

Digital Scholarship Foundations: Static Web

Week 2: The Web, Markdown, and Data
Course website: <https://bit.ly/dsf-static-web>

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Learning Objectives

- Review Git and GitHub
- Learn about some of the building blocks of the web.
- Become familiar with your text editor (VS Code).
- Write with Markdown.
- Learn some best practices for file naming and metadata.

Git and GitHub Review

Git

GitHub

Repository

Clone

Commit

Commit message

Git and GitHub Review

Git: version control software

GitHub: git repository hosting service

Repository: collection of folders and files

Clone: Copy repository from remote to local (from cloud to computer)

Commit: snapshot of repository at that moment

Commit message: message to future self and/or collaborators

The Web

Three main parts to the world wide web:

- HTML (Hypertext Markup Language): structure and content
- CSS (Cascading Style Sheets): style and presentation
- JS (JavaScript): interactivity

The process, simplified:

You enter a web address > your browser sends a request to a server > the server sends back code > your browser renders and displays that code as a web page

Viewing Source Code

Your browser is not a black box! You can use the “view page source” and “inspect” functions of your browser to see the code behind a webpage

Let's look under the hood of a web page: Go to `library.princeton.edu`

Anatomy of a URL

URL: Uniform Resource Locator

A URL is a web address and it asks a server for code.

URL components:

- protocol
- domain name
- subdomain
- path
- filename

Anatomy of a URL



HTML

Hypertext markup language

Markup language:

- a text encoding system that structures and formats a document

So, HTML is a standard to communicate document elements to a browser so the browser can render the content properly.

HTML elements

Elements are the tags or annotations that communicate meaning to your browser

An example:

```
<h3>For Example</h3>
```

Markdown

A markup language for adding formatting elements to plain text files

Simpler way to write web content than html

Future friendly

File extension: .md

Markdown to HTML

CollectionBuilder, but more specifically, Jekyll, will convert your Markdown to HTML so your website looks how you intend.

Let's preview that process with dillinger.io

Go to <https://dillinger.io/>

- View sample Markdown and preview
- Click code symbol to view HTML output of Markdown parser

Questions?

Visual Studio Code and Text Editors

What is VS Code

- Lightweight, but powerful text editor
- Popular with programmers and others
- Integrated Development Environment (IDE)

Why VS Code or another text editor

- Easily read and edit plain text files
- IDE allows for predictive code and other development features all in one space

VS Code

Let's explore!

Data

Conventions and Best Practices

File naming conventions

Metadata best practices

Collection Builder specifics

File Naming Conventions

Limit confusion for humans and computers

Keep track of files

Avoid spaces and special characters

Metadata

What is metadata?

- Structured description of the objects in your collection

How will we create and maintain our metadata?

- Contained in csv file
- Each row of csv contains information about an object
- We will use Google Sheets to create and edit
 - alternatives: LibreOffice or OpenRefine

CollectionBuilder Best Practices

File naming

- all lowercase
- no spaces
- no special characters except underscore

Metadata

- Don't use Excel, ever!
- Use semicolon to separate multiple values in a field
- no special characters in ID values
- strip extra white space
- UTF-8 encoding

Homework

1. Gather exhibit objects in a single folder. Be sure to follow file naming conventions.
2. Prepare metadata using the CollectionBuilder template
3. Attempt to set up your development environment
 - a. If you are unsure how or are unsuccessful, coming to October 9 office hours
 - b. October 9 office hours will have coffee and tea!

Thank you!

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