Introduction to the Web Development Industry

CSC 170: Introduction to Web Development

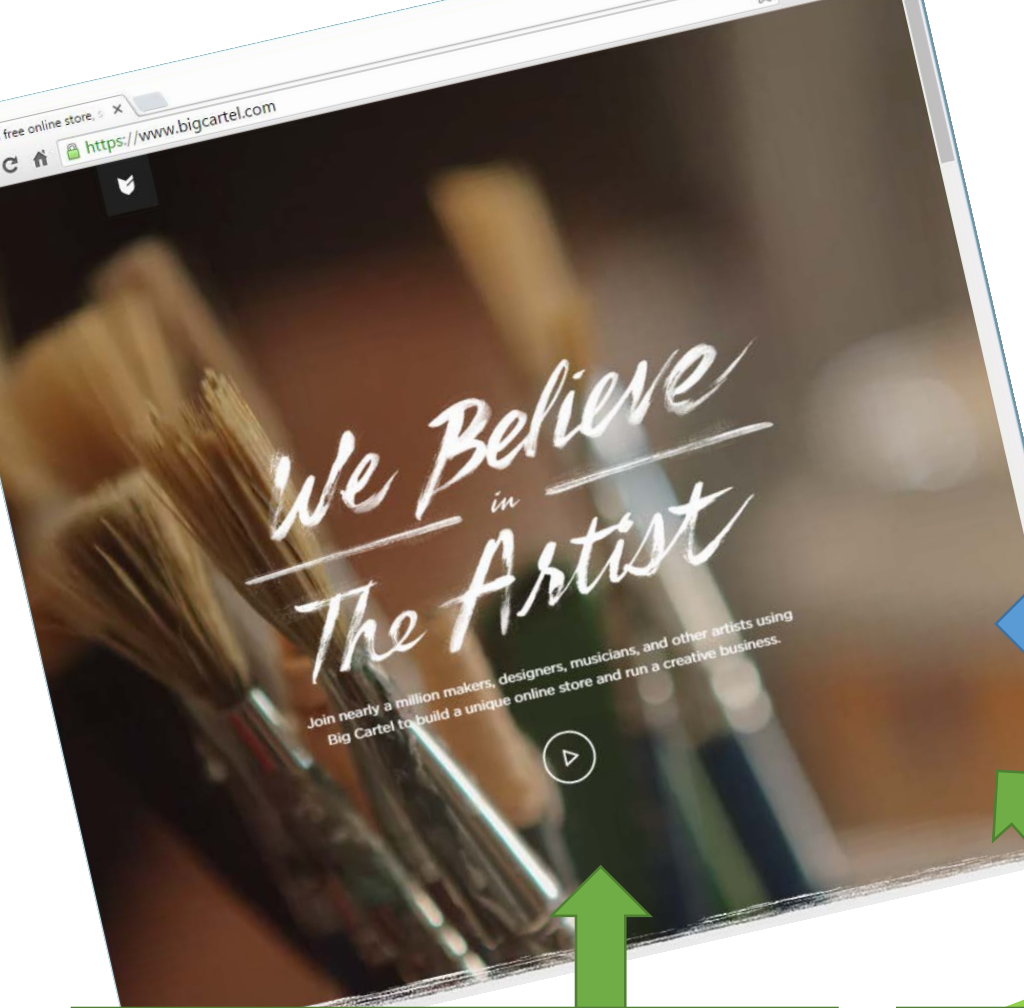Lecture 1

Professor Kostin

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- Private office hours
  - Morey Hall, room 313 (private office)
  - By appointment only; send request via DM in **Slack**
- Technical help
  - Virtual office hours by **Slack**, in the **#help** channel
  - In-person help in labs:

Day & Time	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

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

WYSIWYG – Package Solutions
- Wix
- Squarespace
- Weebly
- Macaw
- Webflow

- ION Interactive
- Mail Chimp
- Constant Contact

Good-enough Websites

Helps ...a lot!

Still required

Professional, Custom Websites

Templates, Libraries, Frameworks
- jQuery
- Bootstrap
- WordPress
- Usability
- Readability

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Graphic/Visual Design Skills

Goal-directed Design Skills

DMS 104

Hand Coding Skills (HTML, CSS, JS)

CSC 170

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