

TYPESCRIPT

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SOFTWARE DEVELOPMENT

CONFERENCE



Application scale JavaScript development is hard.

TypeScript is a language for application scale JavaScript development.

TypeScript is a typed superset of JavaScript that compiles to plain JavaScript.

Any browser. Any host. Any OS.

Open Source.

TypeScript

Starts with JavaScript

All JavaScript code is TypeScript code, simply copy and paste All JavaScript libraries work with TypeScript

Optional Static Types, Classes, Modules

Enable scalable application development and excellent tooling Zero cost: Static types completely disappear at run-time

Ends with JavaScript

Compiles to idiomatic JavaScript
Runs in any browser or host, on any OS

Demo

TypeScript Type System

Type System

Formalization of JavaScript's types

Static representation of JavaScript's dynamic type system

Type inference and structural typing

In practice very few type annotations are necessary

Works with existing JavaScript libraries

Declaration files can be written and maintained separately

Not "provably type safe"

Types reflect intent but do not provide guarantees

Demo

TypeScript Classes and Modules

Classes and Modules

Scalable application structuring

Classes, Modules, and Interfaces enable clear contracts between components

Aligned with emerging standards

Class, Module, and Arrow Function syntax aligns with ECMAScript 6 proposals

Supports popular module systems

CommonJS and AMD modules in any ECMAScript 3 compatible environment

Demo

Application Scale TypeScript

What's Included?

Compiler

Open Source, written in TypeScript

Tooling

Visual Studio language service, browser hosted playground

Libraries

Full static typing of DOM, jQuery, node.js, ...

And More

Lots of samples and formal Language Specification

Application scale JavaScript development is hard.

TypeScript makes it easier.

http://typescriptlang.org