

Dev Environment

David Richards - February 2021

Nodejs

- Superset of javascript originally designed for backend (server) development
- Node's module system now extended to the browser
 - Reactjs is installed as an NPM module
- NPM - node package manager
 - > 1 million modules for javascript
- NPX - locally execute scripts hosted remotely
- package.json - maintains list of production and development modules
 - Scripts for running dev, build, and production builds
- Yarn - alternative module management

Nodejs

- Download from <https://nodejs.org/en/>
- Installs node.js & npm
- Alternative (problems with file permissions?)
 - Install nvm (node version manager)
 - <https://github.com/nvm-sh/nvm>
- Advantages:
 - Explicit node versioning
 - Run different node versions on a single machine

Github

- Create account
 - github.com
 - Email will require verification
 - Ensure that your email is kept private
 - Make note of your commit email address
 - Click dropdown from top right corner > settings > email
 - ex: 123654858+ravenOSS@users.noreply.github.com

VSCode

- Free code editor - open sourced by Microsoft
- Download: <https://code.visualstudio.com/Download>
- Integrated terminal
- Integrated VCS (Version Control System)
- Supports most languages out of the box
- Customize with extensions

ESLint & Prettier Config

- Global install requires some VSCode settings
- Recommendation is to install per project
- Add local config files
- Examples
 - <https://github.com/ravenOSS/VSCode-Eslint-Prettier-Airbnb>

VSCode

- Supports many programming languages simply by switching selection
 - Add more specific language support with extensions
- Built-in Emmet for pop-up definitions and code snippets (! example)
 - Foundation is Typescript (superset of Javascript with type definitions (e.g. number, string, object, array))
- Key integrations
 - ESLint 'lints' code for correct syntax
 - Extensive rule set
 - Prettier formats code for easier readability

VSCode Extensions

- LiveServer - Ritwick Day
 - Python and node alternatives
- Bracket Pair Colorizer - Coenraads
- Color Highlighter - Sergi Naumov
- Material Icon Theme - Phillip Kief
- FiraCode Font - <https://github.com/tonsky/>
 - Enable font ligatures in Settings
- Theming
 - VSCode dark
 - Monokai Pro - includes file icons

Integrated Terminal

- Command line functionality
- `>shell` commands
- `>install 'code .'` shell command to PATH
- `'code .'` will open folder in new VSC window
- Useful when creating projects from CLI installs

Terminal

- MacOS - iTerm2 (integrated terminal in VSCode)
 - Add oh-my-zsh for color theming
 - Add aliases
 - `alias la="ls -lAh"`
 - `alias ll="ls -al | less"` (paginates long file listings)
 - `alias mbp="cd ~/Dropbox/MBP_Projects"`
 - `alias pg="ping 8.8.8.8 -c6"` (pings Google server to report connection status)
- Windows 10 - Window Terminal (install from MS Store)
 - Optional add cmdr
 - HowTo: <https://medium.com/talpor/windows-terminal-cmdr-%EF%B8%8F-573e6890d143>

Chrome

- React Dev Tools

Layout Examples

- CSS Grid & Flexbox
 - <https://github.com/ravenOSS/css-grid-cftw>