## Installing a Web Server

## How do you set up a local testing server?

- This uses Python, a simple general programming platform that is often already installed on MacOS and Linux systems.
- By default, the Python web server runs on port 8000, i.e., your web page addresses will start with **http://localhost:8000/**
- You can specify a different port by adding it to the end of Python command to start the server.
  - Example: **python -m SimpleHTTPServer 8080** will start the server on port 8080.

## Setting Up a Local Web Server using Node.JS

- An alternative, using NodeJS, a popular web platform based on JavaScript.
- By default, **http-server** runs on port 8080, i.e., your web page addresses will start with **http://localhost:8080/**
- You can specify a different port with -p,
  - Example: **http-server -p 8000** will start the server on port 8000.

# JavaScript fetch()

How to make AJAX calls in your resources shows how to use JavaScript fetch() JavaScript and JQuery: Interactive Front-End Web Development by Jon Duckett

- Chapter 8 'Ajax & JSON'
  - Introduces AJAX and various data formats (including JSON)
  - How to use jQuery to create AJAX requests and process incoming data
  - Be sure to see pages 384-387 for a discussion on CORS and JSONP issues related to accessing other people's web services.
- How to Use JSON APIs with JavaScript
- MDN page with many fetch examples
- MDN page with fetch API

### . Vue

## Vue home page

• includes a video introduction to Vue.js and an introductory tutorial on different ways to use Vue

Vue example in your resources, How to Create HTML with Vue:

- Shows how to set up CDN for Vue.
- Shows how to create Vue instance.
- Shows how to design Vue data structure.
- Shows how to call Vue data inside HTML.

#### The Vue Handbook

• a fairly extensive one-page introduction to all the major elements of basic Vue

# **Optional resources**

# 1. jQuery

Note: With modern JavaScript includes **fetch()**, **document.querySelectorAll()**, and array methods such **map()** and **forEach()**, there is much less need for jQuery, even for AJAX calls.

jQuery introduction in your resources, How to Create HTML with jQuery JavaScript and JQuery: Interactive Front-End Web Development by Jon Duckett

- Chapter 7 'jQuery'
  - How to load jQuery
  - How to use jQuery to select elements, perform tasks, and handle events
- Chapter 8 'Ajax & JSON'
  - Introduces AJAX and various data formats (including JSON)
  - How to use jQuery to create AJAX requests and process incoming data
  - Be sure to see pages 384-387 for a discussion on CORS and JSONP issues related to accessing other people's web services.

## **jQuery Tutorial by W3Schools**

• Introduces jQuery and provides interactive demos of the concepts discussed

#### ¡Query Tutorial for Beginners by LearnCode.academy

• Lessons 1-4 work through jQuery basics before Lessons 5-6 give an example application.

Lesson 6 'jQuery' of Learn to Code Advanced HTML and CSS by Shay Howe, see:

- Introduction to JavaScript and then jQuery
- How to use jQuery to traverse the DOM, select and manipulate elements, add event handlers and effect.
- Includes interactive demos

Use the built-in **fetch()** function, rather than jQuery's **ajax()** function, but the basic concepts for asynchronous network calls and handling results are very similar.

jQuery AJAX Tutorial by LearnCode.academy

- Lesson 1 (lesson 7 of the jQuery series)
  - Using AJAX and APIs
- Lesson 2 (lesson 8 of the jQuery series)
  - Posting data to backend
  - You will not be posting data in this task, but the sections on Mustache are useful.
- Lesson 3 (lesson 9 of the jQuery series)
  - Delegating events and Mustache.js templating
- Lesson 4 (lesson 10 of the jQuery series)
  - "Edit" modes and better Mustache.js templating