



- TypeScript Intro & Setup

TypeScript is an open-source programming language built upon JavaScript.

It is called a "super-set" of the JS Language, because it enriches it with new features like static typing and smart error checking; once the development process is complete, it compiles back into plain JS to be digestible to any web browser and NodeJS environment.

It is especially useful on large-scaled applications, because using it you'll avoid losing track on how your data is shaped and you'll be "forced" to use good practices and write cleaner code!

TypeScript Setup

I'll suggest you to install TypeScript via [npm](https://npmjs.com), using the -g flag:

```
npm install -g typescript
```

This will make sure TypeScript gets installed *globally* on your system, allowing you to use the tsc command in any project.

The TypeScript compiler (tsc)

Once you create your TypeScript files (with a .ts file extension) you can compile them back into regular JS invoking the Typescript compiler through the command line:

```
tsc <put-file-path-here>
```

This will generate a .js file with the same name, containing the transpiled code. This file is now ready to be interpreted by the browser or the NodeJS engine.

If you want to automatically generate an updated .js version of your code at every file save, you can leave the tsc process running providing a watch parameter to your command:

```
tsc <put-file-path-here> -w
```