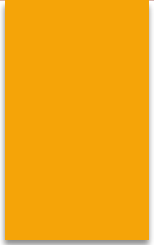# Web Design – Lecture-13

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) Accessibility Techniques & Tools + Project work

- 13)SEO Techniques + Project work

- 14) Written exams, Final project submission & Demo

SEO   -
Rank at the top in the search engines (Google & Bing)

INDEXING – ROBOTS.TXT

Set a Goal. Start with Validate – site: url

SITE OPTIMIZATIONS

Indexing

▶ Validate: site: [url] on search engines

▶ Can be done through - **robots.txt** file

    ▶ Root of your site that indicates those parts of your site you don't want accessed by search engine crawlers.

    ▶ Uses the Robots Exclusion Standard, which is a protocol with a small set of commands that can be used to indicate access to your site by section and by specific kinds of web crawlers

    ▶ Can use

    ▶ The syntax for using the keywords is as follows:
       User-agent: [the name of the robot the following rule applies to]
       Disallow: [the URL path you want to block]
       Allow: [the URL path in of a subdirectory, within a blocked parent directory, that you want to unblock]

Sample – robots.txt file

▶ Add it in the top-level directory of your web server

▶ **<u>Content</u>**:

▶ User-agent: *

▶ Disalllow: /

▶ User-agent: *" means this section applies to all robots.

▶ The "Disallow: /" tells the robot that it should not visit any pages on the site.

Site optimizations

Do's

- SEO friendly URL (Meaningful, dashes over underscores)
- Title tags
- Meta tags
  - <meta name = "description" content="[key phrases]">
  - <meta name="robots" content="index, nofollow">
- Source code
  - Performance
  - External styles & js
  - Semantic html
  - **Structed data**

Think about SEO before using below..

- Flash
- Pdf
- Text in images
- Frames
- Iframes
- Popups

Structed Data

- HTML tags tell the browser how to display the information included in the tag. However, the HTML tag doesn't give any information about what that content means.

  - Eg. Protein bar name is a heading but not that it is a product, movie, etc.

- Structured data is a way for search engine machines to make sense of content in your HTML - Schema.org!

Schema.org

- Founded by Microsoft, Google, Yahoo and Yandex

- 10 million+ sites use it

- Provides a collection of shared vocabularies webmasters can use to mark up their pages in ways that can be understood by the major search engine

- Vocabularies are entities, relationships between entities and actions.

  - Can easily be extended through a well-documented extension model)

  - Formats - Microdata, RDFa, or JSON-LD

- Our focus: Microdata – recent, most used based on http://webdatacommons.org/structureddata/

Microdata

- ▸ Microdata has some propriety attributes that are not HTML attributes that are added.
- ▸ Itemscope: everything inside this article basically pertains to a single type of item
- ▸ Itemtype: type of itemtype and has a value by pointing it to vocabulary.
    - ▸ Eg. Go to schema.org/Product, find it and add it
- ▸ Properties – Itemprop
    - ▸ Name of product & Description of product – Global inheritance from thing
    - ▸ Image
    - ▸ Price
    - ▸ Reviews
    - ▸ …
    - ▸ Lets get back to our code to try this out.

- ▸ GoodRelations - powerful vocabulary for publishing all of the details of your products and services in a way friendly to search engines, mobile applications, and browser extensions.

Validating

- For structured data- https://search.google.com/structured-data/testing-tool

- Provides preview https://search.google.com/structured-data/testing-tool

- Let's test our examples.

Additional Resources

- [Google Structured Data Resource](#)
  - Google's extensive resource on adding structured data to sites. Includes insights into how Google parses and uses structured data.
- [Bing Markup Guide](#)
  - Bing developers guide for marking up structured data.
- [Choosing an HTML Data Format](#)
  - W3C wiki page on how to choose a structured data syntax. that's right for you.
- [Web Data Commons](#)
  - Up to date research on structured data usage and penetration of syntaxes.

Next Saturday Schedule

▶ Written exam = (60 min)

▶ Demo (90 min), each team - 15 minutes

  ▶ 2 – 3 min - intro to project (probably a presentation talking about who the target customers are, the value prop, impact etc).

  ▶ Demo (different viewports) describing the functionality that you implemented and how it is helpful to the user and your thought process of the design keeping customers in mind.

  ▶ Q&A followed by the demo.

Grading

- Assignments & mid-term project demo: 20%
- Written exam: 30%
- Group project: 40%
  - Overall Customer experience – 30%
    - Customer Research & business impact
    - Design
    - Features & Functionality
  - Code Craftsmanship – Code quality, performance, accessibility – 10%
- Presentation style & Class participation: 10%
  - Q& A during demos

Code Craftsmanship

- Best Practices
- Code quality
- Semantics
- Performance
- Usability
- Accessibility
- Mobile
- Environment integration/Social media

http://webdevchecklist.com/