

# R1: Static Site Generators

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6.1040 Fall 2023

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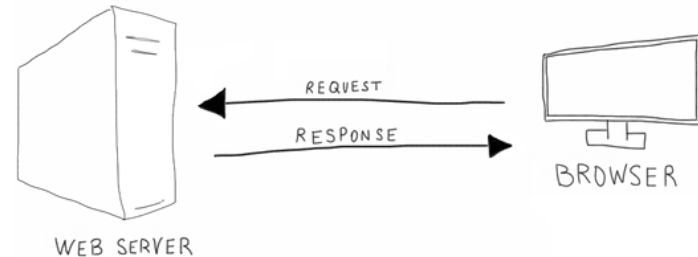
# Roadmap

1. What are Static Site Generators and VitePress?
2. VitePress concepts + Demo
3. Partner Exercise!

# Static Sites

- Website where users cannot influence content of the site (e.g. post or comment)
- Ways to build:
  - HTML + CSS from scratch
  - Website Builders (Wix, Squarespace, etc)
  - **Static Site Generators**

Why do we need yet another way to make static sites? What's wrong with the other ways?



STATIC WEBSITE

# Static Site Generators

- Tools for building static sites
- Ex: the class website (built using Jekyll), and many other documentation websites
- **VitePress**: the SSG we'll be using in 6.1040

## Why VitePress in 6.1040?

- Uses Vue.js and Node.js, frameworks we use in the class
- Well supported and frequently updated
- Styles can be customized with custom CSS and Vue



# VitePress: Key Concepts + Demo

- Key Concepts:
  - Markdown
  - Frontmatter
  - Layouts
  - Collections
- Follow along with your own repo!
  - **cd your-repo-path**
  - **npm run docs:dev**
  - Navigate to **localhost:5173** or wherever your local repo is running

# Markdown

- Markdown is a simple markup language that allows you to customize text with italics, bold text, numbered lists, images, links, etc.
- [Markdown Guide/cheat sheet](#)

# Frontmatter

- Frontmatter is metadata about a page
- It lies at the very top of the markdown file in between 2 dashed lines

```
---  
title: Blog 1  
---
```



# Layout

- A layout represents a certain way of generating a page
- VitePress has 3 layouts by default: **doc**, **page**, and **home**

# Collections

- A collection is a number of files that are treated as a set
- In VitePress, you put all files of a collection into one directory, and add an export file
- **Example:** the blog folder in your repo

## Exercise: Adding an about me page

1. Find a partner and introduce yourself!
2. Work together to add an about me page to your site (each partner should make a page for themselves)
  - a. **Step 1:** create a new file, ``about.md`` and navigate to ``/about.html`` on your site
  - b. **Step 2:** add a bio (who you are, where you're from, and what you're looking forward to in 6.1040)
  - c. **Step 3:** add a profile picture to your page
  - d. **Step 4:** add a link to your about me page to the navbar

## Further Customization

- Further customization can be done by writing additional **Vue** or **CSS**
- You can try playing around with this in a few weeks after learning **HTML + CSS!**

# Resources

- <https://61040-fa23.github.io/pages/site-builders.html>
- <https://www.markdownguide.org/>
- <https://vitepress.dev/>