TypeScript at a glance

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What Is TypeScript?

- TypeScript is a programming language first developed by Microsoft in 2012.
- It is an open source language developed as a superset of javascript. This means that any code valid in javascript is also valid for typescript.

The Advantages And Disadvantages of TypeScript over JavaScript.

- **Advantages of Typescript:**
  TypeScript features mistakes at arrangement time while JavaScript, at the runtime,TypeScript helps in code organizing, TypeScript runs in any program or JavaScript motor.

- **Disadvantage of TypeScript:**
  TypeScript sets aside a long effort to incorporate the code, At whatever point TypeScript needs to run in a program.

Beyond Javascript and more.

- **Static Typing:**
  JavaScript is a dynamically typed language, which means that types are checked, and data type errors are only detected at runtime. This can be very dangerous and can create errors during production.

- **Readability:**
  The strict types and other elements that make the code more self-expressive, This is especially important for distributed teams working on the same project. A code that speaks for itself can compensate for the lack of direct communication between team members.

- **ECMAScript defines the standards and novelties of JavaScript**.
  TypeScript takes great care to include all these new features with each update.

Or you can work on a single portion together.

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Introduction

With the adoption and widespread usage of JavaScript as the standard programming language for web development, certain issues started to appear that caused lots of frustrations for Web Developers mainly due to JavaScript being a *weakly-typed* language. However, this did not stop developers who started looking for solutions to overcome JavaScript's weaknesses.

The Solution

Microsoft proposed a solution in 2012 to deal with these problems by publishing a superset open-source programming language called TypeScript. TypeScript introduced several benefits and solutions for the problems that were being faced by JavaScript developers at that time and it's currently being adopted as the go-to programming language in large-scale projects.

Benefits of Working with TypeScript

- **Statically Typed Language**
  This essentially prevents variables declared by a certain type to be changed into another data type.

- **Predictability**
  With the assurance of everything staying the way it is as it was initially defined, this increases the predictability of the intended output.

- **Readability**
  Code is more readable when other collaborators can have a grasp of what a certain snippet is doing by knowing the type of data accepted and returned.

- **Improved Error Feedback**
  The compiler will actively alert the developer of errors made during the compile-time, instead of having to figure out what went wrong during the runtime, thus, decreasing testing time needed and saving more time.

- **Improved Code Completion**
  By knowing which type of data to expect while coding, IDEs start providing better code suggestions that are most fit.

References

[1] https://en.wikipedia.org/wiki/TypeScript
[2] https://www.stxnext.com/blog/typescript-pros-cons-javascript/
[3] https://www.altexsoft.com/blog/typescript-pros-and-cons/
[4] https://www.typescriptlang.org/docs/handbook