

MERN Stack Resources + DS&ALGO

Resources | horizontech.dev | Ravi Kumar Vykuntham

Web Development Tools

Command Line

Setup

1. If you are using Windows, you can use the Git Bash terminal bundled with the Git installer as your command line. You can download it from <https://gitforwindows.org/>
2. If you are using a GNU/Linux system, use the Terminal emulator bundled in your distribution.
3. If you are on MacOS, you can use the Terminal app installed by default in Mac. You can also checkout iTerm for a more feature rich Terminal.

Command Line : Tutorials

1. [Command Line Crash Course](#)
2. [Learn enough command line to be dangerous](#)
3. [Codecademy command line course](#)

Git and version control

Setup

1. For Windows, download git bash from <https://gitforwindows.org/>
2. For Linux based distributions, see the installation notes at <https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>

Git and version control : Tutorials

1. [Learn enough Git to be dangerous](#)
2. <https://try.github.io/>
3. [Git Book](#)

Visual studio code

Setup

1. Download from here - <https://code.visualstudio.com/Download>

Visual studio code : Tutorials

1. <https://code.visualstudio.com/docs>
2. [The Coding Train tutorial](#)

Chrome developer tools

1. Bundled inside Chrome (or Chromium) browser.
2. Tutorial: [Google tutorial home](#)

CodePen

1. Setup : Signup at <https://codepen.io/>
2. Tutorial : <https://www.youtube.com/watch?v=pd1NX--k29c>

HTML

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HTML : Tutorials

1. <https://htmldog.com/guides/html/>
2. <https://learn.shayhowe.com/html-css/>
3. <https://diveintohtml5.info/>

HTML : Reference

1. <https://developer.mozilla.org/en-US/docs/Web/HTML>
2. <http://www.scriptingmaster.com/html/HTML-reference-pages.asp>
3. [Dev Docs](#) - Contains documentation for HTML & CSS along with many other open source technologies.

HTML : Further Reading

1. [New HTML5 structural elements](#)
2. [HTML5 video introduction](#)
3. [input tag reference](#)
4. [HTML validator](#)

CSS

CSS : layout tutorials

1. [Floats](#)
2. [Centering elements](#)
3. [CSS layouts](#)
4. [The box model](#)
5. [Create a simple CSS grid system](#)
6. [More CSS floats](#)
7. [CSS positioning in depth](#)
8. [CSS layout - interactive tutorial](#)

CSS : Reference

1. <https://developer.mozilla.org/en-US/docs/Web/CSS/Reference>
2. https://tympanus.net/codrops/css_reference/
3. <https://cssreference.io/>
4. [CSS vocabulary](#)
5. [Dev Docs](#) - Contains documentation for HTML & CSS along with many other open source technologies.

CSS : libraries

1. [Eric Meyer's CSS reset](#)
2. [Normalize.css](#)
3. [Bootstrap](#)

CSS : useful links

1. [Styling lists](#)
2. [CSS validator](#)
3. [Magic of CSS](#)

JAVASCRIPT

JavaScript : Tutorials

1. <https://html5dog.com/guides/javascript/>
2. [JavaScript for cats](#) - Easy one to complete compared to others.
3. [Eloquent JavaScript book](#)
4. [Mozilla Developer Network JavaScript tutorial](#)
5. [A re-introduction to JavaScript](#) From MDN again. Kind of a crash course.
6. [The JS way](#)
7. [You don't know JS](#) A book about many JavaScript language features in detail.

JavaScript : Reference & Books

1. <https://developer.mozilla.org/bm/docs/Web/JavaScript>
2. [JS Garden](#) - A collection of docs about quirky parts of JavaScript.
3. [Professional JavaScript for web developers](#)
4. [JavaScript: The definitive guide](#)

JavaScript : E6 Specific Resources

1. [ES6 features in bullet points](#)
2. [Understanding ES6 \(book\)](#)
3. [JS event loop explained](#)

jQuery : Tutorials

1. <https://learn.jquery.com/>
2. <https://www.codecademy.com/learn/learn-jquery>
3. <https://css-tricks.com/lodge/learn-jquery/>

NodeJS

NodeJS : Setup

1. Download from here - <https://nodejs.org/en/>
2. If you are using a GNU/Linux distribution, please use your package managed to install NodeJS.

NodeJS : Tutorials

1. [Art of Node](#)
2. [Mastering Node](#)
3. [How to Node, A collection of node tutorials](#)
4. [Node event loop and event driven programming](#)
5. [How does Node work](#)
6. [Interactive guide](#)
7. [You don't know Node](#)
8. [Teach yourself Node in 10 steps](#)
9. [JavaScript for everyone](#)

ExpressJS

ExpressJS : Setup

1. If you have Node and NPM installed, run **npm install express**
2. [Hello World example](#)
3. [Routing Guide](#)
4. [Template engine Wiki](#)

ExpressJS : Tutorials

1. [Examples for Express apps](#)
2. [Node and Express introduction](#)

Handlebars

Setup

Follow the instruction here - <https://github.com/pillarjs/hbs#install>

Documentation : <https://handlebarsjs.com/>

Tutorials : [Learn everything about Handlebars](#)

Express body parser

Setup

After **cd** ing into your project directory, run **npm install body-parser**

Documentation : <https://github.com/expressjs/body-parser>

MongoDB

MongoDB : Setup

1. Windows users - Download and install from here -
<https://www.mongodb.com/download-center/community>
2. Linux users - Follow the setup instruction here -
<https://docs.mongodb.com/manual/administration/install-on-linux/>

MongoDB : Installation Notes & Docs

1. For those who are on Windows 8 and below, you might need to start the MongoDB server manually. Go to the installation directory in your command line and run **./mongod.exe** to start the server.
2. [Mongo manual](#)
3. [Mongo University](#) From the creators of MongoDB itself.

MongoDB : Tutorials

1. MongoDB "CRUD" operations -

<https://docs.mongodb.com/manual/crud/>

Using MongoDB with NodeJS

1. To install the native driver, run **npm install mongodb**
2. Documentation - <https://mongodb.github.io/node-mongodb-native/>
3. <https://www.mongodb.com/blog/post/the-modern-application-stack-part-2-using-mongodb-with-nodejs>

ReactJS

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React

Documentation

1. [Official Docs](#)

Tutorials

1. [Official Tutorial](#)
2. [React Fundamentals](#)
3. [React Express](#)

React

Video Tutorials

1. [Egghead's Beginner guide to React](#)
2. [Practical React](#)

React – Further Reading

1. [JavaScript fundamentals before learning React](#)
2. [9 things every React.js beginner should know](#)
3. [8 things to learn in React before using Redux](#)
4. [Removing User Interface Complexity, or Why React is Awesome](#)
5. [Your Timeline for Learning React/](#)
6. [Why do we write super\(props\)](#)

Redux

Redux

Documentation

1. [Official Docs](#)

Tutorials

1. [Getting started with Redux by Redux creator Dan Abramov](#)

Further Reading

1. [Create your own Redux! Understanding how Redux works.](#)

React Router

Documentation

1. <https://reacttraining.com/react-router/>

Tutorials

1. [Sitepoint's React Router Tutorial](#)
2. [Tyler's React Router Tutorial](#)
3. [Introduction Video](#)

React + Redux + React Router

Tutorials

1. [React Redux Tutorial](#)
2. [Frontend Bootcamp by Microsoft](#)

DS & ALGO

Big O Notation

1. [Common Big O Notations](#)
2. [Cheat sheet](#)
3. [Another resources for common O notations](#)

DS & ALGO Video Tutorials

1. [Algorithms and Data Structures - Curated playlist](#)
2. [Data Structures Easy to Advance](#)
3. [Algorithms Basics to Depth](#)

DS & ALGO Books

1. [Cracking the Coding Interview](#)
2. [Algorithms by Jeff Erickson](#)
3. [The Algorithm Design Manual](#)

DS & ALGO Practice Sites

1. [Javascript interview coding challenges](#)
2. [Coding Train challenges](#)
3. [Top Coder challenges](#)
4. [Coderbyte challenges](#)
5. [Leetcode challenges](#)
6. [Coding challenges in Javascript](#)

DS & ALGO

Other Useful Resources

1. [Data Structure Visualizations](#)
2. [Visual Algo](#)
3. [Lets talk Algorithms](#)
4. [Algomation](#)
5. [Algorithms as dance moves](#)
6. [Algorithm and Data Structures Wiki](#)