**Week 01 Lab – Create a Standards-Based Website**

In this exercise you will set up and validate a website following modern web standards or “best practices.”

**The List**

Structure

* Outer folder for project, with the following sub-folders
* Public (where the website goes)
  + index.html
  + 404.html
  + img folder
  + js folder
  + css folder
  + css/fonts folder (for webfonts)
* Doc (documentation)
* Assets (images and other Art Direction)

Use of modern image formats

* SVG
* PNG
* JPEG only for photographs

Markup

* HTML5 coding
* CSS3 with vendor prefixes
* Conditional comments toggle the <html> element

<head> tag

* Viewport meta-tag directive
* Favicons and Apple Touch Icons
  + Use: <http://iconifier.net/>
  + Use: <http://realfavicongenerator.net/>
* External CSS stylesheets
  + CSS Reset (e.g. normalize.css)
    - <http://necolas.github.io/normalize.css/>
* CSS Media Queries in main stylesheets
* JavaScript feature-testers
  + Modernizr.js
* JavaScript polyfills
* <body> tag
* HTML5 semantic tags uses (<header>, <footer>…)
* JavaScript libraries (JQuery, three.js)

**Additional Boilerplate Features**

* Canonical (baseref) tags
  + @link <http://moz.com/blog/canonical-url-tag-the-most-important-advancement-in-seo-practices-since-sitemaps>
* General "Social Sharing" Meta-Data SEO
  + @link <https://www.percussion.com/blog/2014/March/how-to-optimize-your-content-for-social-sharing-with-meta-tags>
* Google+ SEO Linking
  + @link <https://blog.kissmetrics.com/google-authorship/>
* Twitter Cards SEO
  + @link <https://dev.twitter.com/cards/types/app>
  + validate at
  + @link <https://cards-dev.twitter.com/validator>
* Facebook Open Graph SEO
  + @link <https://developers.facebook.com/docs/sharing/best-practices>
  + validate at
  + @link <https://developers.facebook.com/tools/debug/>
* ARIA accessibility meta tags
  + @link <http://www.w3.org/wiki/WebSchemas/Accessibility>
* ARIA roles and naming
  + @link <http://www.paciellogroup.com/blog/2013/02/using-wai-aria-landmarks-2013/>
  + @link <http://www.creativebloq.com/html5/5-html5-and-aria-design-patterns-7133753>
  + @link <http://www.creativebloq.com/netmag/make-most-aria-landmark-roles-5135639>
  + @link <http://heydonworks.com/practical_aria_examples/>

**Upload Your Site to Your Web Host**

* Many of the validators listed below require that pages be served from a web host
* Upload most recent version, then test your site
* **Validate Your Boilerplate!**  
  W3C Validator HTML5, ARIA  
  @link <http://validator.w3.org>  
    
  W3C CSS Validator  
  @link <http://jigsaw.w3.org/css-validator/>  
    
  W3C Link Checker  
  @link <http://validator.w3.org/checklink>  
    
  WebLight Validator (Alternate, $$$)  
  @link <http://www.illumit.com/weblight/>  
    
  W3C Semantic Validator  
  @link <http://www.w3.org/2003/12/semantic-extractor.html>  
    
  Semantic Validator (Alternate)  
  @link <https://gsnedders.html5.org/outliner/>  
  Section 508 Accessibility Validator  
  @link <http://www.cynthiasays.com/>  
    
  Google Microdata Validator  
  @link [http://www.google.com/webmasters/tools/richsnippets#](http://www.google.com/webmasters/tools/richsnippets)  
    
  Google Microdata Helper  
  @link <https://www.google.com/webmasters/markup-helper/>  
    
  Microdata Validator (Alternate)  
  @link <http://foolip.org/microdatajs/live/>  
    
  Facebook Open Graph Debugger  
  @link <https://developers.facebook.com/tools/debug/>  
    
  Twitter Card Validator  
  @link <https://cards-dev.twitter.com/validator>

YSlow  
<https://developer.yahoo.com/yslow/>