

Introduction to Typescript

What is TypeScript?

TypeScript is a superset of JavaScript, which means that it adds additional features to JavaScript, but does not break any existing JavaScript code.

The main feature that TypeScript adds is static typing, which allows developers to specify the types of data that variables and functions can hold. This can help to catch errors early in the development process and make code more maintainable.



Why use TypeScript?

There are several benefits to using TypeScript, including:

- **Improved type safety:** TypeScript's static type checking can help to catch errors early in the development process, which can save time and frustration.
- **Better code readability:** TypeScript's type annotations can make code more readable and easier to understand.
- Increased developer productivity: TypeScript can help developers to be more productive by catching errors early and making code more maintainable.



Getting started with TypeScript

To get started with TypeScript, you can follow these steps:

- Install TypeScript: You can install TypeScript using npm or yarn.
- Create a TypeScript file: Create a file with a .ts extension.
- Write TypeScript code: You can write TypeScript code using the same syntax as JavaScript.
- Compile TypeScript code: You can compile TypeScript code into JavaScript code using the TypeScript compiler.
- Reference: https://www.typescriptlang.org/docs/handbook/typescript-tooling-in-5-minutes.html



Example

```
• • •
let x: number = 10;
let y: string = "Hello, world!";
function add(x: number, y: number): number {
  return x + y;
let result = add(x, y);
console.log(result);
```

Resources

- TypeScript documentation: https://www.typescriptlang.org/docs
- TypeScript Handbook: https://www.typescriptlang.org/docs/handbook/intro.html
- TypeScript tutorials: https://www.freecodecamp.org/news/learn-typescript-beginners-guide



Thank You!

