FE101

Grid Systems, Other Responsive Concerns

Any homework questions?

Other Responsive Concerns

float, display

- These two properties are quite useful for responsive content
- If elements are floated in the same direction, they'll naturally collapse underneath each other when the page is resized
- This is similar to the display: inline; or display: inline-block; properties

Fixed widths vs percentage widths

 If you use a percentage width, your text will resize with the page, which can be a useful tool

 Fixed width containers will not change width based on the size of the page

max-width vs width

- Setting a fixed width will mean that your container once again does not resize, regardless of how small the page gets
- More likely, the page will have a scroll bar to get to the non-visible part of the content
- Using max-width instead will actually resize the content based on the size of the viewport, up until your max-width is hit

!important

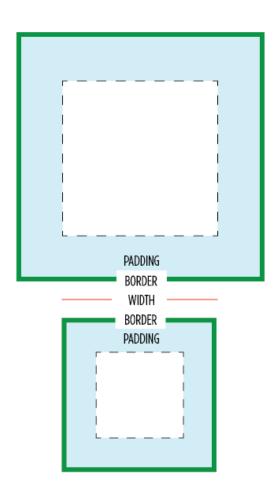
 Adding !important to the end of a css declaration will supersede any other use of that attribute anywhere else

```
font-size: 20px !important;
```

Use with caution.

 Only use this as a last resort if there's no other way to do what you're doing. Later on, when you're editing that attribute in the stylesheet you overrode, you may forgot that stylesheet was overridden.

* {box-sizing: border-box;}



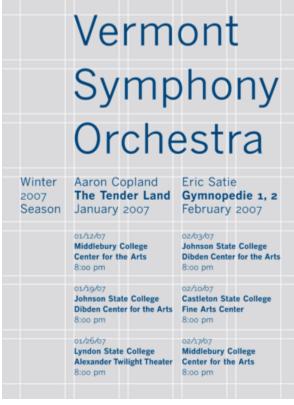
What is a grid system?

(as it relates to design)

 A framework of intersecting lines meant to be used as a skeleton to arrange different

graphic elements

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					10000
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1110	grid systems.	number of possible uses an	d each designer can look for		
O		a solution appropriate to his	personal style. But one must	1	
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GIIG		requires practice."		5	
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Applying Divine	Syncotype	The	InDesign 8.5×11	Doane Paper	Ace Jet 170
Proportion to Your	Synophype is a simple tool	Typographic Grid	Grid System (12)	Utility Notebook	AlsieOne
Web Designs	to help align your text to a	We consider this to be the	Adobe InDesign file with a	A portable notebook	Athletics
This article explains what	baseline grid. Enter your	academic part two to "Grid	grid system for an 8.5"x11"	featuring a patent pending	BBDK
is the Divine proportion	line height and offset in	Systems," Hans Rudolf	page that is divided into 12	Grid+Lines stationery	Blanks
and what is the Rule of	pixels in the Syncotype	Bosshard tackles a deeper	columns and rows using	design that combines the	Build
Thirds and describes how	control box and click	understanding of	the Rule of Thirds (Golden	benefits of grid and ruled	Corporate Risk Watch
you can apply both of them.	"Syncotype it" to overlay a	the complex grid.	Ratio), Includes a	lines onto a single	David Airey
effectively to your designs.	baseline grid in red.	30.Nov.2008	12pt baseline grid.	sheet of paper.	Dirty Mouse
01.Dec.2008	01.Dec.2008		29.Nov.2008	28.Nov.2008	Experimenta
					Experimental Jetset
					Form Fifty Five
					Grafik Magazine
The Grid:	Phiculator	Grid Systems	InDesign 11x17	Replica Typeface	Grain Edit
The Structure	Phiculator is a simple tool	Grid Systems provides a	Grid System (12)	Replica is a new typeface	Graphic Hug
of Design	which, given any number,	rich, easy-to-understand	Adobe InDesign file with a	by Norm that was	Hello Muller



What is a grid system?

(as it relates to CSS + web design)

- Rather than arbitrarily deciding how large content blocks on a web page should be, have them conform to a set width
- Going further, instead of a set width for each block, decide on a width unit and make certain blocks x number of that unit wide
- Makes for more symmetrical designs and easier to maintain, more easily responsive code

Existing grid system options

- Bootstrap http://getbootstrap.com/
- Zurb Foundation http://foundation.zurb.
 com/
- Unsemantic http://unsemantic.com/
- Responsive Grid System http://www.responsivegridsystem.com/

- Bootstrap is a full-featured front end CSS framework
- It is written in LESS, a higher-level version of CSS that gets compiled down to CSS
- To use Bootstrap, you include their library in the <head> section of your webpage
- Different features of the library are accessed using class names like .row, .

(according to the official docs at getboostrap.com/css)

- Rows must be placed within a .container (fixed-width) or .container-fluid (full-width) for proper alignment and padding.
- Use rows to create horizontal groups of columns.
- Content should be placed within columns, and only columns may be immediate children of rows.

(according to the official docs at getboostrap.com/css)

- Predefined grid classes like .row and .col-xs-4
 are available for quickly making grid layouts.
- Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on .rows.
- Grid columns are created by specifying the number of twelve available columns you wish to span. For example, three equal columns would use three.

some sample code

```
<div class="row">
  <div class="col-md-8">.col-md-8</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
</div>
```

Exercise

 Create the webpage mocked up in the file bootstrap.png using Bootstrap's fluid grid system

Creating your own grid system

- You could also create your own grid system
- For inspiration, take a look at one of the major frameworks' code!

https://github.com/twbs/bootstrap

https://github.com/nathansmith/unsemantic

15 Minute Break

More Bootstrap

Setting up your first bootstrap project

```
<!DOCTYPE html>
<html lang="en">
   <head>
      <meta name="viewport" content="width=device-width,</pre>
initial-scale=1">
   </head>
</html>
```

Normalize.css

- Included with Bootstrap
- "Resets" the browser's default styles so they are consistent accross browsers

More Components

- Buttons
- Navbar
- Jumbotron...

And more!

Exercise

Project name

Home

About

Dropdo

Email

Password

Sign in

Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called the hero unit and three supporting pieces of content. Use it as a starting point to create something more unique.

Learn more »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

View details »

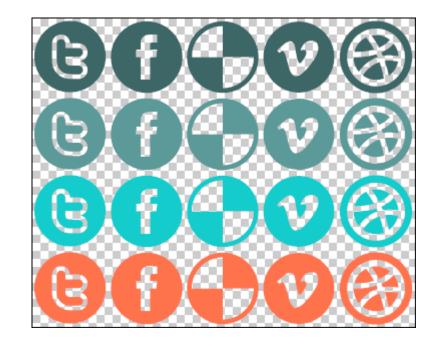
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Sprite Sheets

Sprite Sheets

A sprite sheet is one big image file with many smaller images in it:

This improves performance, since we don't have to make several requests to download images



Sprite Sheets

```
.sprite {
  background-image: url(spritesheet.png);
  background-repeat: no-repeat;
  display: block;
.sprite-github {
  width: 30px;
  height: 30px;
  background-position: -5px -5px;
```

Exercise

Make a spritesheet with some social media icons and display them on an HTML page.