Introduction to the Web Development Industry

CSC 170: Introduction to Web Development

Lecture 1

Professor Kostin

Lab Sessions	Location
Lab 1 (CRN 52036) Mondays, Wednesdays 11:05 AM - 12:20 PM	Gavett 208
Lab 2 (CRN 52020): Mondays, Wednesdays 12:30 - 1:45 PM	Gavett 208
Lab 3 (CRN 52047) Tuesdays, Thursdays 3:25 - 4:40 PM	Gavett 208

- Virtual Office Hours for technical help: Slack, #help channel; Mondays and Thursdays, 9:00 to 10:00 AM
- **Regular Office Hours** for *non-technical help:* Morey 313; Tuesdays and Wednesdays at 9:00 to 10:00 AM.
- Private Office Hours: DM to Professor Kostin in Slack

The Web Today - Yesterday's Technology

- History of the Web
- Original intent of the Web ...still there, underneath
- HTML, CSS, JavaScript
- Need to know:
 - How things work
 - Where things are going
- Things are weird today
 - Hacked; bastardized; bent to our will
- Some changes/improvements to the base technology
- Some hacks become standard practices



Bullet Proof Websites

Standards Based Web Development Industry Best Practices

Bullet Proof

- Standards-based web development
- Industry best practices
- Front-end web development
 - Everything you SEE and interact with on the web
 - Technologies: HTML, CSS and JavaScript
 - Versus backend: "server side" PHP, .net, Ruby, Python, MySQL, mail server

The Seven Abilities Features of Bullet Proof Websites

- Updateability content management system (CMS)
- Compatibility all web browsers, now and future
- Reusability quick builds especially in development teams
- Dependability quality control
- Manageability/Flexibility grows with the organization/business
- Consistency unified look & feel
- Find-ability easy to find in search engines

Publishing Websites

Domain names; Web servers; Files

Basics of websites

- Internet != web
- Any website online...
 - Domain name
 - *something.*com, ...edu, ...org ...whatever
 - Web server
 - Any computer connected to the Internet running web server software
 - Web page files
 - "documents" and sometimes database(s)

Domain names

- ICANN (Internet Corporation for Assigned Names & Numbers)
- Third party companies, examples...
 - Network Solutions
 - Bluehost
 - 1and1
 - Media Temple
- "whois" who registered a domain name
 - whois ...command in Terminal (mac OS) or any Unix-based computer
 - Google for any Whois website
 - Note: pay for privacy

Web Server

- Any computer
 - Unix-based, usually LINUX
 - Can also be mac OS, Windows
- Has internet connection
 - Dedicated –connection
 - Open ports to provide access to sub-net (local network)
- "Web server" software
 - Apache (apache.org)
 - IIS Microsoft's Internet Information Server
 - Nginx
 - HTTPD (by Tim Berners-Lee)

Web page files

- Documents, originally: literally documents later called "web pages"
- History:
 - Important to know → how things work today
 - Evolution of the web
 - Marketing people
 - Hacking
 - Bastardizing tools and technologies