



Course Outline: Basics

This is a rough draft of the course outline I'm thinking about developing. It still needs a lot of work but it's a good start.

1. Introduction
 1. What is the web?
 2. A little history
 3. Components of the web
 1. HTML
 2. CSS
 3. Javascript
 4. What the course will not cover
 1. Frameworks (React, Angular, Vue)
 2. Backend (Node, PHP, Python)
 5. A Technical Overview
 6. Course Project: CMS
 1. What
 2. Why
 3. How
2. HTML
 1. What is HTML?
 1. Markup Language
 2. Differences with CSS and Javascript
 2. Elements by groupings
 1. Structure
 2. Styles
 3. Multimedia
 4. Linking and Embedding
 3. Course Project
 1. Build the Markup for specific portions of the CMS
3. CSS (Structure based on [Web.dev's Learn CSS](#))
 1. Box Model
 2. Specificity and the cascade
 3. Stacking Context and Z-index
 4. Selectors
 5. Inheritance
 6. Color
 7. Measuring units in CSS
 1. Absolute units

- 2. Relative units
 - 3. Viewport units
- 8. Layouts
 - 1. Flexbox
 - 2. Grid
 - 3. Multi column
- 9. Spacing
- 10. Pseudo Elements and Pseudo Classes
- 11. Focus
- 12. Advanced Features
 - 1. Borders and Shadows
 - 2. Gradients
 - 3. Animations
 - 4. Filters
 - 5. Blend modes
 - 6. Logical Properties and writing modes
- 13. Course Project
 - 1. Style the blog
- 4. Javascript
 - 1. Javascript history
 - 2. Unusual Inheritance model
 - 3. About Javascript versions
 - 1. Annual release
 - 2. Browser supporta
 - 1. caniuse.com
 - 4. Values ([Eloquent Javascript](#))
 - 1. Numbers
 - 1. Special numbers
 - 2. Strings
 - 3. Booleans
 - 4. Logical Operators
 - 5. Empty Values
 - 1. Null
 - 2. Undefined
- 5. Program structure
 - 1. Functions
 - 2. Expressions and statements
 - 3. Variables and Constants
 - 1. Difference between var, let and const
 - 4. Return values
 - 1. There is always a return value, it may not be explicit

- 5. Control flow and conditional execution
 - 1. If / Then / Else
 - 2. While / Do
 - 3. For
 - 4. Switch
- 6. Functions ([Eloquent Javascript](#))
- 7. Defining
 - 1. Function Expressions
 - 2. Function declarations
 - 3. IIFE
 - 4. Arrow functions (ES6)
 - 1. Shortcomings
- 8. Classes
- 9. Bindings and Scopes
- 6. Modules ([Eloquent Javascript](#))
 - 1. Special type of script
 - 2. Import / Export
 - 3. Different types of modules
 - 1. CommonJS
 - 2. ECMAScript Modules (ESM)
- 7. Javascript on the browser
 - 1. The DOM
 - 2. Looking for elements on the page
 - 1. getElementBy
 - 2. querySelector and querySelectorAll
 - 3. Using scripts on a page
 - 1. Inline
 - 2. Linking
 - 4. Events
 - 1. Event listeners
 - 2. Event handlers
- 5. Asynchronous Programming (pull the content from `mdn-async-js.md`)
- 6. Javascript on the server
 - 1. Node.js
 - 1. History: What came before and why now
 - 2. How it works
 - 3. Advantages and Disadvantages
 - 2. Course Project: Installing the CMS
- 7. Converting the blog into a PWA
 - 1. The PWA concept
 - 2. Elements of a PWA

1. The manifest file
 2. The service worker
 3. The offline page
3. Course Project: Add a Manifest
 1. Where to place it
 2. What it must contain
4. Course Project: Add a service worker
 1. Add it to the root of the site
 2. basic caching and offline functionality
8. Publishing your work
 1. Course Project: Publish the site to Netlify
 1. Create a Netlify account
9. Accessibility

Advanced (and somewhat disjointed) topics

1. Build sites with Flexbox and CSS grid together without shooting yourself on the foot
 1. How they are different
 2. How they work together
2. CSS Variables
 1. What they are
 2. How to use them
3. Variable fonts and integrate them into your workflow
4. Build your tools: Work with Gulp and its ecosystem
5. Quick Overview of WordPress
 1. Why it matters and why you should know about it
 2. What technologies does it use
 3. Can I develop a full web project with it?