INTRODUCTION TO TYPESCRIPT

What is it?

Why should I care?

How do I use it?

WHO IS THIS GUY?

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I make web stuff.

WHAT IS TYPESCRIPT?

A superset of JavaScript

- It **is** JS - with extras
- Compiles to JS - ES2015, ES5, even ES3 (if you really must...)
- Compiled code is basically the code you wrote

Includes tomorrow's JS features today

- ES2015 and up - classes, let/const, arrow functions, spread operator, etc.

WHAT IS TYPESCRIPT?

Adds static typing- A Good Thing™

- Anything you can do, I can do better safer

```
// JavaScript
function findOne(data, config){
  // What is data? What is config? BOB! How many
  // times have I told you to document your code?!
  /* ... */
}
```

```
// TypeScript
function findOne(data: Person[], config: SearchConfig): Person {
  // We know what data and config are, super helpful!
  // This can be even cooler. Just wait till the live demo!
  /* ... */
}
```

WHY SHOULD I CARE?

JavaScript was never designed for large apps.

*Documentation takes time. (both writing **and** reading)*

Developers are *lazy. . . except for me. I'm a go-getter!*

*Really, we're just very busy.

*The available tooling is **amazing.***

HOW DO I USE IT?

Install typescript:

```
$ npm install typescript
```

You write JavaScript.

```
function foo(a){ /* do stuff */ }
```

HOW DO I USE IT?

And then you add type annotations.

```
function foo(a: string){ /* do stuff */ }
```

Win.

LIVE DEMO!

CONCLUSION

TypeScript is a really powerful extension of JavaScript.

It can be used anywhere JS can be, because it compiles to JS.

It adds a huge degree of maintainability to large apps.

It speeds up development.

THANK YOU

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 Zenith-One

Useful Links

- Slides
  bit.ly/the-slide-decks

- TypeScript Playground
  typescriptlang.org/play

- Intro Video by Anders Hejlsberg
  bit.ly/intro-to-typescript-video