Session 1: Browser Basics

Mastering the Internet
Duke OLLI Spring 2024

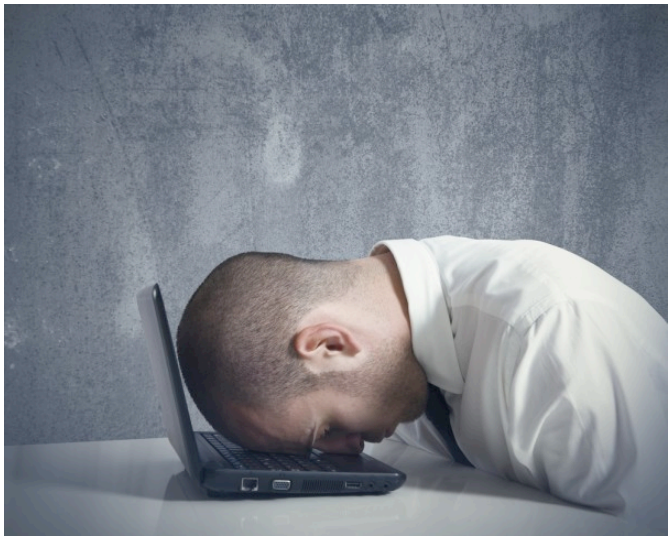
David Shamlin

Schedule

1	May 1	Browser Basics
2	May 8	Browser Features
3	May 15	The Internet
4	May 22	Accounts
5	May 29	The Cloud
6	June 5	Wrap Up & Help/Search

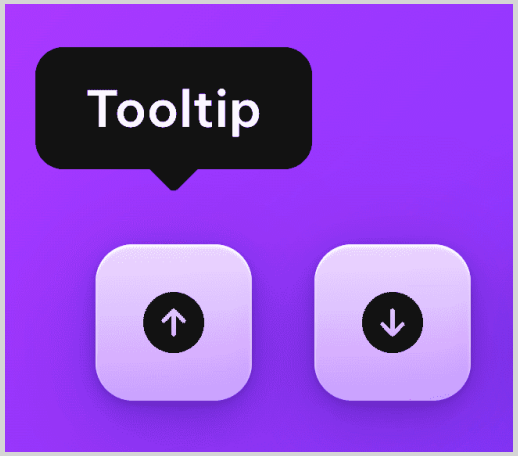
Ground Rules

- Support Duke OLLI Code of Conduct
  Curiosity + Connection + Kindness + Compassion = Community
- There are no stupid questions!
  So ask them and share your feedback as we go.
- Arrive late, leave early, step out as you need.
- 10 minute break near the end of sessions' first hour.
- Everyone is invited to lunch at a nearby eatery



Exercise

- Start Chrome
- Identify the following UI components/controls
  - **Window**
  - **Tab**
    - Close tab
    - New tab
  - **Toolbar**
  - **View Pane**
  - **Address Bar**
  - Refresh control
  - Tab search
  - More
  - You



Exercise

- Load the following URL
  https://olli-shamlin.github.io/spring-2024/
- Create a favorite bookmark for the above
- **RMB** on the **Address Bar**
  Make sure “Always Show Full URLs” is selected
- Find a **link** on the current page
  Notice what happens in the Address Bar
- Return to the originally loaded **page**

Exercise

Enter each of the following URLs in separate tabs in a window:

- https://olli-shamlin.github.io/spring-2024/
- dequeuniversity.com/library/responsive/1-non-responsive
- amazon.com
- wikipedia.org/wiki/IP_address

Exercise

- Load each of the following URLs in separate **tabs**
  - dequeuniversity.com/library/responsive/1-non-responsive
  - amazon.com
  - wikipedia.org/wiki/IP_address
- Move the tab containing the dequeuniversity.com URL to a separate **browser window**
  - Resize the window and observe if/how the page text changes
- Move to the wikipedia.org tab
  - Resize the window and observe if/how the page text changes

Exercise

- Load each of the following URLs in separate **tabs**
  - dequeuniversity.com/library/responsive/1-non-responsive
  - wikipedia.org/wiki/IP_address
- Move the tab containing the dequeuniversity.com URL to a separate **browser window**
  - Resize the window and observe if/how the page text changes
- Move to the wikipedia.org tab
  - Resize the window and observe if/how the page text changes
- In the Wikipedia page, find “Contents” on the left hand side of the page
  - Click on some of the links and observe how the URL in the Address

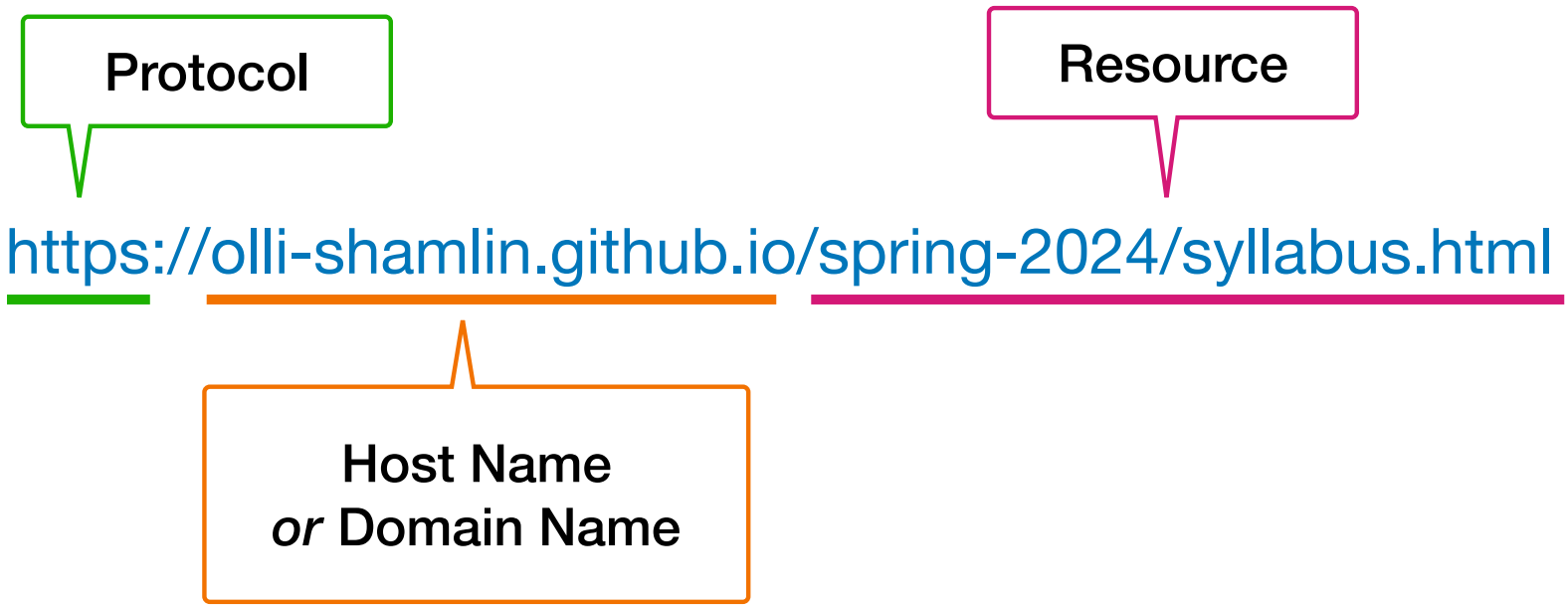
Exercise

- Load amazon.com into new tab
- Navigate to a product
- Observe the URL in the address bar while
  - “Flipping” through product pictures
  - Scrolling through a “similar products” section

Uniform Resource Locator

- https://olli-shamlin.github.io/spring-2024/
- dequeuniversity.com/library/responsive/1-non-responsive
- amazon.com
- wikipedia.org/wiki/IP_address

Uniform Resource Locator



Anatomy of a URL

protocol://*hostname*/*resource*?*parameters*

URL Protocol

protocol*://*hostname*/*resource*?*parameters

- Usually HTTP or HTTPS
- The site determines whether HTTP or HTTPS is used
  When you enter a URL into the Address Bar, you don't have to type the protocol
- HTTP is an acronym for
  HyperText Transport Protocol
- The "S" in "HTTPS" stands for "secure"
  When HTTPS is used…
  - Communication between the browser and the site is **encrypted**
  - The browser can "prove" the site's identify using a **certificate** sent to the browser by the site

URL Hostname

protocol://***hostname***/*resource*?*parameters*

- The hostname provides the address of the site
- The value found here is typically a **domain name**
  - Think of “domain name” as a synonym for “site name"
- Domain names are “words” separated by periods; for example…
  - www.amazon.com
  - en.wikipedia.org
  - courses.learnmore.duke.edu
- Note: domain names are used in email addresses!
  E.g., “gmail.com" is the domain in the email address “dukeollitotw@gmail.com"

URL Resource

protocol://*hostname*/***resource***?*parameters*

- The resource is the address of the page
- The value found here is usually a list of words separated by forward slashes (‘/‘)
- Sometimes the value may also contain
  - A file extension
    `https://olli-shamlin.github.io/spring-2024/syllabus.`**`html`**
  - An anchor point
    `https://en.wikipedia.org/wiki/IP_address`**`#Subnetworks`**

URL Paramters

protocol://*hostname*/*resource*?***parameters***

- Parameters are pieces of information your browser sends to the site in addition to the resource
- When parameters are needed is determined by the page currently loaded in the View Pane
- Your browser generates parameters part of a URL when needed
- Don't be surprised if/when the parameters value looks like "gibberish"
  Your browser and the site you are visiting know how to "read" them

Example of a URL with parameters

https://www.google.com/search?q=what+is+a+url&sca_esv=ef32433310457e91&sca_upv=1&ei=FUwiZsuiFcOs5NoP_7CMyAk&ved=0ahUKEwiLgcOrjc6FAxVDFlkFHX8YA5kQ4dUDCBA&uact=5&oq=what+is+a+url&gs_lp=Egxnd3Mtd2l6LXNlcnAiDXdoYXQgaXMgYSB1cmwyCBAAGIAEGLEDMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgAQyBRAAGIAESPAeUMYNWJgccAR4AZABAJgBZKABuAaqAQQxMi4xuAEDyAEA-AEBmAIRoAKOB8ICChAAGLADGNYEGEfCAg0QABiABBiwAxhDGIoFwgITEC4YgAQYsAMYQxjIAxiKBdgBAclCEBAAGIAEGLEDGEMYgwEYigXCAgsQLhiABBixAxiDAclCCxAAGIAEGLEDGIMBwgIREC4YgAQYsQMY0QMYgwEYxwHCAg4QLhiABBixAxjRAxjHAclCChAAGIAEGEMYigXCAg4QLhiABBixAxiDARiKBclCDhAAGIAEGLEDGIMBGIoFwgINEAAYgAQYsQMYQxiKBclCCBAAGIAEGMkDwgILEAAYgAQYkgMYigXCAgsQLhiABBiRAhiKBclCBBAAGAPCAiMQLhiABBiRAhiKBRiXBRjcBBjeBBjgBBj0AxjxAxj1A9gBApgDAlgGAZAGDLoGBAgBGAi6BgYIAhABGBSSBwQxNi4xoAeVZg&sclient=gws-wiz-serp

https://olli-shamlin.github.io/spring-2024/syllabus.html

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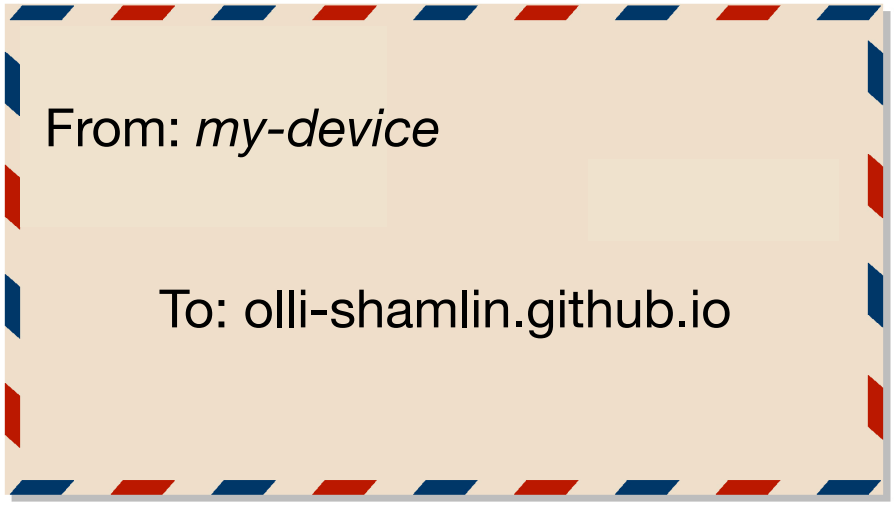


https://olli-shamlin.github.io/spring-2024/syllabus.html


<h2>Course Aims and Outcomes</h2>

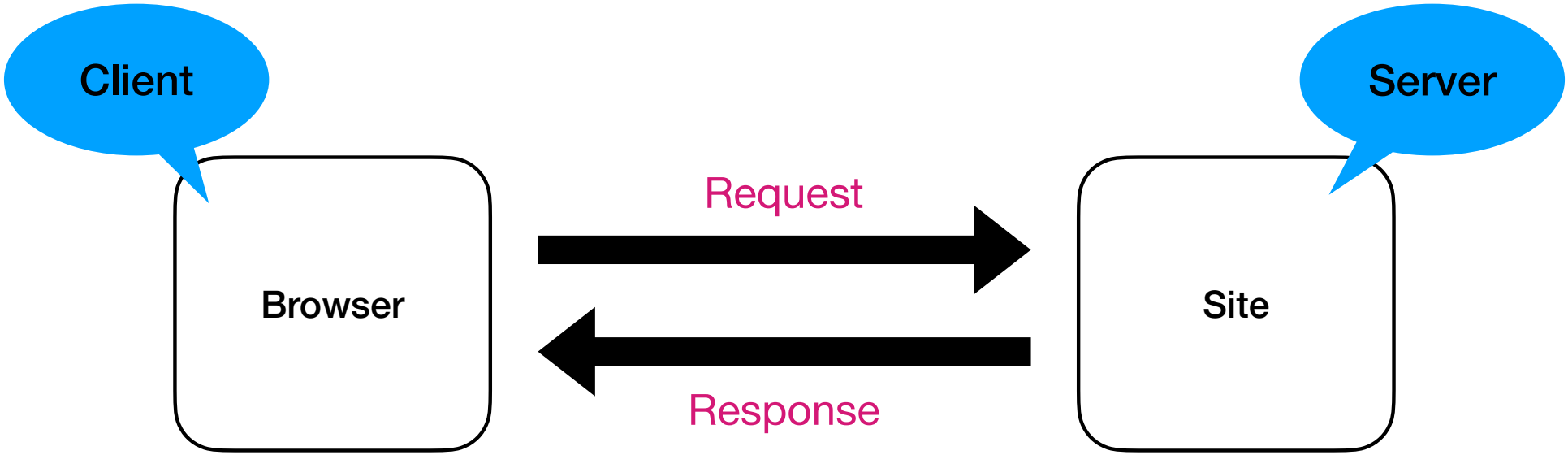
<p>
This course is designed to increase your digital proficiency specifically as it perta
Internet. Lectures presented over the course's sessions will give you a working un
ow the Internet, the World Wide Web, and the Cloud work. While lectures will incl
ussions of how computers and software used with the Internet work, the lectu
s a general audience. There is no prerequisite technical understanding need
ticipate in this course.


HTML
Hyper Text Markup Language


CSS
JS


From: olli-shamlin.github.io
To: *my-device*


Browser
Site
From: olli-shamlin.github.io
To: my-device


Client
Server
Browser
Request
Site
Response


client
server

Review

- **Windows & Tabs**
- **Toolbar & View Pane**
- **Address Bar**
- **Site**
- **Page**
  - Responsive *versus* Non-Responsive
  - **Static *versus* Dynamic**
- **Loading** a page
- Control & Icon
- **Hyperlink**
- **URL**: protocol, **domain name**, **resource**, parameters
- HTML, CSS, JavaScript (aka, “JS” or “JSP”)
- HTTP(S)
- **Client-Server**
- **Message: Request & Response**

Homework

Reinforce key concepts; reflect on your "comfort zone"

1. Visit some sites you regularly use and try to determine if they have dynamic or static pages.

2. Using a different browser than Chrome, repeat the exercises we did in class.

   - If you have an Apple device, you should have Safari installed
   - If you have a Windows PC device, you should have IE or Edge installed
   - If you have a Chromebook and don't already have a different browser than Chrome installed, try using Firefox for this exercise; you can download it on this page.

3. Assess your "digital life profile" using the worksheet found on the "Resources" page of the class website.