MIS3690 - Web Technologies

Publishing your website

Process of publishing a static website

1. Create pages locally
   - i. *.html* files, *images/styles/scripts* folders
   - ii. test and validate pages
2. Select a web hosting service
3. Register a domain name
4. Transfer and maintain pages
5. Search engine optimization (SEO)

Prepare your web pages

Test and validate pages

- Use HTML validator and CSS validator
- Test with different browsers
    - Chrome, Firefox, Edge, Safari
    - other browsers
- Remove or correct broken links
    - Link Checker (after website is published)

Improve performance

- Code your website for quality and speed

- Optimize images

- Make the page simple and clean

- Load JavaScript asynchronously

- Try a CDN

Add metadata in `<head>`

- Use appropriate `<title>` for each page
- `<meta>` elements
  - `name` and `content` attributes
    - `name` specifies the type of meta element it is; what type of information it contains
    - `content` specifies the actual meta content
  - many for SEO
- Visit the homepage of your favoriate website, view page source or inspect
  - what `<meta>` do you find?

Common `<meta>` elements.

- `description` :
  - short description of the page
  - `<meta name="description" content="...">`
  - Google your favoriate website, then read the search result
- `keywords`
  - comma delimited list of search terms
  - `<meta name="keywords" content="...">`
- `author`
  - the author of the page
  - `<meta name="author" content="...">`

`<meta>` for social networking sites

- Open Graph Data
  - a metadata protocol that Facebook invented to provide richer metadata for website
  - Example: `<meta property="og:image" content="..."`
  - Read more about the Open Graph protocol
- Twitter Cards
  - you can attach rich photos, videos and media experiences to Tweets, helping to drive traffic to your website
  - Read more about Optimizing Tweets with Cards

Select a web hosting service

Evaluate web hosting services

- Price

- Storage and transaction limits

- Technical features

- E-Commerce features

- Customer service features

- Reliability

Web hosting providers

- Some web hosting providers:
    - Godaddy
    - bluehost
    - HostGator
- Cheap(free) cloud alternatives for small websites
    - Heroku
    - Amazon Web Services (AWS)
    - Google Cloud Platform
    - DigitalOcean

Register domain name

- Web hosting service may bundle domain name registration
  - recommended if you have paid for web hosting
- Check your desired names on domain registrars
  - for best recognition, aim for `.com` or `.org`
  - other top-level domains (TLD):
    - *.us* (located in the U.S.)
    - *.co* (Columbia, but open to public and seems like *.com*)
    - *.info*, *.me*, *.name* (good for personal website)
- Domain privacy

WHOIS babson.edu

```
Domain Name: BABSON.EDU

Registrant:
        Babson College
        Horn Computer Center
        Babson Park, MA 02457
        US

Administrative Contact:
        Babson Dns
        Babson College
        Horn Computer Center
        Babson Park, MA 02457
        US
        +1.7812396483
        dns@babson.edu

Technical Contact:
        Domain Admin
        Babson College
        Horn Computer Center
        Babson Park, MA 02457
        US
        +1.7812396483
        dns@babson.edu

Name Servers:
        NS0.DNSMADEEASY.COM
        NS2.DNSMADEEASY.COM
        NS1.DNSMADEEASY.COM
        NS4.DNSMADEEASY.COM
        NS3.DNSMADEEASY.COM

Domain record activated:    07-Oct-1992
Domain record last updated: 25-Mar-2020
Domain expires:             31-Jul-2020
```

Transfer files

- Use FTP client to upload files
  - many web hosting website also provide web-based file transfer

Deploy a static website to Heroku* (optional)

- include index.php in website folder

- create a Heroku app

- link your Heroku app to GitHub project repository

- deploy app

- add your domain to heroku app

* based on wh1tney/deploy-static-site-heroku.md

Search Engine Optimization (SEO)

- Google's Search Engine Optimization Starter Guide

- Lynda course - Danny Sullivan on SEO

- YouTube: SEO For Beginners

SEO: Keywords

- Keywords are those words/phrases that
    - describe your web site
    - users type in to search the web
    - your competitors are using
- You can
    - use keywords in internal links
    - use keywords in `alt` attribute tag
    - place keywords in `<h>` tags
    - use keywords multiple times in a page

Questions?