Web Design – Lecture-10

INSTRUCTOR: VIDHI KESARIA

Class Schedule

- 1) Website Architecture, Design, Strategy and Planning and Creating web pages – Semantic HTML4/5

- 2) Design using CSS (covers CSS3)

- 3) Responsive web design,

- 4) Making the web page Interactive - JavaScript (Datatypes, Inline, Embedded and external JavaScript, variables, operators, loops, functions, arrays, objects

- 5) Working with DOM Model and JavaScript Events

- 6) Using Jquery & Hosting on AWS

- 7) Assignment presentation with demo.

- 8) Local storage, cookies, Personalization & wireframing for project

- 9) Design Style guide, Using LESS Preprocessor + Project work

- 10) Performance + Project work

- 11) Review styled website with actual content, learn about interactive JavaScript + Project work

- 12) SEO Techniques + Project work

- 13) Accessibility Techniques & Tools + Project work

- 14) Written exams, Final project submission & Demo

Website Performance impact

- In 2007 Amazon reported that for every 100 ms increase in load time of Amazon.com their sales decreased by 1%.

- Google also reported similar results.

- If your pages load too slowly and performance isn't optimal, it really could spell the difference between success and failure

57% OF ONLINE CONSUMERS will abandon a site after waiting 3 seconds for a page to load.

80% of these people WILL NOT RETURN.

Of these... Almost half will go on to tell others about their negative experience.

strangeloop   www.strangeloopnetworks.com   SOURCE: PhoCusWright

During Design phase

- ▶ Fonts
- ▶ Icon Fonts
- ▶ Vector artwork (SVG)
- ▶ Optimize images further
- ▶ General webdesign tips

Fonts & Icon fonts

Fonts

- Less is better
- Use system fonts where they will do (https://www.w3schools.com/cssref/css_websafe_fonts.asp)
- Hosted fonts (CDN)
- Use optimized fonts (instead of regular, italic, bold – add only what you are using)

Icon Fonts

- Can easily change the size
- Can easily change the color
- Can easily shadow their shape

- https://css-tricks.com/examples/IconFont/

- https://www.w3schools.com/icons/fontawesome_icons_intro.asp

SVGs

- ▶ Scalable Vector Graphics Loads faster

- ▶ Defines the graphics in XML format

- ▶ Does NOT lose any quality if they are zoomed or resized

- ▶ Can be animated

- ▶ can be searched, indexed, scripted, and compressed

```html
<!DOCTYPE html>
<html>
<body>

<h1>My first SVG</h1>

<svg width="100" height="100">
    <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />
    Sorry, your browser does not support inline SVG.
</svg>

</body>
</html>
```
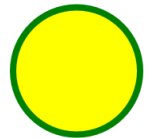
My first SVG

https://www.w3schools.com/graphics/svg_intro.asp

Optimize Images

- Compress without losing perceived quality
- Programs that allow you to do so-
  - Mac – ImageOptim, windows – File optimizer
  - Online sites
  - Phototshop/illustrator

During Development phase

- **Minimizing HTTP Requests**
  - Minimizing # of round trips
- **Minifying HTML, CSS & JavaScript (**YUI compressor**)**
  - space, comments and new line characters
- **Deferring Parsing of Javascript, so styles at top, js at the bottom**
- **Avoid Making Bad Requests**
- **Content Delivery Networks**

Tools

- https://developers.google.com/speed/pagespeed/insights/
- http://www.webpagetest.org/
- Chrome Dev Tools
- Page Speed
- Y-Slow
- Firebug
- Yottaa.com