

TypeScript and SharePoint

Better Code Through Tools

David Mann

About Aptillon



- SharePoint MVPs
- Microsoft Certified Master
- Consultants, Trainers, Authors, Speakers, Bloggers
- Great People, Great Experience, Great Passion



David Mann



Gary Lapointe



Darrin Bishop



Maurice Prather



Matthew McDermott



About Me



- SharePoint since 2001
- Developer, Architect, Speaker, Author, Teacher, Community-Guy
- Founder & Director at Aptillon
- SharePoint MVP since 2007
- MCM Author and Instructor

Before We Begin

- ✦ I can't possibly show you everything or make you a JavaScript or TypeScript expert in 1 hour.
- ✦ This is a primer on what is possible and where to begin.
 - See the resources slide for next steps.

Introducing TypeScript

- 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.

(www.typescriptlang.org)

Caveats

- ✦ TypeScript is still in Preview!
 - A little buggy
 - Sometimes closing and reopening the file clears things up
- ✦ Generated code
 - How much do/should you care?

TypeScript 101

- Type safe JavaScript
- Intellisense
- Compiler support

TypeScript 101

➤ Datatypes

- Any
- Number
- Boolean
- String
- Null
- Undefined

Typescript 101

- ✦ Ambient declaration
 - *Compiler hint*
 - *Not in generated JS*
- ✦ *Declaration files*
 - **.d.ts*
 - *Access to custom libraries*

The background features a large, semi-transparent red triangle pointing downwards from the top right corner. A thin, grey, semi-transparent line curves across the slide from the top left towards the bottom right.

DEMO

INTRO TO TYPESCRIPT

TypeScript and SharePoint

~~CSOM~~

- No dialogs, status bar, notifications, variables, SP namespace, etc.
- Technically possible, but you lose a lot of the benefit without the declaration files

REST

- On-server or off

TypeScript and SharePoint

- ▶ Large scale JS
 - Apps?



DEMO

TYPESCRIPT AND SHAREPOINT 2013

Keep in mind

- ✦ You can edit the generated JS
 - One-way

Resources

- Pluralsight course on Typescript:
<http://pluralsight.com/training/courses/TableOfContents?courseName=typescript>
- Type definition files:
<https://github.com/borisyankov/DefinitelyTyped>
- Spec doc:
<http://go.microsoft.com/fwlink/?LinkId=267238>

Thank You!

- ✦ Contact: dave@Aptillon.com
- ✦ Twitter: [@MannD](https://twitter.com/MannD)
- ✦ Blog: blog.aptillon.com/category/david-mann/
blog.mannsoftware.com

Q&A