

#### Class 11





#### Overview

HTML Wireframes Review (10 min)

Layout/Media Query Assignment Review (15 min)

Becoming Responsive (with JavaScript) (30 min)

Break (5 min)

Performance and Progressive Enhancement, Preprocessing (20 min)

Performance and Usability Testing Assignment (15 min)

HTML/CSS Prototype/Templates (15 min)

Templates Hands On + Group Project Management (45 min)



#### HTML Wireframes Review

www.rwdkent.com/class/assignments/wireframes



### Layout/Media Queries Review



#### Becoming Responsive

Responsive Process



Can we determine a user's website goals once we know a user is on mobile vs. desktop?



How can design and development become more collaborative in a responsive design project?



### Performance & Progressive Enhancement

Fast Enough, Loading RWD Fast as Heck, Progressive Enhancement

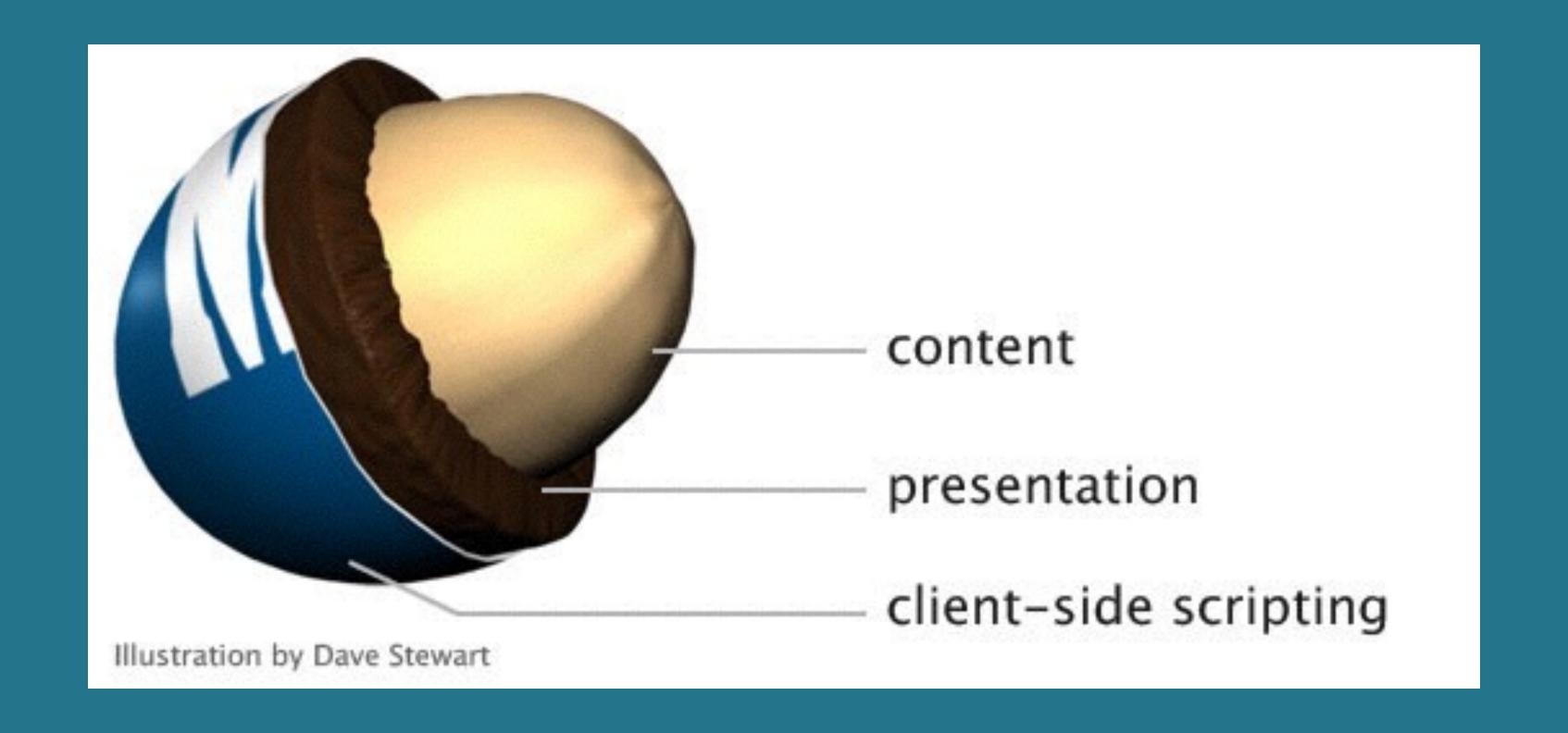


How can we organize our CSS for both better mobile performance and maintainability?



## 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

```
<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. jQuery is not part of browser by default - must be loaded.



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



#### jQuery Slider Plugin Example

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



Modernizer.js is a library that allows you to test for certain browser features, then only use those features on capable browsers.

https://modernizr.com

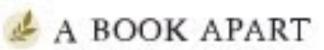


#### Performance



## How Can We Make Sure Pages Load Quickly?





13

Scott Jehl

#### RESPONSIBLE RESPONSIVE DESIGN



#### Site Build Tools

Using Tools to Speed Up Development



#### 3 Options for Publishing Website

	Raw HTML	Static Site Generator	Content Management System
Pros	Simplest to do Fast Performance	Fast Performance  Dynamically Created Templates	Very easy to edit (once set up) Many templates from which to choose
Cons	Must write all templates manually Must know HTML to edit	Must use command line to setup  Must know HTML/CSS to set up	Generally slower performance Require database backend (if custom) A lot of overhead



# Jekyll is an open-source static site generator written in the Ruby language.



# WordPress and Drupal are open-source content management systems written in PHP.



#### Preprocessors

Using Tools to Speed Up Development



# A CSS preprocessor is a tool that provides shortcuts for writing CSS.



You write in the preprocessor language and a command converts your rules to a regular CSS file.



#### Popular CSS Preprocessors:

SASS (SCSS)
LESS
Stylus



#### Features:

Nesting
Variables
Partials
Extends / Mixins
Logic
Output Styles



#### SASS Demo

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



### Performance & Usability Testing Assignment

www.rwdkent.com/class/assignments/testing



#### HTML Templates/Prototypes

+ Group Project Management

www.rwdkent.com/class/assignments/templates

