

TypeScript 3.5 is now available. Get ([/#download-links](#)) the latest version today!

## JavaScript that scales.

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

Any browser. Any host. Any OS. Open source.

[Download](#)

[Documentation \(../docs/index.html\)](#)

#iHeartTypeScript (<https://twitter.com/intent/tweet?text=%23iHeartTypeScript>)

**Dave Herman** @littlecalculist

(<https://twitter.com/littlecalculist/status/857464401569357824>)

I ported my first nontrivial JS lib to @typescriptlang

(<https://twitter.com/typescriptlang>) and it was a pure joy. What a lovely piece of technology.

**Gabriela Mendes** @Kappyh  
(<https://twitter.com/Kappyh/status/822247462232530945>)  
@typescriptlang (<https://twitter.com/typescriptlang>) is really awesome O-O'

**Thiago Script** 🌴🕶️🏖️ @thiagoviski  
(<https://twitter.com/thiagoviski/status/857024764992475142>)  
#TypeScript (<https://twitter.com/hashtag/TypeScript?src=hash>) is really awesome! I'm glad to see people are using it in some of #Preact (<https://twitter.com/hashtag/Preact?src=hash>) projects. #FrontEnd (<https://twitter.com/hashtag/FrontEnd?src=hash>) #Webpack (<https://twitter.com/hashtag/Webpack?src=hash>) #Programming (<https://twitter.com/hashtag/Programming?src=hash>)



Starts and ends with JavaScript

TypeScript starts from the same syntax and semantics that millions of JavaScript developers know today. Use existing JavaScript code, incorporate popular JavaScript libraries, and call TypeScript code from JavaScript.

TypeScript compiles to clean, simple JavaScript code which runs on any browser, in Node.js, or in any JavaScript engine that supports ECMAScript 3 (or newer).



Strong tools for large apps

Types enable JavaScript developers to use highly-productive development tools and practices like static checking and code refactoring when developing JavaScript applications.

Types are optional, and type inference allows a few type annotations to make a big difference to the static verification of your code. Types let you define interfaces between software components and gain insights into the behavior of existing JavaScript libraries.



State of the art JavaScript

TypeScript offers support for the latest and evolving JavaScript features, including those from ECMAScript 2015 and future proposals, like async functions and decorators, to help build robust components.

These features are available at development time for high-confidence app development, but are compiled into simple JavaScript that targets ECMAScript 3 (or newer) environments.

[Learn it fast \(../docs/index.html\)](#)

# Get TypeScript

# Node.js

The command-line TypeScript compiler can be installed as a Node.js package.

## INSTALL

```
npm install -g typescript
```

## COMPILE

```
tsc helloworld.ts
```

# Visual Studio

Visual Studio 2019 (<https://marketplace.visualstudio.com/items?itemName=TypeScriptTeam.typescript-341-vs2017>)

Visual Studio Code (<https://code.visualstudio.com>)

Visual Studio 2017 (<https://marketplace.visualstudio.com/items?itemName=TypeScriptTeam.typescript-341-vs2017>)

# And More...

Sublime Text  
(<https://github.com/Microsoft/TypeScript-Sublime-Plugin>)

Emacs  
(<https://github.com/ananthakumaran/tide>)

Atom  
(<https://atom.io/packages/atom-typescript>)

WebStorm  
(<https://www.jetbrains.com/webstorm/>)

Vim  
(<https://github.com/Microsoft/TypeScript/wiki/TypeScript->

Eclipse  
(<https://github.com/palantir/eclipse-typescript>)

## See TypeScript in Action



(<https://channel9.msdn.com/Events/Build/2017/B8088/>)

## Open Source

TypeScript is being developed on GitHub. The TypeScript compiler is implemented in TypeScript and can be used in any JavaScript host.

- Read the specification on GitHub (<https://github.com/Microsoft/TypeScript/blob/master/doc/spec.md>) or download it as a docx (<https://github.com/Microsoft/TypeScript/blob/master/doc/TypeScript%20Language%20Specification.docx?raw=true>) or pdf (<https://github.com/Microsoft/TypeScript/blob/master/doc/TypeScript%20Language%20Specification.pdf?raw=true>).
- Play with the bits and file bugs (<https://github.com/Microsoft/TypeScript/issues>).
- Join the #typescript (<https://twitter.com/search?q=%23typescript>) Twitter discussion and follow the GitHub project (<https://github.com/Microsoft/TypeScript>).

Get the source code (<https://github.com/Microsoft/TypeScript>)

# Why TypeScript?



(community/friends.html)

*We love TypeScript for many things... With TypeScript, several of our team members have said things like '**I now actually understand most of our own code!**' because they can easily traverse it and understand relationships much better. And we've **found several bugs via TypeScript's checks.**'*

— Brad Green, Engineering Director - AngularJS

See more friends of TypeScript

(community/friends.html)

## Contribute

Help shape the future of TypeScript by joining our community today and send us pull requests via our GitHub repository (<https://github.com/Microsoft/TypeScript>)!

## Learn

Docs (/docs/) & Quick Starts (/samples/) - To help you get started

GitHub (<https://github.com/Microsoft/TypeScript>) & Stack Overflow (<https://stackoverflow.com/questions/tagged/typescript>) - File and discuss issues

Blog (<http://blogs.msdn.com/b/typescript/>) & Twitter (<https://twitter.com/typescript/>) - Stay up to date

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