

# Lecture 1

CSC 170: Web Design and Development

# Professor Kostin

Robert M Kostin, [robert.kostin@rochester.edu](mailto:robert.kostin@rochester.edu)

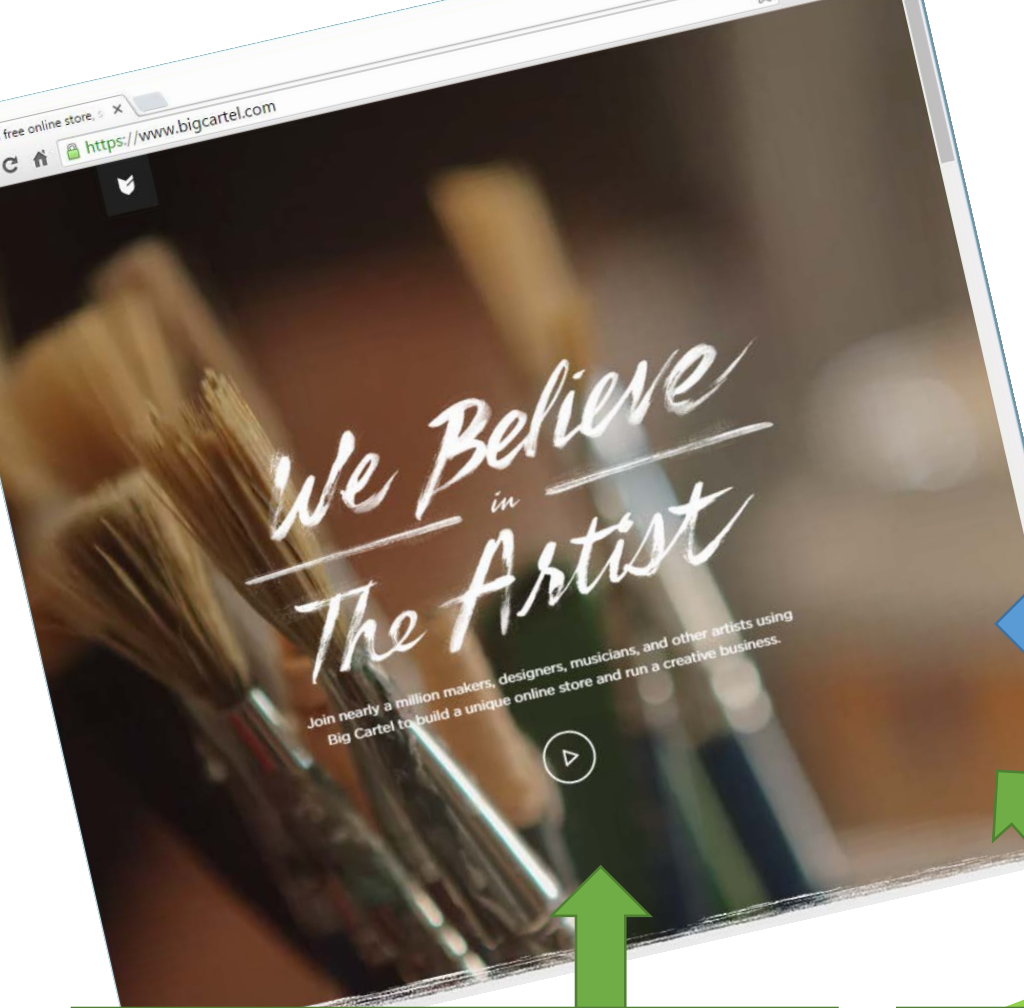
- Morey Hall, room 313
- Wegmans Hall, room 2105
- Open Office Hours:

Day & Time	Location
Mondays & Wednesdays 9:00 - 10:15 AM	Gavett 208
Tuesdays & Thursdays 9:40 - 10:55 AM	Gavett 244
Tuesdays & Thursdays 11:05 AM - 12:20 PM	Gavett 244

- **Virtual Office Hours:** the professor will publish times when he will be available to answer questions and provide general assistance via [Slack](#).
- **Private Office Hours:** by appointment only (*When students need to meet with the professor privately, send email to [robert.kostin@rochester.edu](mailto:robert.kostin@rochester.edu)*)

# 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



Good-enough  
Websites

### WYSIWYG – Package Solutions

- Wix
- Squarespace
- Weebly
- Macaw
- Webflow
- ION Interactive
- Mail Chimp
- Constant Contact

Helps  
...a lot!

Professional, Custom  
Websites

### Templates, Libraries, Frameworks

- jQuery
- Bootstrap
- WordPress
- ...et cetera

Still required

CSC 174

Graphic/Visual Design Skills

Interaction Design Skills

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](http://apache.org))
  - IIS – Microsoft’s Internet Information Server

# 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