Web Development
CSCI-GA 1122

Introduction and Overview
What is the Internet?

A computer network consisting of a worldwide network of computer networks that use standardized network protocols to facilitate data transmission and exchange.
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Introduction and Overview

1964, On Distributed Communications
Networks

Centralized, decentralized, and distributed

A decentralized network represents a less-hierarchical structure than a centralized network. Complete reliance on a single point is not required.

The foundational concept of decentralized networks would be deployed in tandem with what came to be known as “packet-switching,” which entails breaking up communications into small parts, sending them along, and reconstructing them at the end.
The Internet and the World Wide Web
The Internet and the World Wide Web

The Internet and the Web are separate but related things.

The Internet is a massive network of networks, a networking infrastructure that connects computers globally.

The Web is a way of accessing information over the medium of the Internet, an information sharing model that is built on top of the Internet.

The Web is just one of the ways that information can be disseminated over the Internet but it is the one we are focused on in this class.
Internet Access
1980s–Present

• Personal Computing
• Portable Computing
• Mobile Computing
• Ubiquitous Computing
• Ambient Computing
IBM 5150
1981
Apple PowerBook 540c
1993
Apple iPhone
2007
Ubiquitous Computing
Introduction to Web Design & Computer Principles
CSCI-UA 4
Class 1
Introduction and Overview
The Open Web and its Discontents

The digital revolution, which represented a shift from analog and electronic technology to digital, is now commonplace.

In many ways we are experiencing the afterglow of the digital revolution.

Digital tools and media still offer lots of possibilities but also problems.
Re-Decentralization

“A new Decentralized Web has the potential to be open, empowering users around the globe to control and protect their own personal data better than before.”

Decentralized Web Summit
<table>
<thead>
<tr>
<th>Syllabus</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI-GA 1122-1</td>
<td>This graduate-level course uses a project-based learning approach toward the study of web technologies and web programming. Students study principles and techniques of web design and build interactive websites based on content relevant to their scholarly interest in the humanities or social sciences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Notes</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, 6:20–9:00 p.m.</td>
<td>The class will meet weekly for two and a half hours with time allocated to teaching, discussion, and project development. Projects will involve multiple aspects of front-end web development and critical reflection thereof.</td>
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<tr>
<td>Room C03, 60 Fifth Ave</td>
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<td>Professor: Joshua Clayton</td>
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</tr>
</tbody>
</table>

Spring 2019 • New York University • Accessibility
Course Content

Web Development

• Unix command line
• HTML
• CSS
• Web graphics
• Web page layout
• Responsive design
• Scripting with JavaScript
• Content management systems
• Special topics
Guiding Principles

Open Source

• Anyone is free to use it
• Usually free of charge
• Source code is made available
• Can be modified and redistributed
Guiding Principles
Accessibility and Net Neutrality

Net neutrality is the principle that Internet service providers should enable access to all content and applications regardless of the source, and without favoring or blocking particular products or websites.
Guiding Principles

Web Standards

The formal, non-proprietary standards and technical specifications that define and describe aspects of the World Wide Web and its interoperability.

These include:
- HTML5
- CSS
- JavaScript
- SVG
- WOFF
Introductions

Me

Joshua Clayton
Clinical Assistant Professor
jclayton@cs.nyu.edu

Office hours
• Tuesday, 12:30–1:30 p.m.
• Thursday, 3:30–4:30 p.m.

Room 420, Warren Weaver Hall

cs.nyu.edu/cs/faculty/clayton
Introductions

You

- Name
- Where you’re from (where you identify most closely with)
- Describe your research
- What interests you about this class
Syllabus

Attendance

You are expected to come to all classes and arrive on time.

Please let me know in advance if you will be out for any reason.

Please let me know if you miss class due to illness.

Computers are welcome in class; use them with discretion.

If you ever feel overwhelmed or need extra help, I will be available to you.
Syllabus

Textbook

5th Edition

Jennifer Robbins
978-1-491-96020-2
Syllabus

Assignments

There will be weekly assignments over the course of the semester.

Details of each assignment will be posted on the class website.

All assignments are due before class, submitted via NYU Classes.

Do your best to turn work in on time. 10% will be deducted for each day after the deadline.

No assignments will be accepted after one week without prior permission.
Web Development
CSCI-GA 1122

**Syllabus**

**Grading Rubric**

Class Presentation: 10%
Project 1: 20%
Project 2: 15%
Project 3: 20%
Project 4: 15%
Project Reflection: 20%