

Class 12







### Overview

Wireframes Work + Review (1 hour)

Responsive Images, Performance and JavaScript (30 min)

Common Patterns (10 min)

Break (5 min)

Global Patterns Part 1 (1 hour)



### CSS Grids + Background Video



### Wireframes Work + Review



### Responsive Images & SVG



## SVG = Scaleable Vector Graphic



```
\Theta \Theta \Theta
                                     ai13625054892.txt
<?xml version="1.0" encoding="utf-8"?>
<!-- Generator: Adobe Illustrator 16.0.4, SVG Export Plug-In . SVG Version: 6.00 Build 0)
-->
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.1//EN" "http://www.w3.org/Graphics/SVG/1.1/DTD/</pre>
svg11.dtd">
<svg version="1.1" id="Layer_1" xmlns="http://www.w3.org/2000/svg" xmlns:xlink="http://</pre>
www.w3.org/1999/xlink" x="0px" y="0px"
        width="612px" height="502.174px" viewBox="0 65.326 612 502.174" enable-
background="new 0 65.326 612 502.174"
        xml:space="preserve">
<ellipse fill="#C6C6C6" cx="283.5" cy="487.5" rx="259" ry="80"/>
<path id="bird"
d="M210.333,65.331C104.367,66.105-12.349,150.637,1.056,276.449c4.303,40.393,18.533,63.704,
52.171,79.03
c36.307,16.544,57.022,54.556,50.406,112.954c-9.935,4.88-17.405,11.031-19.132,20.015c7.531-
0.17,14.943-0.312,22.59,4.341
c20.333,12.375,31.296,27.363,42.979,51.72c1.714,3.572,8.192,2.849,8.312-3.078c0.17-8.467-1
.856-17.454-5.226-26.933
c-2.955-8.313,3.059-7.985,6.917-6.106c6.399,3.115,16.334,9.43,30.39,13.098c5.392,1.407,5.9
95-3.877,5.224-6.991
c-1.864-7.522-11.009-10.862-24.519-19.229c-4.82-2.984-0.927-9.736,5.168-8.351l20.234,2.415
c3.359,0.763,4.555-6.114,0.882-7.875
c-14.198-6.804-28.897-10.098-53.864-7.799c-11.617-29.265-29.811-61.617-15.674-81.681c12.63
9-17.938,31.216-20.74,39.147,43.489
```



### SVG Demo

http://codepen.io/challahan/pen/OywabP?editors=110



### 'Mo Images, 'Mo Problems

What's the problem with images?





# Responsive Images Community Group

https://responsiveimages.org



#### <Picture> Element

Multiple images at different crop sizes (aka "Art Direction)

https://responsiveimages.org/demos/basic-implementation/index.html



### Srcset

Same image at different resolutions

http://codepen.io/martinwolf/pen/hFxyj/



### Performance & Progressive Enhancement

Fast Enough, Loading RWD Fast as Heck, Progressive Enhancement

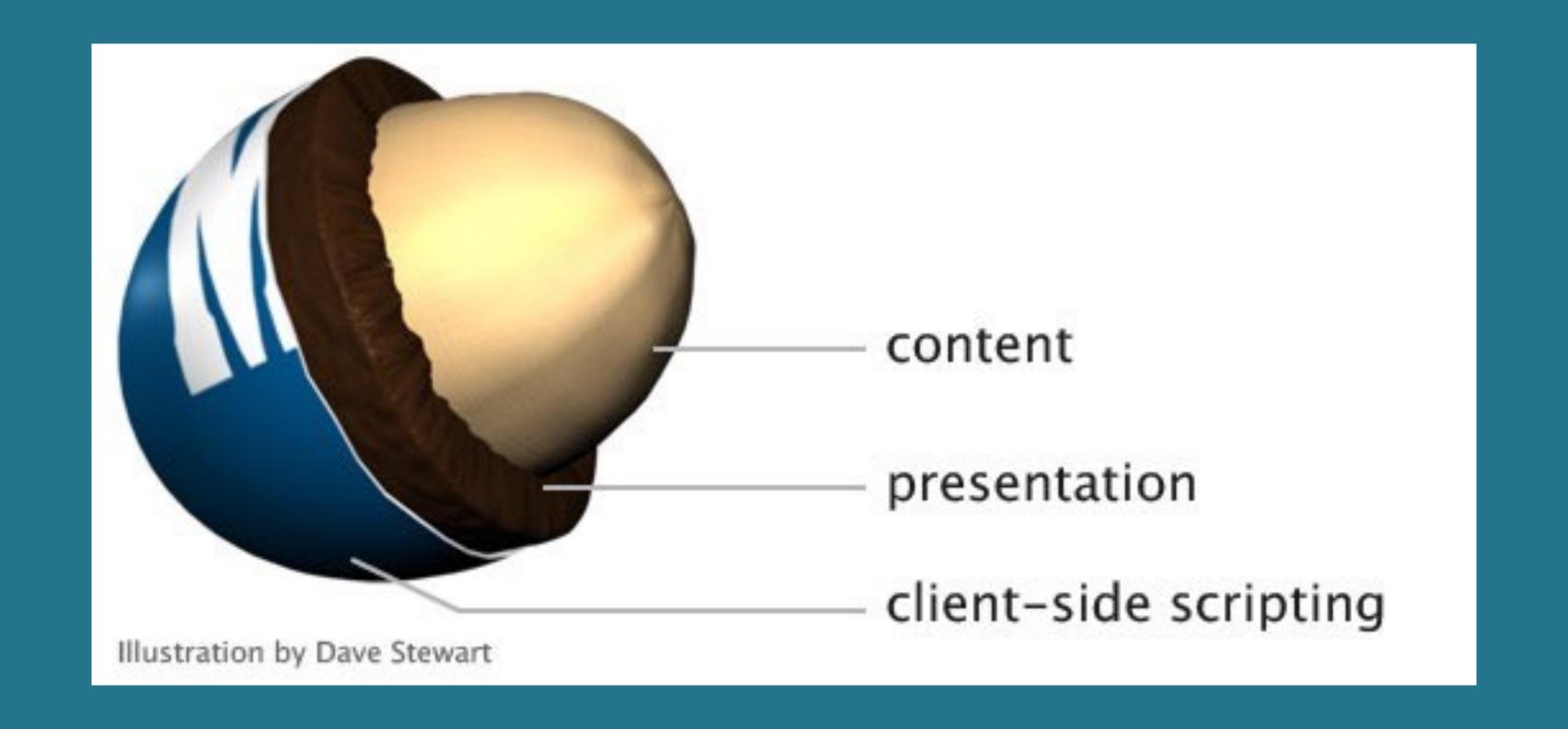


How can we organize our CSS for both better mobile performance and maintainability?



# What is Progressive Enhancement and why is it important?







A Progressively Enhanced website should still provide the core content with CSS and JavaScript disabled.



### JavaScript



# JavaScript is a programming language for adding interactivity and state changes to your web site.



Dynamically loading new content or content from other sources (AJAX, web fonts)

Animation/Movement of page elements

Change an element in some way based on some condition

Validating input values of forms

Transmitting information about browsing activity (analytics, ad tracking, personalization)



# JavaScript can be disabled in browsers. Usually unavailable to screen readers.



# JavaScript can significantly increase page load time and CPU usage when not used efficiently.



### Inline JavaScript

```
<script>
JavaScript Goes Here
</script>
```



#### External JavaScript

Place in your HTML

```
<script src="scripts.js">
</script>
```



#### Simple JavaScript Example

http://codepen.io/challahan/pen/JYmqLX



jQuery is an open source library of JavaScript files that makes implementing JavaScript easier. iQuery is not part of browser by default - must be loaded.



# Many third-party JavaScript plugins (galleries, etc) require jQuery in order to work.

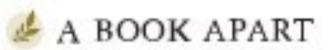


### Performance



# How Can We Make Sure Pages Load Quickly?





13

Scott Jehl

#### RESPONSIBLE RESPONSIVE DESIGN



### Common RWD Patterns Examples

http://www.rwdkent.com/common-patterns



### Global Patterns (Part of HTML Templates Assignment)

https://rwdkent.com/class/assignments/templates/



### For Next Time

**DUE:** Patterns Part 1: Global Patterns in HTML/CSS

PAST ASSIGNMENTS: Check and ensure you have submitted the Style and CSS Grid Assignments (last chance to submit)

**READ:** Usability Testing & Accessibility

