**What is TypeScript?**

TypeScript is an open-source, typed super set of the JavaScript programming language. TypeScript was created by Microsoft in 2012 to make it easier for developers to create large, scalable applications. It is widely used by companies like Slack, Asana, and Microsoft.

The TypeScript language uses the same syntax and semantics as the JavaScript language. There are a few differences that makes it easier to write scalable code. As a result, you can use your existing JavaScript code to start a TypeScript application, then call your TypeScript code from a JavaScript application.

The TypeScript feature set offers support for all the latest JavaScript features. This means that when you use TypeScript, you don’t miss out on other features that have been introduced into JavaScript.

Whereas JavaScript is a dynamic scripting language, TypeScript is a static scripting language that lies on top of JavaScript code. TypeScript is not a replacement for JavaScript. It is a complementary technology used alongside JavaScript, especially when you are looking to build highly-scalable web apps.

These are main differences between JavaScript and TypeScript:

* TypeScript offers static typing, whereas JavaScript offers dynamic typing.
* TypeScript uses types and interfaces.
* TypeScript supports optional parameter functions, whereas JavaScript does not.

**What is TypeScript Used For?**

TypeScript is a modern web development framework. It extends JavaScript with static type definitions. These definitions make it easier to describe how an object is structured, which enhances code readability.

All JavaScript code can be TypeScript code. This is because TypeScript only extends on JavaScript. It does not replace the framework. TypeScript code is turned into JavaScript code when it is compiled.

There is no need for a developer to change their entire application to support TypeScript. At any moment, TypeScript can be added to either a client- or server-side application.

Because TypeScript is based on JavaScript, any transition will involve adding TypeScript code rather than removing JavaScript code.