WEEK 8 - PUTTING IT TOGETHER

GA GENERAL ASSEMBLY

FEWD

Giefs fewd!

naow!

Joe Bliss
Is probably humming Stephen Sondheim ...

AGENDA

CSS Positioning

jQuery Animation

Responsive Design - Use of em's

Putting it Together

CSS POSITIONING

Static

Fixed

Relative

Absolute

What's your favorite posish?

POSITION: STATIC;

Everything that we've seen so far has been "position: static;" by default. This is the default for all elements.

You cannot set right, left, top, bottom values to elements with position: static;

A static element is said to be not positioned and an element with its position set to anything else is said to be positioned.

POSITION: FIXED;

Fixed-position elements don't move when the browser scrolls. They are placed relative to the browser window (top, left, bottom, right). Elements with position: fixed; are removed from the normal flow of the page.

It is "buggy" in older browsers, as well as unsupported in many mobile browsers. (http://caniuse.com/css-fixed)

Usage: Persistent navigation, "Modal" divs

Saturday, February 8, 14

POSITION: ABSOLUTE;

An absolutely-positioned element is positioned relative to it's nearest parent with a position other than static (relative, absolute, fixed). Often, this is the browser window.

Absolutely-position elements are taken out of the normal flow of the page.

Usage: Animation!, Placing an element within a parent.

POSITION: RELATIVE;

When an element is assigned position: relative, this changes its position on the page relative to it's current position.Important to note: the original space for the element is preserved in the page.

Usage: Overlapping elements, providing a reference for an absolute object to be placed within.

OVERLAPPING ELEMENTS

When you take objects out of the normal flow of the page, they will potentially overlap other elements.

Elements taken out of the normal flow will appear on top of each other, with the elements furthest down on the HTML appearing as the front-most.

What if we want to change that order?

Z-INDEX

Specifies the "stack order" of objects outside of the normal flow.

Can be positive or negative.

A higher z-index means it will be in front of a lower index.

Works for absolute, relative, and fixed position elements.

EXERCISE – FARM PARTY

Set clouds_2.gif as the background image.

Create a div for the grass with green background and appropriate height - position it at the bottom.

Create a div for the "Farm Party!" banner. For a bonus, use a fun custom font (like from Google Web Fonts).

For each of the images, create a img for it on the page.

Position each of the img elements with position: absolute;

EVERYTHING YOU EVER WANTED TO KNOW ABOUT LAYOUT AND MORE

http://learnlayout.com/

ANIMATIONS – .ANIMATE();

```
$("#myElement").animate({
    opacity: .3,
    width: "500px",
    height: "700px"
  }, 2000);
```

The .animate() method allows us to create animation effects on (most) numeric CSS properties.

.ANIMATE() THESE THINGS:

borderWidth	padding	bottom
borderBottomWidth	paddingBottom	left
borderLeftWidth	paddingLeft	right
borderRightWidth	paddingRight	top
borderTopWidth	paddingTop	
margin	height	
marginBottom	width	
marginLeft	fontSize	
marginRight		
marginTop		

ANIMATE() WITH EASE

```
$("#myElement").animate({
    opacity: .3,
    width: "500px",
    height: "700px"
  }, 2000, "nameOfEasingFunction");
```

The one two options available by default are "linear" and "swing".

http://gsgd.co.uk/sandbox/jquery/easing/ for more.

http://easings.net/ for what they look like.

CODEALONG – EASINGS

CHAINING COMMANDS

Download more graphics at www.psdgraphics.

Chain chain chain ... Chain of fools ...

$("#p1").css("color","red").slideUp(2000).slideDown(2000);

CALLBACK FUNCTION

A callback function is a function that runs AFTER another effect is completed.

For example:

```
$("p").fadeOut(2000 ,function(){
    alert("The paragraphs are now gone.");
});
// This will fadeOut all the paragraphs on the page over 2
seconds, then, once that has completed, send an alert.
```

CODEALONG – JQUERY CAROUSEL

Swap out the main image, replacing src, title, alt attributes.
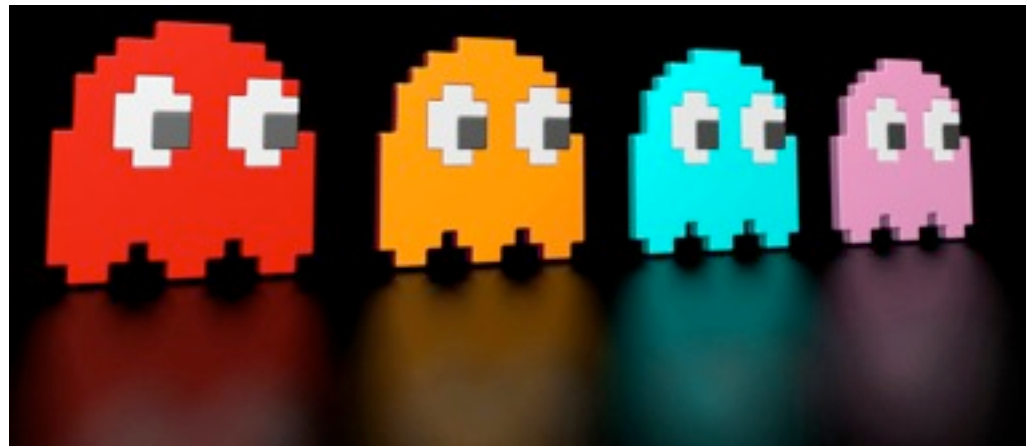
Animate the thumbnails section on click of arrows.

What about adding easing?

EXERCISE – PACMAN

On user event (e.g. click), place a character on the page and animate it. When animation has completed, remove it from the DOM.

- Optionally, add other characters, use easing, perform multiple animations sequentially.

RESPONSIVE REMINDERS

Fluid Layout - Use of %'s

Media Queries

Use of em's

MEDIA QUERY REMINDER

Within stylesheet:

@media only screen and (min-width: 1024px) {

/* Styles go here */

}

Assigns styles for browser widths wider than 1024px.

BREAK POINT REMINDER

Classic "Break Points"
to target:
(1280px), (960px), 768px,
480px, 320px

META REMINDER

iOS devices usually have higher resolutions than the actual "pixel" width of the device itself, making zooming an issue.

<meta name="viewport" content="width=device-width, initial-scale=1">

This ensures that your site is actually being viewed at the width of the device (that you've painstakingly created media queries for …).

Let's put Roxy online to see why we need to do this.

CODEALONG – ROXY RESPONSIVE

Build a collapsible responsive nav for Roxy!

How might we make the nav a little more "interactive"? What if we wanted to add jQuery?

RESPONSIVE DESIGN

Fluid Layout - Use of %'s

Media Queries

Use of em's

EM ... WHAT?

An em is a unit of measurement. Just like pixels, ems can determine the size of elements on a web page. Unlike pixels, which are absolute, ems are relative to their parent's font size.

1em is equal to the inherited font size. If the font size of a <div> is set to 16px, 1em within that <div> is equivalent to 16px. If the font size of that <div> changes to 20px, 1em within that <div> is equivalent to 20px.

LET ME EM-PHASIZE THIS

http://kevinperalta.com/playground/em_size.html

- A good example

I EM WHAT I EM

And what I em is based one what you are ...

```
.element {
    font-size: 20px;
    line-height: 1.2em; //i.e. 24px
    margin: 2em 0; //i.e. 40px 0
}
```

CARPE DI–EM! SEIZE THE EM!

Set a font-size on the <body> using pixels.

Set your typography based on ems.

Then, in your media queries at smaller sizes, set that <body> font size to be smaller. The other values will cascade down.

CODEALONG – EM–TYPOGRAPHY

(... OR USE FLOWTYPE.JS ... SHHH ...)

http://simplefocus.com/flowtype/
- A pretty sexy jQuery plugin

EXERCISE – STARTUP MATCHMAKER RESPONSIVE

Turn the Startup Matchmaker into a Responsive site.

Minimum requirement: 1 single-column layout with a collapsible menu for every width < 768px.

ALSO, THIS. FOR NO REASON.