



RWD

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 & Jekyll 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

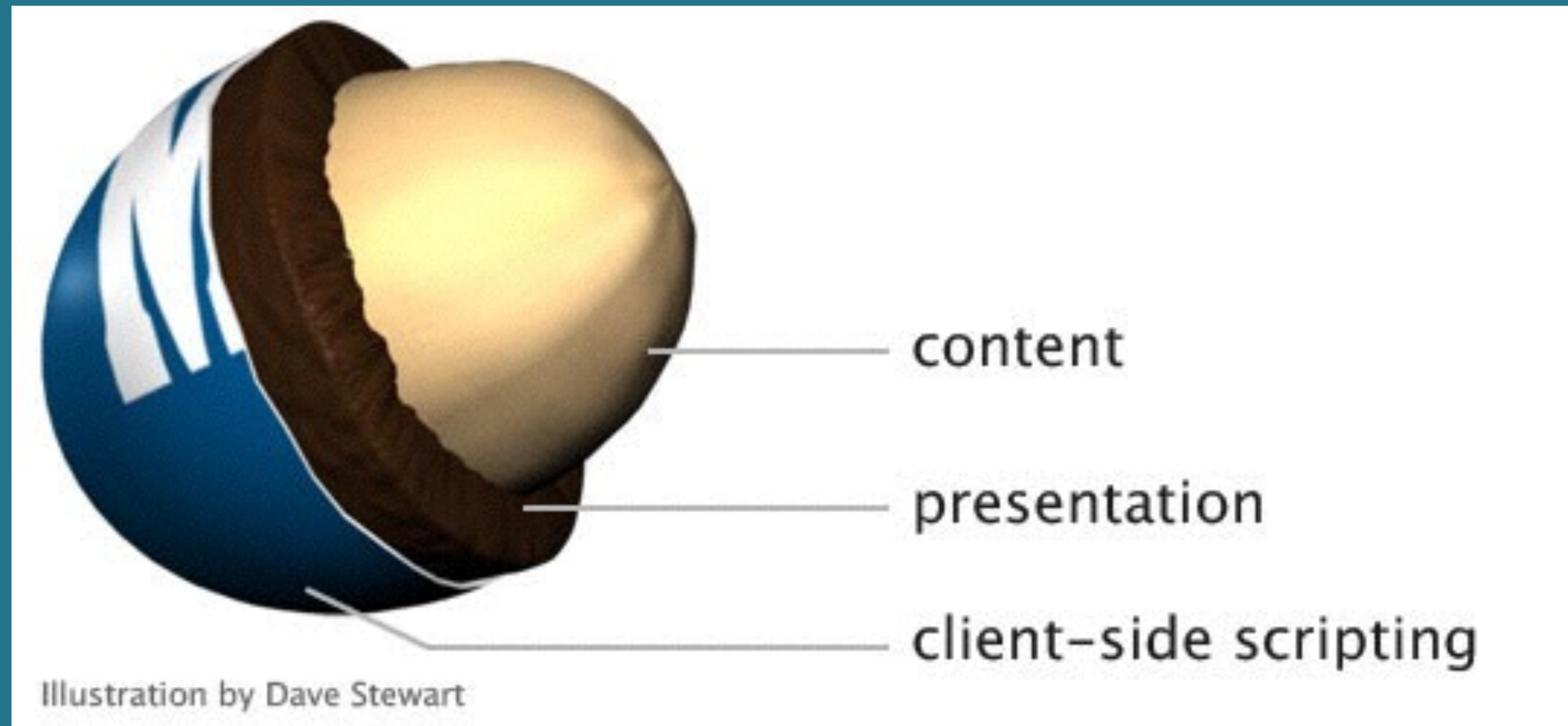


How can we organize our
CSS for both better mobile
performance and
maintainability?



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](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?



 A BOOK APART

13

Scott Jehl

RESPONSIBLE RESPONSIVE DESIGN



Jekyll

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.



It has to be run from the
command line, but setup is
pretty simple.



Jekyll has many features, but
we'll use it to share HTML
between multiple templates.



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

