TypeScript Intro By: Joey Bayes

FED Throwdown 2021.04.16

Here's the plan

1. Brief Overview of TypeScript
2. Examine the example project
3. Fix bugs in a JS version of the project
4. Fix the same bugs in a TS version
5. Summary

TypeScript Overview

- TypeScript is a superset of JavaScript
- All JavaScript is valid TypeScript
  - Gradual Adoption
  - Type inference
- Compilation/Transpilation options (tsconfig.json)
  - Strict options (null checks, no unused, etc.)
- Other great features
  - Enums, generics, first-class static typing

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Jokes provided by the Chuck Norris API (https://api.chucknorris.io/)

Today's random joke is:
{
  value: 'Chuck Norris can write multi—threaded applications with a single thread.',
  url: 'https://api.chucknorris.io/jokes/y7_p2—52sc2t7ho1hjtwcq'
}

Example Project

Feel free to clone this project and follow along:
bayes343/chuck-norris-ts-cli: TypeScript example CLI using the Chuck Norris Api (github.com)

- Simple CLI that outputs portions of an http request's response

- Demonstration on master branch

Fix the JS Version

- Checkout the branch, "broken-js"
- Restart build (still using TypeScript to build - allowjs)
- Fix Errors
  - Trial and error - LAME!
  - Debugger
  - // @ts-check JS files

Start time: *Finish Time:*

Fix the TS Version

- Checkout the branch, "broken-ts"
- Restart build
- Fix Errors
  - They're all highlighted… NICE!

Start time: *Finish Time:*

Summary

TypeScript is pretty awesome.

It can save you a lot of time and help you write better software.

This intro just scratches the surface...

For more, check out the docs: https://www.typescriptlang.org/docs/handbook