

Typescript

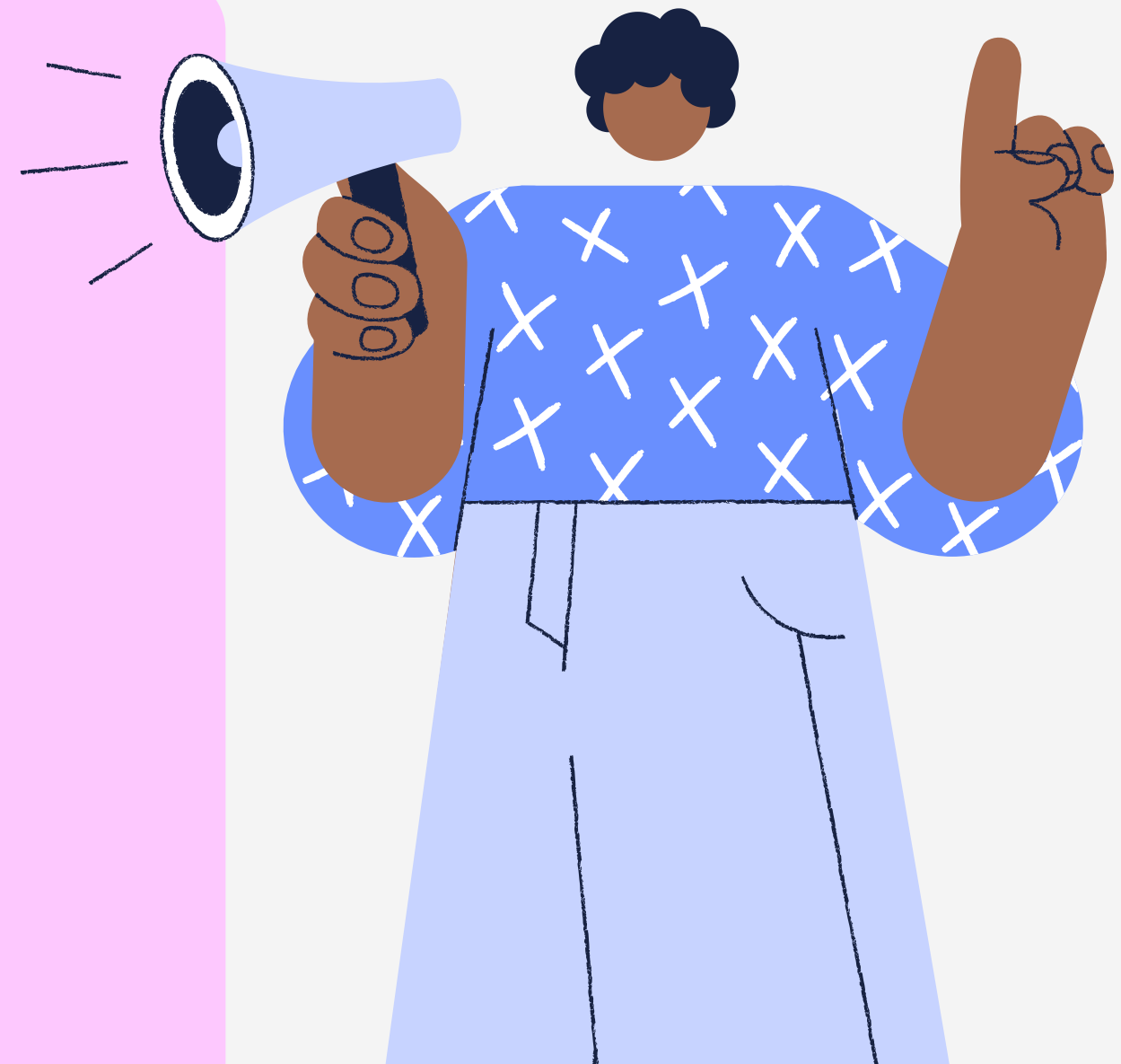
a love story

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Up Ahead!

- **What is Typescript?**
- **Hesitations**
- **Benefits**
- **Creating a TS Project**
- **Converting a JS Project**
- **React + Typescript === <3**





What is Typescript?

Typescript is a super-set of javascript, with a type system, that compiles to javascript.

- Compile time errors, not runtime errors
- Any valid Javascript is valid Typescript



But why should i bother?


**Great... we just
created Java
all over again.**

**Javascript
works just fine
for me.**

**Seems like a lot
of hassle.**

**I would, but my
project is
already in
javascript.**

Agreed, Java kinda sucks

A cartoon character with a pink, patterned shirt and a blue skirt is holding a white sign with both hands. The character has a simple face with a single eye and a smile. The sign contains text about disliking Java.

We don't dislike Java
because it's statically
typed,
We dislike Java because it
forces OOP!!!

Also:

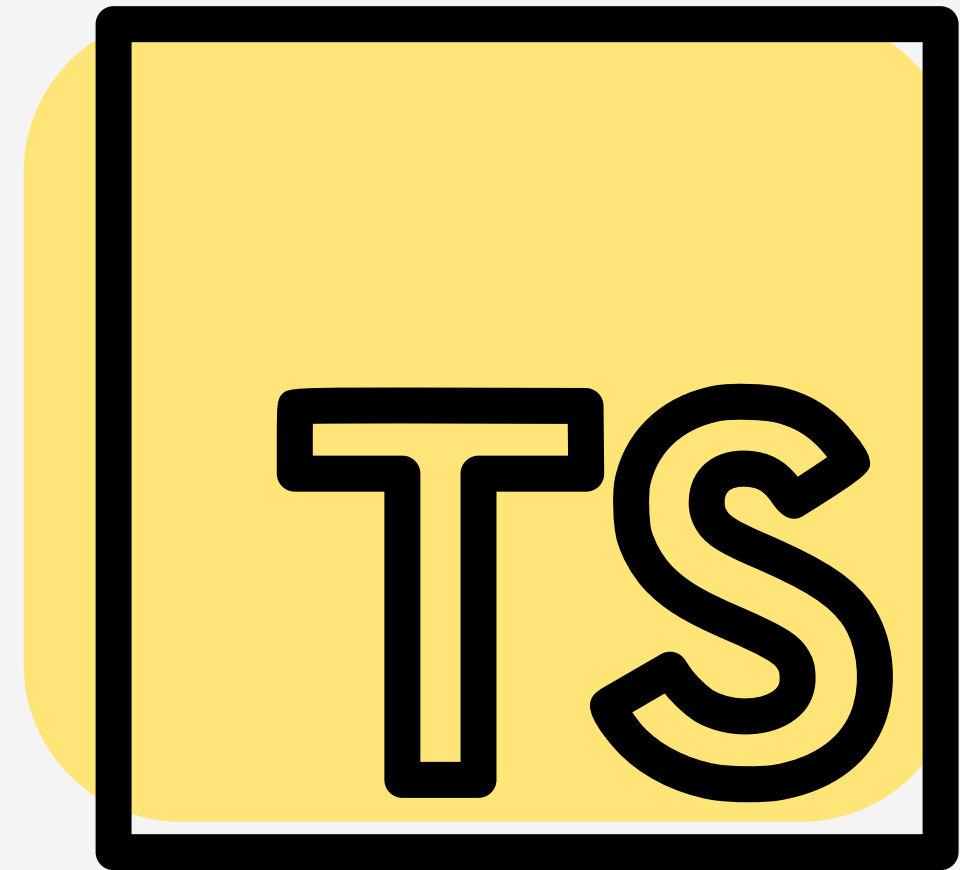
- TS's type system is waaay better
- TS has all the things you love about JS
- Just adds a buddy watching out for you



The Many Wonders

- 1. Inference**
- 2. No surprises at Runtime**
- 3. Eliminates most of the reasons to reference package docs**

...and many more!



Super Basics

- Basic types
- Objects/Maps
- Functions

quick intro before
we code

07



Basic Types

08

```
1  // basic types
2  type BasicTypesObject = {
3      my_number: number;
4      my_string: string;
5      my_bool: boolean;
6      my_num_list: number[];
7      my_str_list: Array<string>;
8      my_str_literal: 'hello' | 'world';
9      my_tuple: [string, string, number];
10     my_unknown: unknown;
11     my_any: any;
12 }
```




```
1 //defining vars
2 let myStr: string = 'hello';
3
4 type MyObject = {
5     hello: string;
6     world: number[];
7 }
8
9 let myObj: MyObject = {
10     hello: 'I 💙 TS',
11     world: [0,1,2,3]
12 }
13
```

```
14 const myFunc: (boolean) => string = (amAlive) => {
15     if (amAlive) return "Then you 💙 TS too!";
16     return "Sorry to hear that."
17 }
18
19 function mySecondFunc(name: string): string {
20     return `I, ${name} love what I'm seeing so far!`;
21 }
22
```



Let's Code!

"A journey of a thousand miles
begins with a single step."

–Confucius, probably