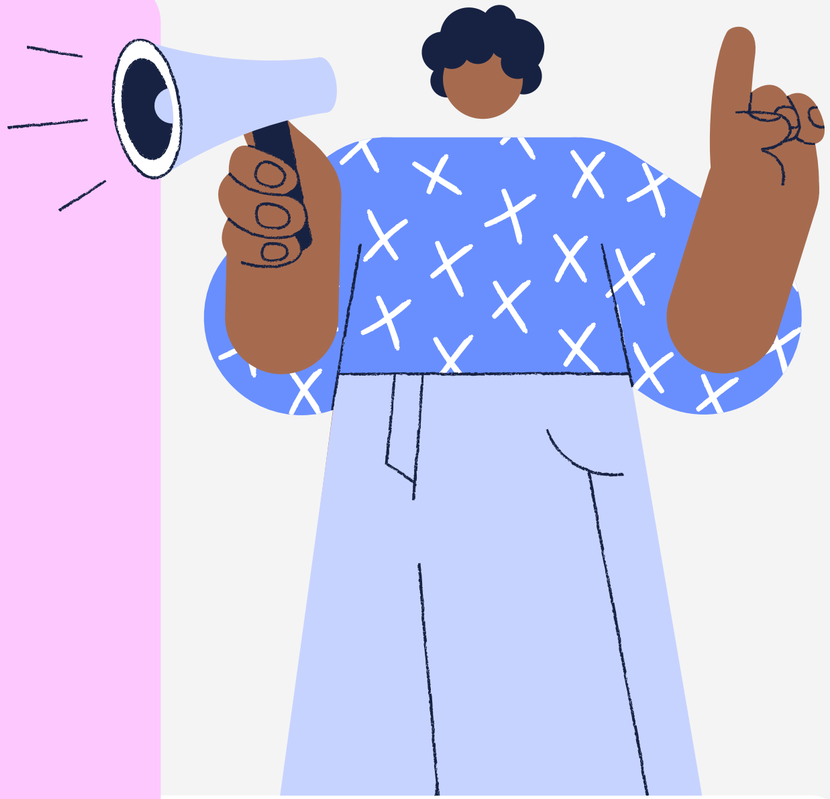
Typescript

a love story

JOHN KANGSUMRITH

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?

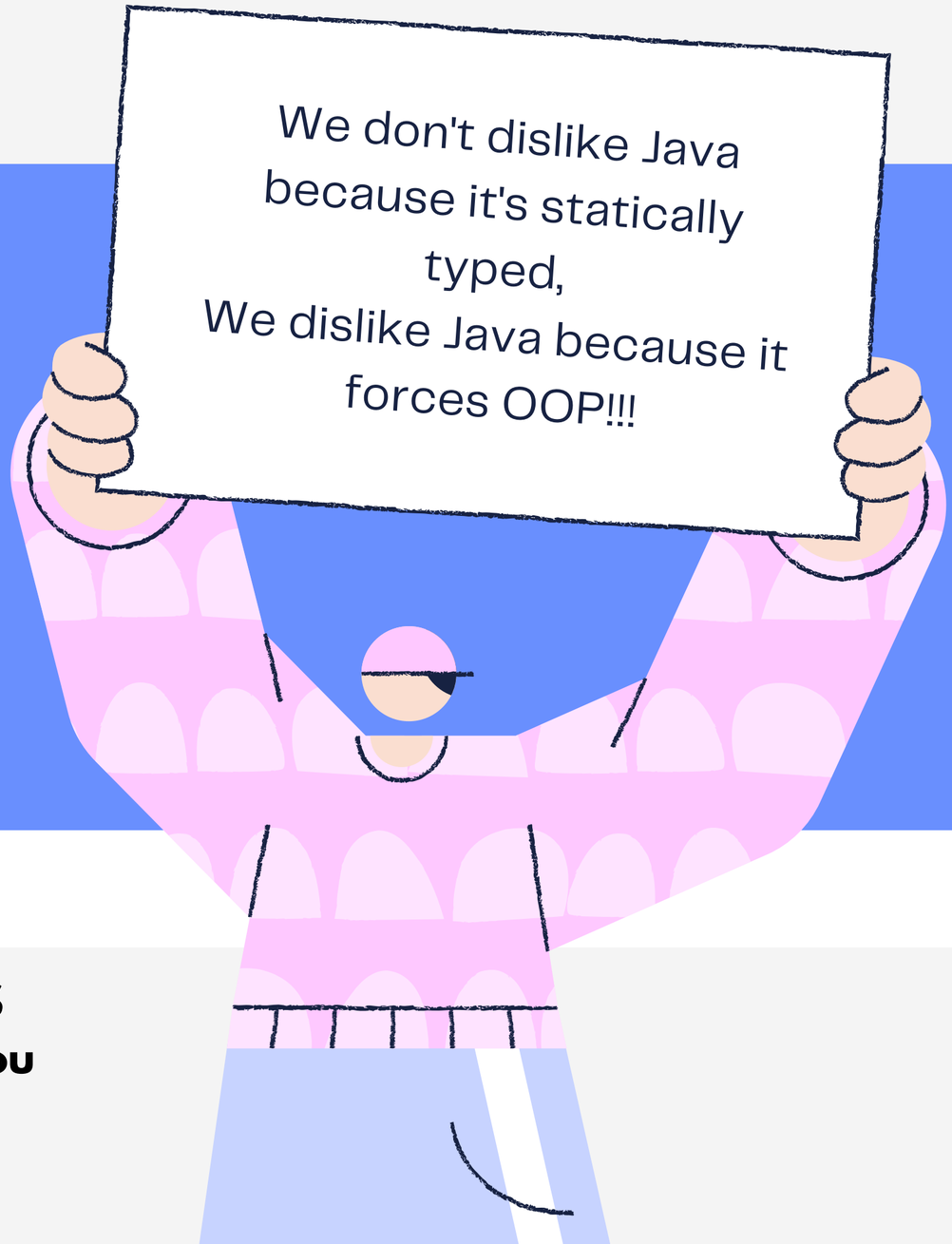
Great... we just created Java all over again.

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



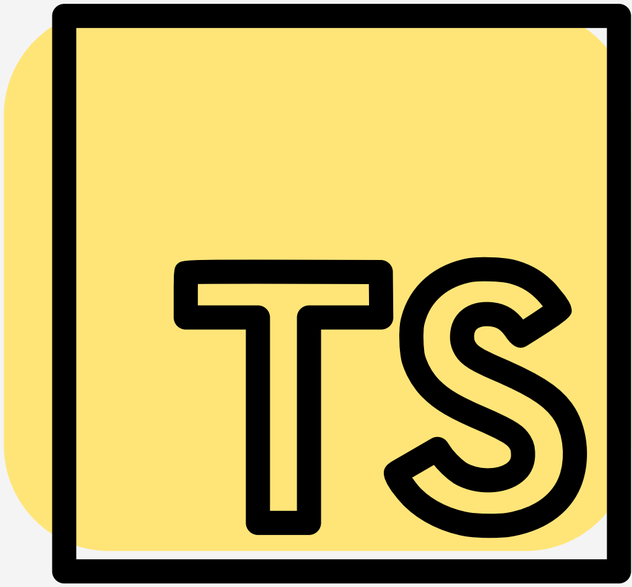
Also:

- **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

→

Basic Types

08

```ts
// basic types
type BasicTypesObject = {
    my_number: number;
    my_string: string;
    my_bool: boolean;
    my_num_list: number[];
    my_str_list: Array<string>;
    my_str_literal: 'hello' | 'world';
    my_tuple: [string, string, number];
    my_unknown: unknown;
    my_any: any;
}
```

```ts
//defining vars
let myStr: string = 'hello';

type MyObject = {
    hello: string;
    world: number[];
}

let myObj: MyObject = {
    hello: 'I 💔 TS',
    world: [0,1,2,3]
}

const myFunc: (boolean) => string = (amAlive) => {
    if (amAlive) return "Then you 💔 TS too!";
    return "Sorry to hear that."
}

function mySecondFunc(name: string): string {
    return `I, ${name} love what I'm seeing so far!`;
}
```


→

Let's Code!

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

–Confucius, probably