## Overview

TypeScript is an open source programming language that is developed and maintained by Microsoft.

It was initially released in 2012.

TypeScript is a super-set of ES6. That means whatever features we have in ES6 are also in TypeScript with some extra features on top, such as static typing and richer syntax.

In this section will cover both; we will go over some of the key features of ES6 and then we will cover some of the key features of TypeScript.

**ES6 Support**

ES6 is an *agreement* for how JavaScript should function in the future.

Its up to each browser manufacturer to implement those features according to that agreement.

Therefore all browsers don’t support all the features of ES6 *yet*.

Chrome has the best support by far and so does Node. I will be providing plunkers where you can try out the code yourself, remember to use Chrome to run the plunker.

Sometimes ES6 features are only *switched on* when we are in "use strict" mode, so to test our ES6 code my recommendation is to always add "use strict" to the top of your files.

A list of all the ES6 features and current support across a variety of platforms can be found here: <http://kangax.github.io/compat-table/es6/>

 We should be using at least node version 6 to support most of the ES6 features wewill be demonstrating in this section.

**TypeScript Support**

TypeScript transpiles down into ES5 so we don’t need to worry about browser support.

Code will be provided for all the examples, but also we’ll explain how to how to compile typescript locally on your computer with the command line tools.