What is the Internet?

CVJ 341: Introduction to Web Design

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http://en.wikipedia.org/wiki/Internet
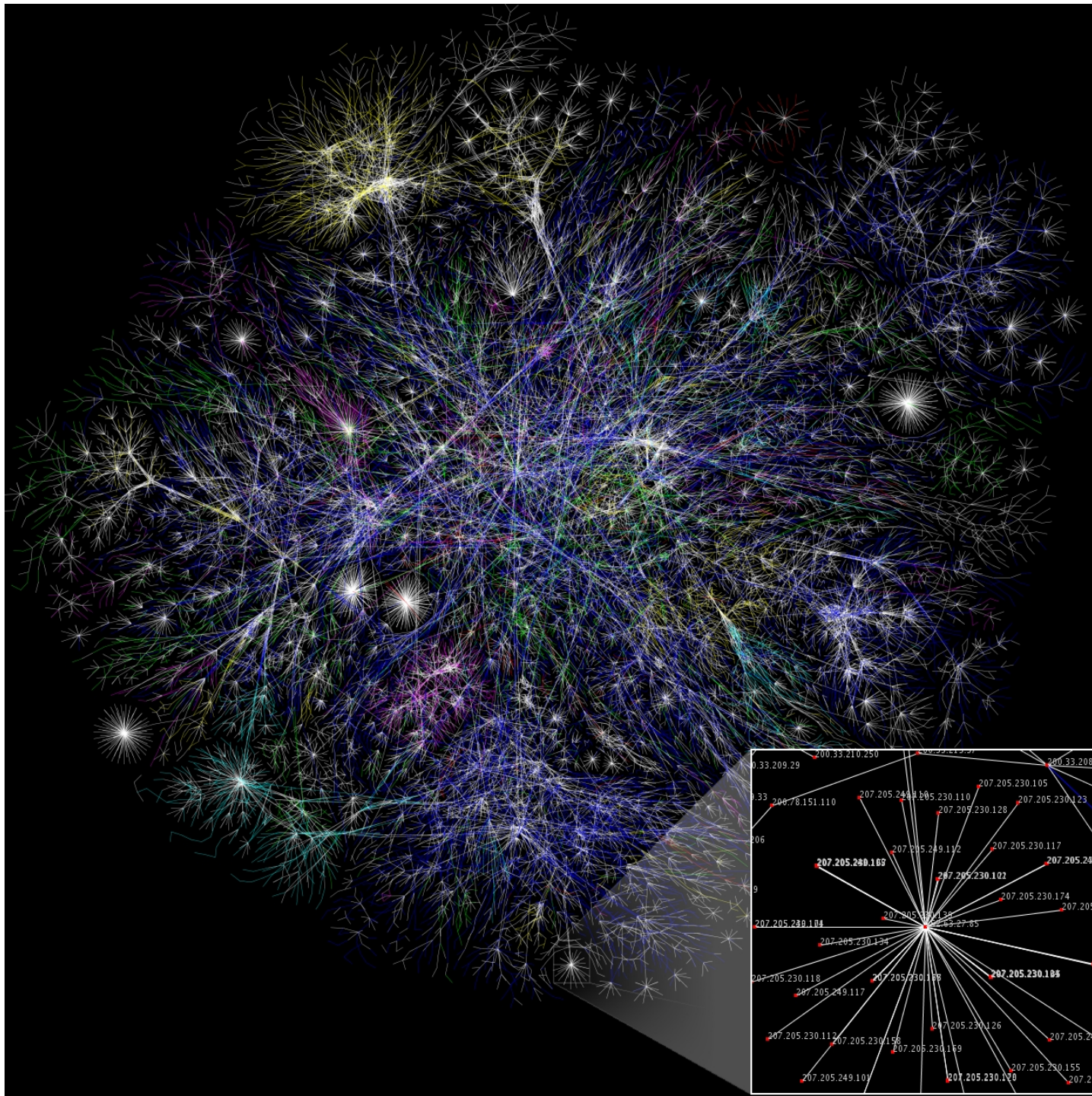
The technical

The internet is an information protocol which passes data back and forth between **computers** and **servers**.

This protocol is called **TCP/IP**, which stands for Transmission Control Protocol/Internet Protocol.
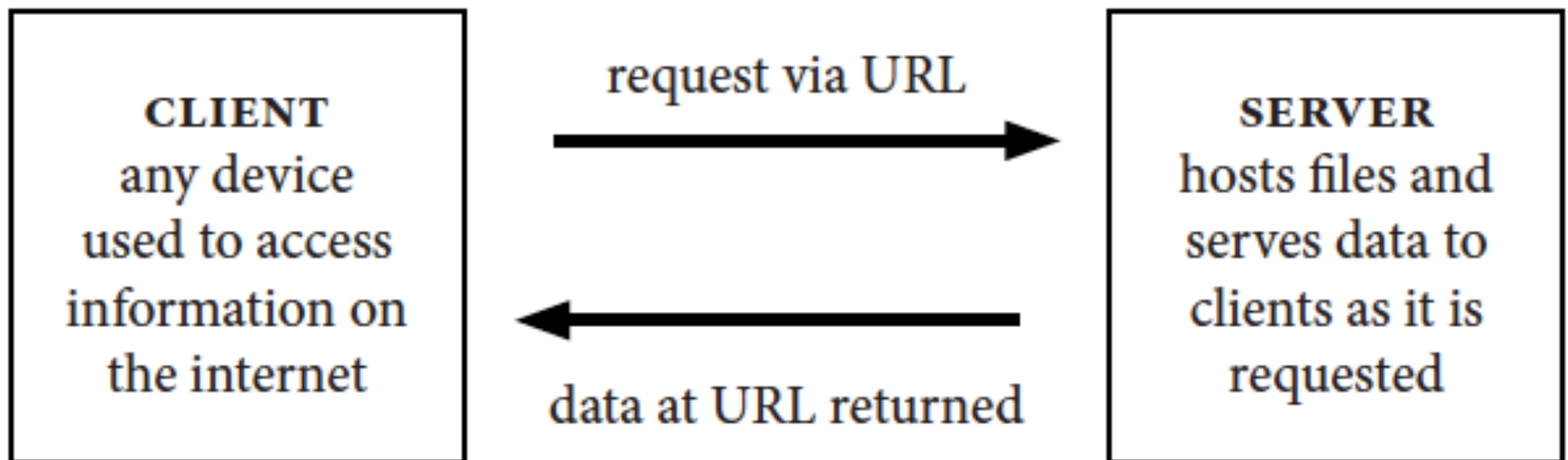
It is how the web serves you hypertext documents, email, and everything else you see "online."

Internet vs. the Web

The Internet is a worldwide network of computers and systems cooperating with each other to exchange data using a common set of networking and software protocols.

The Web is a collection of documents whose content are structured with hypertext.

Client-Server Model

CLIENT
any device
used to access
information on
the internet

request via URL
→

data at URL returned
←

SERVER
hosts files and
serves data to
clients as it is
requested

Servers and files

Servers and computers have IP addresses.
These represent locations on the web.
These look like: 184.152.46.88.

URLs point people to server IPs in order to download information they are looking for.

URLs not only make IP addresses easier for humans to remember, but they also allow multiple paths to point to the same IP address.

Web clients

Web clients or browsers show us the content at a particular IP.

These clients interpret hypertext documents into visual elements.

As this interpretation is done at the browser level, it is important to test your HTML in as many browsers as possible.

HTML

Hypertext Markup Language (HTML)

HTML is a language for describing webpages

HTML is not a coding language, it is a **markup** language

HTML History

Created in 1991 by Sir Tim Berners-Lee.

Based off of SGML
(Standard Generalized Markup Language)

HTML DOCUMENTS

VISUAL WEB PAGES

INVESTMENT BANKING | AUGUST 25, 2013, 9:26 PM | 💬 39 Comments

Shoeshines Keep Wall Street in the Black (or Maybe Brown)

BY WILLIAM ALDEN

Ozier Muhammad/The New York Times

A morning rush at Eddie's Shoe Repair in Rockefeller Center.

Mauricio Dias was being courted by Wall Street.

After losing his job at the investment bank Donaldson, Lufkin & Jenrette when it was sold to Credit Suisse, he received a phone call from the office of Hamilton E. James, the executive who had orchestrated the sale, Mr. Dias said. Mr. James was starting a new role as the No. 2 at the Blackstone Group, a big investment firm, and wanted Mr. Dias to join him.

Mr. Dias, now a 10-year stalwart at Blackstone, is no banker with a briefcase, however. He carries a shoeshine box.

DealBook: Indian Firm to Pay $2.6 Billion to Build Its Stake in African Gas Project
ONGC Videsh, a unit of the India's state-run Oil and Natural Gas Corporation, says it will acquire a 10 percent stake in a natural gas project in Mozambique from Anadarko Petroleum in an all-cash deal.

Under Obama, Little Progress on High-Level Jobs for Women
The president, who is considering candidates for a new Federal Reserve leader, has named no more women to major posts than Bill Clinton did. Janet L. Yellen, the Federal Reserve's vice chairwoman, is a finalist for the position.

DealBook: U.S. Short-Seller Takes Aim at Chinese Vegetable Producer
The Glaucus Research Group has accused the China Minzhong Food Corporation of fabricating sales and doctoring financial statements, leading to a 48 percent fall in Minzhong's stock before trading was suspended on Monday.

News by Sector

Energy	Technology
Industrials	Financials
Cyclical Goods & Services	Real Estate
Autos	Basic Materials
Media	Health Care
Non-Cycl. Goods & Services	Telecom
Food & Beverage	Utilities

Morning Agenda With William Alden

A Blockbuster Biotech Deal
Amgen agrees to buy Onyx Pharmaceuticals for about $10.4 billion. | Muriel Siebert, the first woman to buy a seat on the New York Stock Exchange, has died at 80. | Inside New York's investment houses, the service has proved remarkably resilient. | Pawnshops are

Article Tools

f FACEBOOK   🗀 SAVE

```
250          <h1 class="entry-title">Shoeshines Keep Wall Street in the Black (or Maybe Brown)</h1>
251          <address class="byline author vcard">By <a href="/author/william-alden/" class="url fn" title="See all posts by WILLIAM
     ALDEN">WILLIAM ALDEN</a></address></header>
252   <!-- The Content -->
253   <div class="entry-content"><div class="w592"><img src="http://graphics8.nytimes.com/images/2013/08/26/business/SUB-shoeshine/SUB-
     shoe-shine-tmagArticle.jpg" id="100000002405334" width="592" height="355" alt="A morning rush at Eddie's Shoe Repair in
     Rockefeller Center." /><span class="credit">Ozier Muhammad/The New York Times</span><span class="caption">A morning rush at
     Eddie&#8217;s Shoe Repair in Rockefeller Center.</span></div>
254   <p>Mauricio Dias was being courted by Wall Street.</p>
255   <p>After losing his job at the investment bank Donaldson, Lufkin &amp; Jenrette when it was sold to <a
     href="http://dealbook.on.nytimes.com/public/overview?symbol=CS&#038;inline=nyt-org" class="tickerized" title="More information
     about Credit Suisse Group A.G">Credit Suisse</a>, he received a phone call from the office of Hamilton E. James, the executive who
     had orchestrated the sale, Mr. Dias said. Mr. James was starting a new role as the No. 2 at <a
     href="http://dealbook.on.nytimes.com/public/overview?symbol=BX&#038;inline=nyt-org" class="tickerized" title="More information
     about The Blackstone Group">the Blackstone Group</a>, a big investment firm, and wanted Mr. Dias to join him.</p>
256   <div class="w231 left module">
257
258   <div class="entry entry-utility">
259   <h4>Article Tools</h4>          <meta name="emailThisHash" content="tnzA+VJqsovmlTTs7Yus4Q">
260             <div class="shareTools shareToolsThemeClassic shareToolsThemeClassicHorizontal articleShareToolsBottom " data-
     shares="facebook,save,twitter,email,google,print,showall|Share,permalink" data-
     url="http://dealbook.nytimes.com/2013/08/25/keeping-wall-st-in-the-black-or-maybe-brown/" data-title="Shoeshines Keep Wall Street
     in the Black (or Maybe Brown) " data-description="In-house shoeshine service has proved resilient, surviving the rise of
     technology and even the 2008 financial crisis, which snuffed out many of Wall Street's quirks."></div>
261          </div><!-- end .utility -->
262   <div class="entry entry-related">
263   <h4>Related Links</h4><div class="entry-related">
264   <ul>             <li><a href="http://dealbook.nytimes.com/2013/08/25/an-appreciation-of-leather-and-polish/">An
     Appreciation of Leather and Polish</a></li></ul>
265   </div><!-- end .entry-related -->
266   </div><!-- end .entry-related -->
267   </div><!-- end .module -->
268   <p> Mr. Dias, now a 10-year stalwart at Blackstone, is no banker with a briefcase, however. He carries a shoeshine box.</p>
269   <p>Inside New York's investment houses, a vestige of old Wall Street lives on. Gone are the days when offices were filled with
     smoke and secretaries were the only women in sight. But in-house shoeshine service has proved remarkably resilient, surviving the
     rise of technology and even the turmoil of the 2008 financial crisis, which snuffed out many of Wall Street's quirks.</p>
270   <p>Mr. Dias, 52, is at the top of the heap in the shoeshine world. He charges $6 for a shine in Blackstone's offices, while the
     Dr. Shine shoeshine parlor in the building's lobby charges $3. Not counting the tip.</p>
271   <p>"He's a V.I.P.," said Gotardo Cortez, 38, a co-owner of Dr. Shine. A spokesman for Blackstone declined to comment.</p>
272   <p>Though they are not bank employees, Wall Street's shoeshine workers are privy to the hidden dramas of trading floors and
     executive suites. At <a href="http://dealbook.on.nytimes.com/public/overview?symbol=JPM&#038;inline=nyt-org" class="tickerized"
     title="More information about JPMorgan Chase &#038; Company">JPMorgan Chase</a>, for example, a shoeshine worker said that <a
     href="http://topics.nytimes.com/top/reference/timestopics/people/d/james_dimon/index.html?inline=nyt-per" class="tickerized"
     title="More articles about James Dimon.">Jamie Dimon</a>, the bank's powerful chief executive — who favors Ferragamo loafers —
     typically offers $10 for a shoeshine, "the same thing the guys on the trading floor pay."</p>
273   <p>But the modern shoeshine business has changed since the old days, reflecting the evolution of Wall Street firms from private
     partnerships to large, public corporations. Senior traders from <a
     href="http://topics.nytimes.com/top/news/business/companies/bear_stearns_companies/index.html?inline=nyt-org" class="tickerized"
     title="More information about Bear Stearns Cos">Bear Stearns</a> recall the days when they could put their feet up on a shoeshine
```

HTML Tags

<html>   </html>

- Keywords are surrounded by brackets
- Tags come in pairs with an opening and closing tag
- Tags describe page content

HTML ELEMENTS

<p> This whole line is an HTML element. </p>

- Everything between the start and end tags, including the tags

BASIC STRUCTURE

```html
<!DOCTYPE html>
<html>

        <head>
                <meta charset = "utf-8">
                <title>Page Name</title>
        </head>

        <body>
                <p>My first paragraph.</p>
        </body>

</html>
```

WHY DO WE NEED STRUCTURE?

Correctly written HTML and CSS improves findability and SEO (Search Engine Optimization)

HTML Elements

\<p\>Hello world.\</p\>

Opening tag
Closing tag
lowercase

Empty Elements

\<br /\>

Empty elements have no content.

HTML Headings

```
<h1>This is the main heading.</h1>
<h2>This is the next heading.</h2>
<h3>And the next….</h3>
<h4> … </h4>
<h5> … </h5>
<h6> … </h6>
```

HTML Headings

```
<h1>This is the main heading.</h1>
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<h3>And the next….</h3>
<h4> … </h4>
<h5> … </h5>
<h6> … </h6>
```

HTML Paragraphs

<p>This is a paragraph.</p>

<p>This is a paragraph <br /> with a line break. </p>

HTML Comments

<!-- This is a comment. It does not show up on the browser. -->

Use comments to help you identify the purpose of segments in your code.

HTML Links

Provide additional information about an element specified in the opening tag

Attributes come in name/value pairs. A value is enclosed in quotes.

Format:
name="value"

HTML Links

Click here

Example of an EXTERNAL link:

University of Miami

HTML Links

Click me

Example of an INTERNAL link:

About Me

FAQs

HTML Images

Example of an IMAGE tag:

Review

```
<!DOCTYPE html>
<html>

<head> ……</head>
<body>
      <h1> through <h6>
      <p> </p>
      <br />
      <a> …. </a>
<img …. />
</body>

</html>
```

Web Resources

W3C: World Wide Web Consortium

Validate & Debug:
http://validator.w3.org

Web Development Resource:
http://w3schools.com

Head Element

Includes scripts and stylesheets (css)

Example:

```
<head>
     <meta charset="utf-8" />
     <title>CVJ 341 Web Design</title>
</head>
```

Useful Tips

Write clean HTML with proper indentation.

Use comments to annotate and organize your code (and to test different code before deleting it)

Validate your pages at http://validator.w3.org.

Test your website in multiple browsers (cross-browser compatibility)

Use "Inspect Element" and other developer tools to debug and test code

What is Image Compression?

The reduction of the file size of images, which also reduces the quality of the image.

Why Image Compression?

Create faster loading web pages because there are less bytes to download (better user experience)

Reduce the burden on your user's browser
(uses less bandwidth / less of your data plan)

Protecting your images from being misused
(putting up lower quality image reduces chances someone will use your image without your permission)

Free up space on your server

Increase your search engine optimization (SEO)

http://www.searchenginejournal.com/image-optimization-101/50649/

Image Resolutions

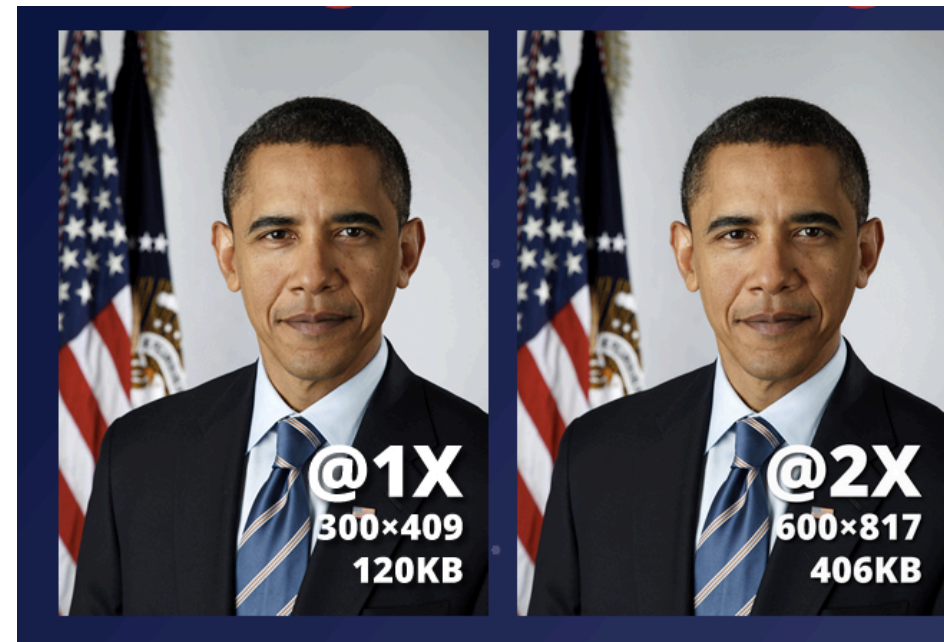Print   -   300 dpi

Web   -   72 dpi

Images for Retina Displays

Double the size of all your images.

Instead of uploading a 300 x 409 pixel image to your site, upload a 600 x 817 pixel image instead.

Keep in mind that you are more than doubling the file size of the image when you double the dimensions.

Image Compression Tools

ImageOptim – http://imageoptim.com/

Tiny PNG – http://tinypng.org/

Apple Preview > Tools > Adjust Size

Photoshop > File > Save for Web