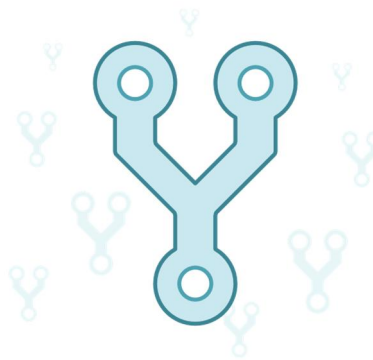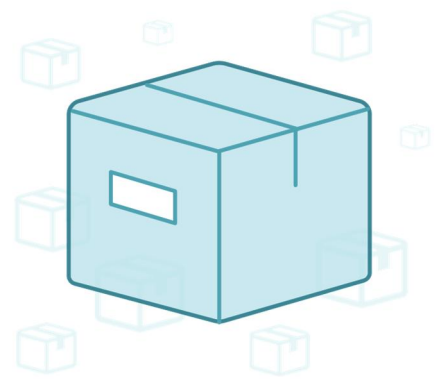Felix Starke

ELECTRON

Electron is an open source library developed and maintained by GitHub. Development began in 2013 as the framework on which Atom, GitHub's Editor would be built on.

Web Technologies   Open Source   Cross Platform

Electron uses web technologies so you can build desktop apps with HTML, CSS and JavaScript. You can package your apps for Windows, Linux and Mac. Electron apps can be built and run on three platforms.

The app is split into two silos. There is the *main process*, which contains the node.js runtime and provides file system access, native dialogs and lets you use all the node modules you need. Next to that there is the *renderer process*, which contains the HTML and CSS renderer and provides you with full DOM-Access. You can communicate between those processes in both directions via Inter-Process-Communication (IPC).
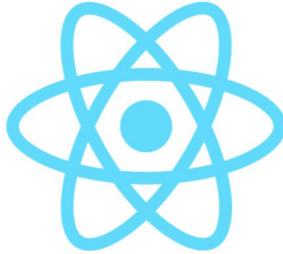
IPC

Main Process   Renderer Process

For your UI layer, you are not limited to a certain UI framework. You can choose what suits your application best or what you are most familiar with. This makes Electron powerful. You can write your own UI code using JavaScript or TypeScript and create your own stylesheets with Sass, Less or plain CSS, but you can also use powerful frameworks like Angular or React.

This handout, the slideshow as well as the finished application built in the hands-on part and step by step instructions are available on GitHub: https://github.com/FelixStarke/e-portfolio

Sources

- *ElectronJS*: https://electronjs.org/
- *What is Electron*: The Hard Parts Made Easy: https://www.youtube.com/watch?v=8YP_nOCO-4Q
- *Chromium Logo*:
  https://upload.wikimedia.org/wikipedia/commons/thumb/5/5f/Chromium_11_Logo.svg/2000px-Chromium_11_Logo.svg.png
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