

# Digital Scholarship Foundations: Digital Mapping

Week 4: Code Templates and Customization

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Fall 2025

# Today's Objectives

- Learn how to fork and clone repositories with GitHub
- Read a code template
- Explore building blocks of the web
- Develop code locally using JavaScript and Leaflet.js
- Generate a basic website locally and/or publicly using Jekyll

# Cloning and Local Development

GitHub enables multiple ways for you to clone and develop locally

- GitHub Desktop
- VS Code Integration
- Command line

Benefits of cloning and developing on your own computer

- Work with your preferred text editor
- “Live” version of website as you edit
- Build site on own server in the future

# A Gentle Introduction to Leaflet and Borrowing Code

# Leaflet and JavaScript

Leaflet is a common JavaScript library that allows your to create lightweight, interactive maps.

This means Leaflet is a collection of prewritten code.

That code is written in JavaScript, which is a programming language that is one of the three main building blocks of the web.

# Leaflet

Leaflet relies on:

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

Let's work with leaflet!

# Publishing Your Project on the Web

Building a map with a platform or with your own code does not guarantee it will be publicly accessible.

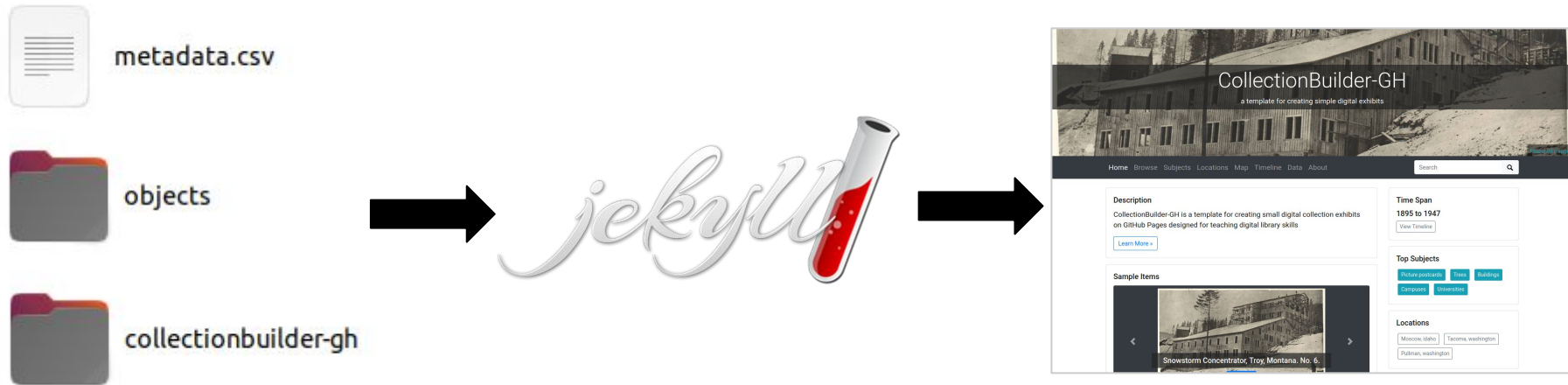
If you're using a platform, it needs to have a hosting option, an embed option, or a download option.

If using your own code, you need to build a web infrastructure around that code

GitHub Pages and Jekyll (the static site generator GitHub Pages uses) will allow us to publish our map and build additional interpretative content if necessary.



# Jekyll



## [CollectionBuilder Project](#)

(template code, metadata,  
configurations, and digital  
objects)

## [Jekyll Static Generator](#)

(built into GitHub Pages or installed on  
computer)

## [Static Web Site](#)

(hosted on any basic web server or  
GitHub Pages)

# GitHub Pages

Free static web hosting service available as part of every repository

## Advantages

- Minimal hosting requirements
- Faster performance
- Easy version control
- Get started with the click of a button

# GitHub Pages Key Terms

*Static website*: site delivered as stored rather than dynamic

*Static site generators*: software tools that transform source code into a website

*Jekyll*: popular static site generator

*Markdown*: markup language to add formatting to plain text; file extension: .md

*yaml*: plain text data format; used in Jekyll to configure site; file extension: .yaml

*\_config.yaml*: file that is first step in creating jekyll generated site

# index.md

An index file is the root file in any web directory.

The index.md is the root of your homepage.

It establishes an "index.html" file at the root of your directory.

Thank you!