# **What is TypeScript?**

TS is a language on top of JS i.e., everything possible in JS is available in TS as well – hence it is a superset of JS.

It provides 2 strong advantages –

* It transpiles TS into JS so advanced ES features can be used which are not available to all web browsers and does that by providing polyfill. It acts as a combination of other static checkers combined with babel.
* It can enforce static typing to catch potential issues earlier in SDLC hence reducing the need for some unit tests and can analyze the code to find runtime errors at design time.

TS was made public on October 1st 2012, but inception started at Redmond 2 years prior as an internal product (2010) at Microsoft. The project is open-source, hosted in GitHub, and under Apache2 license.

Many Microsoft products use TS like Teams, Visual Studio Team Services (VSTS), Office online version, VS Code etc. Google has been using TS since Angular 2. Slack has migrated their JS codebase to TS. And many other companies use TS.

TS was created by Andres Hejlsberg, and currently manages it as well. He is also the creator of Turbo Pascal, Delphi, C#

TS is all about having a strongly-typed language at design time, but the code produced doesn’t contain any type. The type gets erased because TS removes types, interfaces, aliases etc. at transpilation and ends up with a common JS file, which means the final design must not rely on the type dynamically at runtime. We must remember that type and interface are not available at runtime.