

Alphabet Soup of the Web

CSS, HTML, JS, HTTP, RDBMS, DNS... oh my!

Jeremy Woertink & Russ Smith

Interwebz.. Where did it begin?!



The date, 1969. The place, UCLA



Protocols

As the network grew it required a new protocol to be developed to help with the transfer of information. The new protocol was called TCP/IP (or just TCP). This protocol is still in use today, in use on your computer and even your smartphone. This protocol enables data to be broken down into packets, sent over the wire, and reassembled on the other end.

Interwebz.. How does it work?!



Step 1

Choose a Web Browser



or like a million other really horrible ones

or even one like this!

```
xterm
#<<<>>> Lynx (web browser) - Wikipedia, the free encyclopedia (p1 of 5)
#copyright

Your continued donations keep Wikipedia running!

Lynx (web browser)

From Wikipedia, the free encyclopedia

Jump to: navigation, search

CAPTION: Lynx

Wikipedia Main Page displayed in Lynx
Wikipedia Main Page displayed in Lynx
Maintainer: Thomas Dickey
Stable release: 2.8.5 (February 4, 2004) [[+/-]]
Preview release: 2.8.6 (?) [[+/-]]
OS: Cross-platform
Use: web browser
License: GPL
Website: lynx.isc.org

Lynx is a text-only Web browser and Internet Gopher client for use on cursor-addressable, character
cell terminals.

Browsing in Lynx consists of highlighting the chosen link using cursor keys, or having all links on
a page numbered and entering the chosen link's number. Current versions support SSL and many HTML
features. Tables are linearized (scrunched together one cell after another without tabular
structure), while frames are identified by name and can be explored as if they were separate pages.

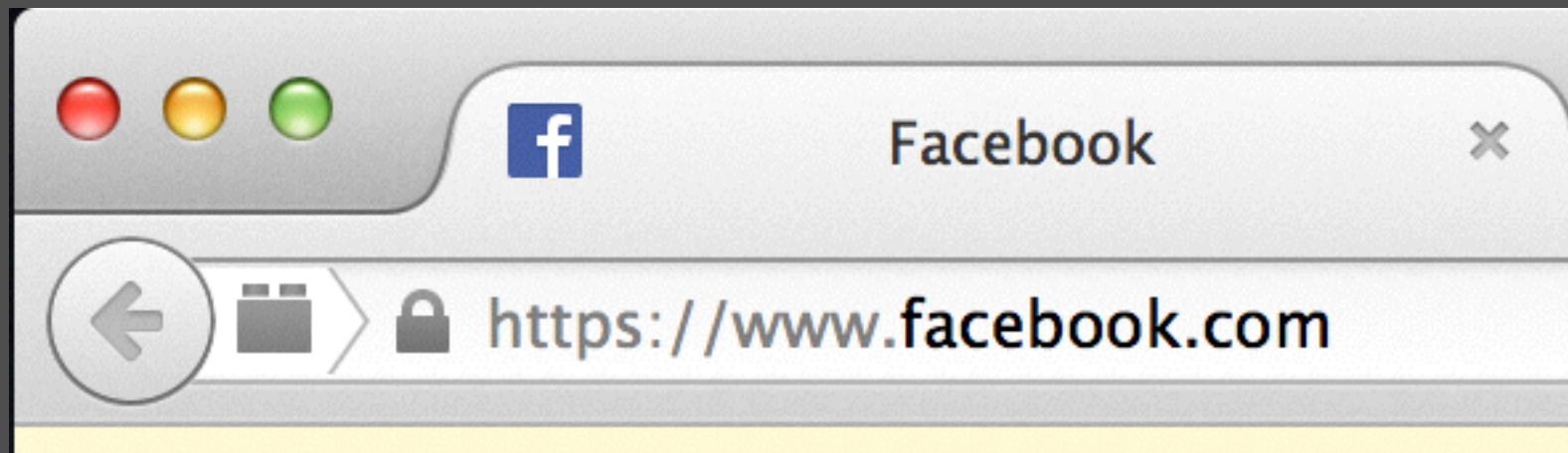
Lynx is a product of the Distributed Computing Group within Academic Computing Services of the
University of Kansas, and was initially developed in 1992 by a team of students at the university
(Lou Montulli, Michael Grobe and Charles Rezac) as a hypertext browser used solely to distribute
campus information as part of a Campus-Wide Information Server. In 1993 Montulli added an Internet
interface and released a new version (2.0) of the browser [1] [2] [3].

--more-- http://en.wikipedia.org/wiki/Image:Lynx_28web_browser29.png
```

Step 2

That's "You Are Elle", not "Earl"

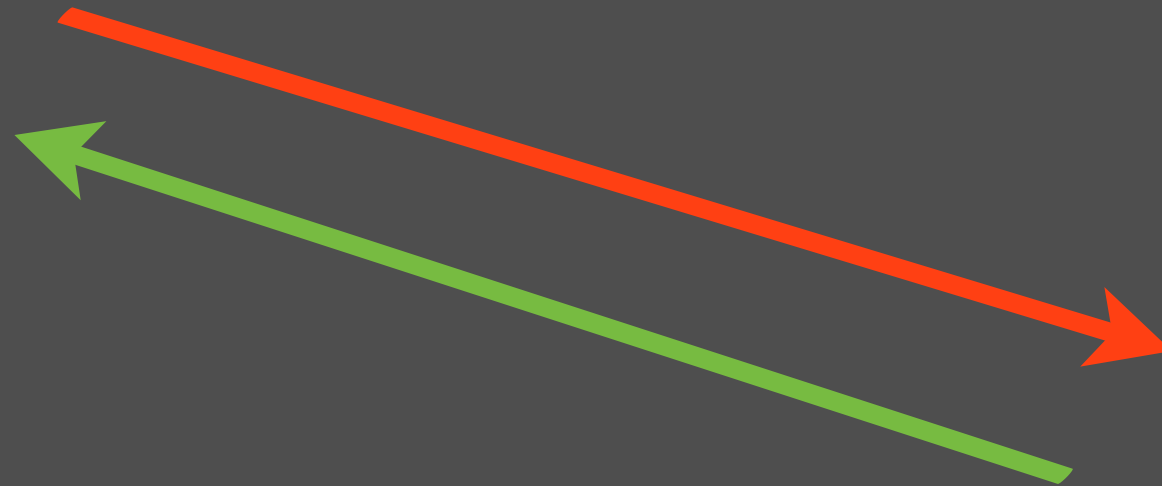
Type in a website address (also called a URL)



Step 3



Hey DNS, can you tell me
where I can find
www.facebook.com?



IP Address



Sure thing! It's at
173.252.120.6



Step 4



Hello, 173.252.120.6. I
want to creeper stalk
people.



** Note: Stuff is going on here



Here's the homepage. Let me
know if you need anything else.

Step 5

The screenshot shows a Facebook profile page for a user named Jeremy Woertink. The top navigation bar includes the Facebook logo, a search bar, and the user's name 'Jeremy' next to a 'Home' button. Below the navigation bar, the left sidebar contains links to 'News Feed', 'Messages', 'Events', 'PAGES', and 'GROUPS'. The main content area features a status update section with options to 'Update Status', 'Add Photos/Video', and 'Create Photo Album'. Below this is a post from 'Lori Gutierrez' stating she changed her profile picture, accompanied by a photo of two people. The right sidebar displays 'TRENDING' news items and a 'SPONSORED' advertisement for Microsoft Gold Certified Partner services, including Windows Server, SQL Server, Active Directory, and System Center.

Search Facebook

Jeremy Home

Jeremy Woertink
Edit Profile

News Feed
Messages
Events

PAGES
Phone Case of the ... 1
Pages Feed 12
Like Pages
Create Ad
Create Page

GROUPS
MANCAVE HOLIDA... 5
LVHS Band Alumni ... 6
Teah's Team 20+
Manage Your Groups

Update Status | Add Photos/Video | Create Photo Album

What's on your mind?

Viewing most recent stories · [Back to top stories](#)

Lori Gutierrez changed her profile picture.
2 mins ·

TRENDING

- Charlie Hebdo:** 2 massacre suspects dead after French police storm 2 hostage sites, reports say
- Vincennes:** 4 hostages, gunman reported dead in Paris supermarket siege linked to Charlie Hebdo attack
- Kendrick Lamar:** Azealia Banks criticizes rapper for comments on Ferguson shooting

[See More](#)

SPONSORED [Create Ad](#)

Microsoft GOLD CERTIFIED Partner

Windows Server
SQL Server
Active Directory
System Center

Free Expert Consultation

That's it! (sort of)

Terminology (nerd jargon)



feel free to be taking notes

HTTP & DNS

Hyper Text Transfer Protocol

the thing that takes stuff to the place where the thing is, and gets the things from the place with the stuff.

(think “FedEx”)

Domain Name System

some computers that turn your domain name into some numbers and back again

Domain Name

<http://www.yourcoolwebsite.com> ← things that look like this

HTML - CSS - JS

Hyper Text Markup Language

the "stupid" web language. A Markup Language is **NOT** a programming language.

Cascading Style Sheets

the thing that makes the web look pretty!

JavaScript

NOT to be confused with Java. This is the programming language that makes webpages fancy!

Website Breakdown



Show me the HTML

```
<html>
  <head>
    <title>Ruby Programming Language</title>
    <link rel="stylesheet" type="text/css" href="styles.css" />
  </head>
  <body>
    <div id="page">
      ... page stuff in here
    </div>
    <script type="text/javascript" src="scripts.js"></script>
  </body>
</html>
```

Make it pretty!

```
body {  
  background: #213449 url("images/background.png");  
  font-size: 14px;  
  color: #ffffff;  
}  
#page {  
  width: 980px;  
  margin: 0 auto;  
  padding: 10px;  
}  
p.links {  
  text-decoration: underline;  
}
```

Now make it fancy!

```
$(function() {  
    $('p.links').click(function() {  
        windowPopup(this.href);  
        return false;  
    });  
});  
  
var windowPopup = function(href) {  
    window.open(href, '_blank', '', false);  
};
```


Remember that Webserver?



← yeah, that one

What stuff was going on?

Sir, someone is
requesting the
homepage!



Notify the unicorns



Reporting for
duty, sir!



RAINBOWS!

Render the home
page A.S.A.P



ok, got my HTML and
CSS



Ready to go



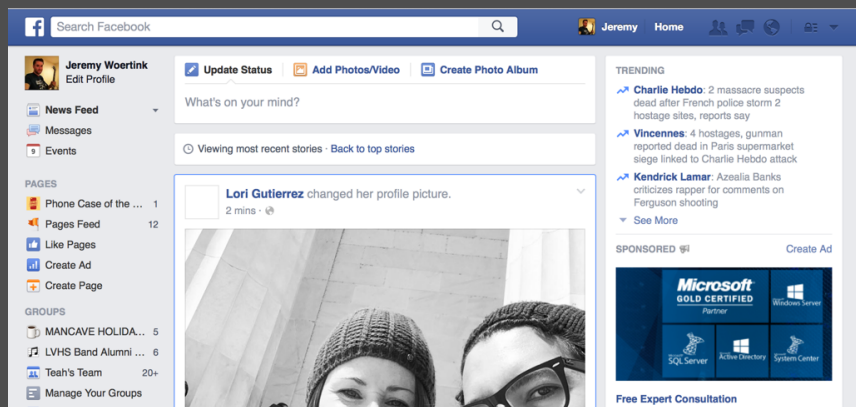
Take it away, WebServer!

Unicorn

A webserver program. There's a bunch of others, too.

Webserver

A program that will send files from your website server to someone's browser.



WHAMO!

We have interwebz

Learning Resources:

- www.w3schools.com
- teamtreehouse.com
- www.codeschool.com
- dochub.io
- hipsterhackers.usefedora.com

Huh?

Quick recap

- 1.Type in URL
- 2.Get IP Address of site from DNS
- 3.Connect to webserver of website
- 4.Website gets files ready
- 5.Webserver serves up website
- 6.Your browser downloads the requested page

Questions?