

# Transition to TypeScript

The first steps to standardize on TypeScript  
for front-end development within the organization.

Scott C. Krause and David Engle | 7 June 2021

# Enter TypeScript

TypeScript is a strict syntactical superset of JavaScript and adds static typing to the language. TypeScript is designed for the development of large applications and transcompiles to JavaScript.

TypeScript is now ubiquitous and essential in *every area* of the ECMAScript ecosystem. Even TypeScript is written in TypeScript (also Grafana, Vue.js, and VSCode)

# Enter TypeScript

## The State of JavaScript 2020

“TypeScript is definitely way past being a top JavaScript trend and we can talk about a standard now. And an obvious choice for the vast majority of software development projects. Typescript popularity has been increasing for the last four years and it's 100% the most promising language for 2021 with a 78% usage ratio amongst professional developers.”

## Real or Hype?

Airbnb discovered the 90% of JavaScript developers wanted to switch to TS after a working with the language for one week.

# Justifying TypeScript

Embracing TypeScript will help us achieve our mission through robust, reliable, and fault tolerant customer facing web applications.

- ❖ A scalable front-end that can evolve to facilitate growth, reuse, and new feature integration
- ❖ An optimized DX allowing for better developer productivity
- ❖ Enforces code quality effectively reducing the need for long QA cycles
- ❖ End to end single source of truth for types (Scala => .d.ts)

# The way forward

What can we do *now* to facilitate TS adaptation in the *future*?

- ❖ Learn, experiment, and collaborate
- ❖ Educate stakeholders (mention the 15% rule)
- ❖ Cross functional team research survey
- ❖ Establish a TS [center of excellence](#) for techniques and best practices
- ❖ Propose a roadmap / migration plan
- ❖ Commission a Proof of Concept