



# MIS3690 WEB TECHNOLOGIES

**BABSON COLLEGE**  
**TOIM DIVISION**



# OPTIMIZING WEB PAGES AND PUBLISHING PAGES



# THE PROCESS OF PUBLISHING PAGES

- Create your pages locally
  - Test and validate pages
- Identify a host service
- Register a domain name
- Transfer and Maintain pages
- Search Engine Optimization

# PREPARE YOUR WEB PAGES

- Test thoroughly
  - Use HTML validator (<https://validator.w3.org/> ) and CSS validator (<http://jigsaw.w3.org/css-validator/> )
  - Test with different browsers
  - Remove or correct broken links
    - <https://validator.w3.org/checklink/>

# PREPARE YOUR WEB PAGES

- Evaluate Performance
  - Is it loading “acceptably” quickly?
    - What is “acceptable”?
- Improve Performance (if necessary)
  - Reduce content
  - Modify multimedia files
  - Make the page simple and clean
  - Locate all necessary files in one place.

# PREPARE YOUR WEB PAGES

- Use appropriate title for each page
- Use `<meta/>` tags for search engine reference
  - `<meta>` tag attributes are name and content
  - Example:

```
<meta name="description" content="The New York Times:  
Find breaking news, multimedia, reviews & opinion on  
Washington, business, sports, movies, travel, books,  
jobs, education, real estate, cars & more at  
nytimes.com." />
```
- All “meta” goes between the `<head>` and `</head>` tags

# COMMON <META> NAMES

- description – short description of the page

```
<meta name="description" content="..."
```

- keywords – comma delimited list of search terms

```
<meta name="keywords" content="..."
```

- author – the author of the page

```
<meta name="author" content="..."
```

# SPECIFYING TITLE, DESCRIPTION & KEYWORDS

- In summary, specify title, description and keywords that contain words or phrases that users would enter as search terms.
  - Review similar sites
    - Go to site and VIEW | SOURCE
  - Survey users
  - Sound judgment
- **SEO Basics: How to Add Keywords to a Website**



# KEYWORD

- It is not only about keywords that describe your web site.
- It is also about keywords/phrases that users type in to search the web
- It is also about how many competitors are using the keyword/phrase.
- It is about using keywords in your internal links (don't use HOME).
- Using keywords in your `alt` attribute tag.
- Placing keywords in the `<h>` tags
- Use key words multiple times in a page (less than 5-10% of the page content)

# MOST IMPORTANT.....

- Make your website USEFUL
- Like a product – people should need it.
  - Build a community around it
  - Refresh content and keep it up-to-date
  - Limit the use of multi-media
    - Flash for demos/presentations is good
    - Flash for intro is bad.

# EVALUATE HOST SERVICES

- What's important?
  - Price
  - Storage and transaction limits
  - Technical features
  - E-Commerce features
  - Customer service features
  - Reliability

# EVALUATE HOST SERVICES

## ■ Technical Features

- Disk Storage (on Web Server)
  - Storage in GB or MB (Allotment and Overage)
  - Redundancy (reliability)
- Network Connection (of Web Server)
- How soon can changes be seen?
- Email Service
  - Number of Accounts
  - Type of Account
  - POP/IMAP: Use Outlook, Mail (in Mac)
  - Web-based: Use Browser Program
  - Forwarding Option

# EVALUATE HOST SERVICES (CONT.)

- Technical Features (cont.)

- Server-side Support

- FrontPage Extensions

- Streaming Media

- Real Audio & Video

- QuickTime

- Adobe (Flash/Shockwave)

- ASP, CGI, PHP

# EVALUATE HOST SERVICES (CONT.)

## ■ E-Commerce Features

- Shopping Cart
- Credit Card Payment
  - Need SSL (Encryption)

## ■ Reporting

- Standard Reports
  - Site Statistics on Traffic (Hits, Click-through rate)
- Ad Hoc Reports
  - Log Files
  - MySQL

# EVALUATE HOST SERVICES (CONT.)

- Customer Service Features
  - Technical Support
    - Availability (24/7)
    - Contact Options (Phone, Email)
  - Domain Name Registration/ Renewal
  - Content Update Frequency

# SELECT A HOST SERVICE

- Do a search for top hosting, best hosting, cheap hosting, or hosting reviews
- Prices will often be shown for package that includes advertising and full year commitment
  - Your project website must have NO advertising
  - Calculate total rate assuming 3 months of service and one domain name
- FYI:
  - <http://www.hosting-review.com/hosting-directory/top-10-lists/Top-10-Overall-Web-Hosts.shtml>
  - <http://www.consumer-rankings.com/hosting/>
  - <http://www.bluehost.com/>
  - <http://www.000webhost.com>



# REGISTER YOUR DOMAIN NAME

## ■ Registering your domain name

- Your selected hosting service may bundle domain name registration with hosting fee
  - Even if not, it's easiest if you purchase the domain name from the hosting company
- Other alternatives
  - Search “domain name registration” (InterNIC – part of ICANN)
  - <http://www.internic.net/>
  - Review fees (first and annual) and services
- Registration sites usually have a service that checks your desired name to see if it is available
  - If not, may offer suggestions for similar names

# MY ADVICE

- I strongly recommend that you purchase your domain name from the same company that hosts your site
- For best recognition, aim for .com or .org
- Other popular top level domains:
  - .biz (may be challenged if not a real business)
  - .us (located in the U.S.)
  - .co (Columbia, but open to public and seems like .com)
  - .info
  - [Wikipedia list of top level domains](#)
- If your desired name isn't available, most hosts will provide other similar choices
- Minimum registration period is one year, but you don't have to pay for a year's hosting

# OTHER DECISIONS YOU MIGHT HAVE TO MAKE

- Windows or Linux hosting
  - Choose Linux
  - Linux hosting supports PHP, Ruby, Perl, Python, or CGI scripting and/or MySQL database. We need PHP.
  - Windows hosting supports ASP or ASP.NET and/or SQL Server or Access database
- Domain Privacy
  - Usually offered at an extra price
  - Hides owner's contact information when searched for at registry
  - Generally good to refuse privacy so people can contact you if they have concerns about your website, but ... (see next slide)

# DOMAIN PRIVACY EXAMPLE

- Here is result of search  
whois:babson.edu

Domain Name: BABSON.EDU

Registrant:

Babson College  
Horn Computer Center  
Babson Park, MA 02457  
United States of America

Administrative Contact:

Babson Dns  
Babson College  
Horn Computer Center  
Babson Park, MA 02457  
United States of America  
+1.7812396483  
dns@babson.edu

Technical Contact:

Domain Admin  
Babson College  
Horn Computer Center  
Babson Park, MA 02457  
United States of America  
+1.7812396447  
dns@babson.edu

Name Servers:

NS0.DNSMADEEASY.COM  
NS4.DNSMADEEASY.COM  
NS2.DNSMADEEASY.COM  
NS3.DNSMADEEASY.COM  
NS1.DNSMADEEASY.COM

Domain record activated: 07-Oct-1992  
Domain record last updated: 24-Sep-2018  
Domain expires: 31-Jul-2019

# OTHER DECISIONS YOU MIGHT HAVE TO MAKE

## ■ Auto-renewal

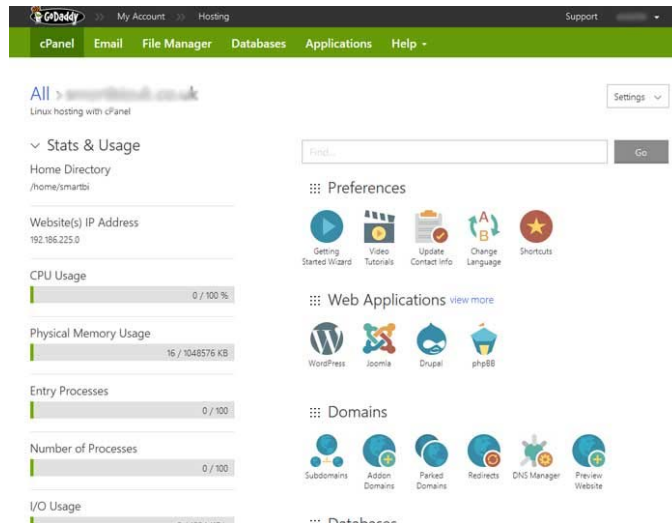
- At many sites, the default is for automatic renewal of both the hosting service and the domain name
- Look for a check box that declines auto renewal
- If you cannot find how to decline auto-renewal and host is not clear about it, check by email or phone to make sure that you are not automatically billed for renewal

# TRANSFER YOUR FILE

- Use FileZilla FTP client
- Many hosts also have Web-based file transfer
- Web-authoring Programs usually have a "publish" feature

## 4. TRANSFER AND MAINTAIN PAGES

Most sites have an app (cPanel on Linux sites) for managing your web hosting. Usually includes a file manager, ftp manager, and other services



# SET UP AND TEST YOUR HOME PAGE

- A file manager is available in cPanel
- Use the file manager to transfer your index.htm page (from any previous class session) to the host service's public\_html folder. If an index.htm file exists already, overwrite it.
- Remove index.html, default.htm, or default.html from the public\_html folder if they are there
- In your browser's URL window, enter URL of your domain. You should see your index page.
  - Sometimes, it takes an hour or two for your domain name to become public. If your domain name does not work, enter the IP address of your domain (http://####.####.####.####). You should see your index page.
  - If you cannot see your index page with either your URL or IP address, get help immediately.



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# SET UP FILEZILLA

- The host name should be the same as your domain name
- The user name and password should be what you set up using cPanel
- After entering host name, user name, and password, click Quickconnect
- Then use FileZilla just like with the Babson site. You might need to navigate to the public\_html folder (which already contains index.htm).
- After you've set up your hosting site using FileZilla, you should be able to toggle between your hosting site and your Babson site using FileZilla's Quickconnect button

# UPDATE YOUR LOW.HTM PAGE

- Update your low.htm page to add a link to your hosted site using its domain name or IP address in the href:  
`<a href="http://...">Hosted site</a>`
- You will find the hosted site link at the very bottom of your low.htm page
- FTP your revised low.htm page to the Babson server overwriting the existing page
- It may take some time for your domain name to work.
  - If it does not work after 24 hours, send me an email
  - If it does work, update your low.htm page to replace the IP address in the href with your domain name if you haven't already done so. Again, FTP your low.htm page to the Babson server

# HELP FOR ALL - GODADDY SOLUTION

- Domain Name Registration - Search and Register Website Name  
<https://www.youtube.com/watch?v=5aUKxJnlKkQ>
- Web Hosting with GoDaddy: <http://www.youtube.com/watch?v=oSli88zxmyo>
- How to Access Web Server Via FTP Client (HD):  
<http://www.youtube.com/watch?v=vf84PCqVWYL8>
- Edit Domain Name Servers in GoDaddy:  
<http://www.youtube.com/watch?v=2tlGKV9rzJs>
- Add Domain Name to Web Hosting Account :  
<https://www.youtube.com/watch?v=oa3B9ZCYrVQ>

# ATTRACT TRAFFIC TO YOUR SITE

- To start...
  - Submit your home page to the search engine crawlers
    - Google
    - Bing
- In the long run...
  - SEO
  - Advertising (for fee)

# SEARCH ENGINE OPTIMIZATION (SEO)

- Introduction to Search Engine Optimization

- <http://www.slideshare.net/randfish/introduction-to-seo-5003433>

- <https://www.youtube.com/watch?v=ID-kjYvTQxk>

- Google's Search Engine Optimization Starter Guide

- [www.google.com/webmasters/docs/search-engine-optimization-starter-guide.pdf](http://www.google.com/webmasters/docs/search-engine-optimization-starter-guide.pdf)

- Lynda course - Danny Sullivan on SEO

- <https://www.lynda.com/SEO-tutorials/Danny-Sullivan-SEO/544272-2.html>

# GET THIS DONE...SOON

- Sign up for a hosting service (there must be no advertising)
- Sign up for a domain (this typically is not free)
  - I recommend that you purchase your domain name from your hosting service if possible
- FTP or upload an index.htm page to your hosting service
- Add a link from your low.htm page to your hosted index.htm page
  - It might take 24 hours for this link to work
- Get this done by end of tomorrow