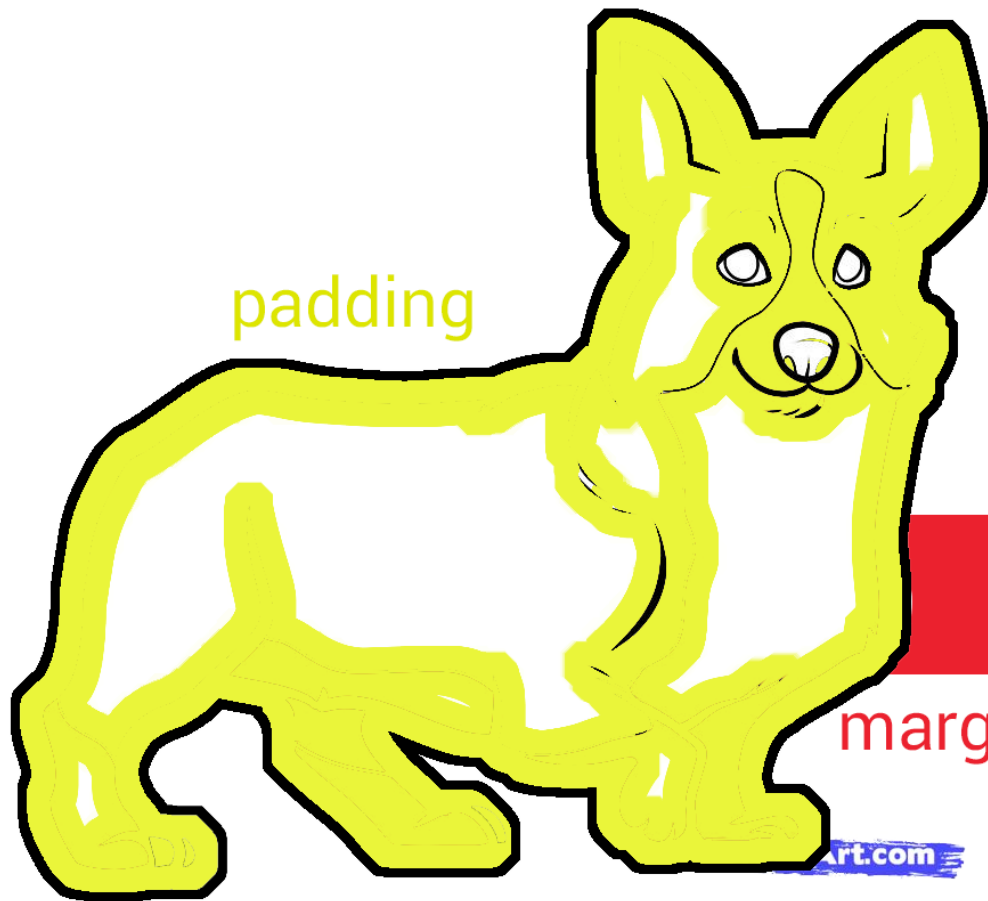


border

padding

DragoArt.com





border

margin



art.com



Padding

Padding is included within the size of the element, because it is inside the border.

- Percentage is in relation to its parent's width, including padding-top & padding-bottom – WEIRDNESS.
- Padding is also included in an element's click zone

Margin

Margin is independent of an element's size, but does relate to an element's parent.

- Percentages in margins are based on container's parent's width and height.

Property Shorthands

For properties that affect all sides of an element/container (like padding, border, or margin), you can use the following shortcuts:

- `property: top right bottom left;`
- `property: top right&left bottom;`
- `property: top&bottom right&left;`
- `property: all-four-sides;`

Borders

Borders are one of the most powerful properties of an element. You can do a lot with borders.

- Size
- Style
- Color
- border-radius <https://css-tricks.com/almanac/properties/b/border-radius/>

Class

`class="class_name"`

`<style>`

`.class_name {`

`// All the styles for this class`

`}`

`</style>`