

Angular with TypeScript

Introduction



Deborah Kurata

@deborahkurata | blogs.msmvps.com/deborahk/

For Angular Developers
That Want to:

Build **high quality** Angular applications

Improve **development** and **refactoring** activities

Smooth the transition to **Angular 2**

Module Overview

What Is
TypeScript?

Benefits of
TypeScript?

What Is TypeScript?



Superset of JavaScript

Compiles to plain JavaScript

Strongly typed

Class-based object-orientation

Superset of JavaScript

TypeScript

JavaScript

```
var x;
```

```
function() {}
```

```
var x : string
```

```
class {}
```

```
module {}
```

```
interface {}
```

TypeScript Transpiles to JavaScript

myFile.cs

csc

myfile.dll

productListCtrl.ts

```
var x : string
```

```
class ProductListCtrl {}
```

tsc

productListCtrl.js

```
var x;
```

```
function ProductListCtrl() {}
```

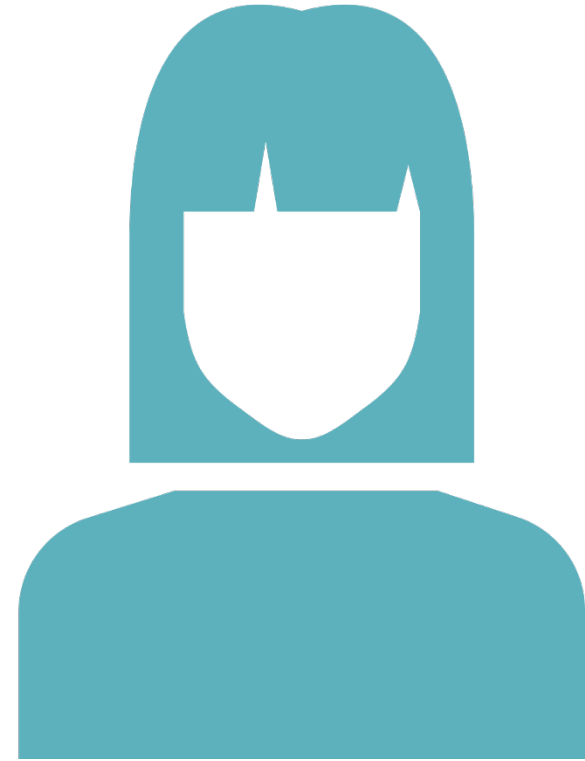
Why Bother?



Build Better Code



Refactor Code



Reason About Code

Strong Typing

JavaScript

```
var x;  
  
x = 42;  
  
x = 'hello';  
  
x = { lastName: 'Harkness',  
      firstName: 'Jack' };
```

TypeScript

```
var x : number;  
  
var x : string;  
  
var x : {};  
  
var x = { lastName: string,  
          firstName: string };
```


Class-Based OOP

JavaScript

```
function Product(productId) {  
    this.productId = productId;  
}
```

TypeScript

```
function Product(productId) {  
    this.productId = productId;  
}
```

OR

```
class Product {  
    productId : number  
  
    constructor(productId: number) {  
        this.productId = productId;  
    }  
}
```

TypeScript Is ...



Superset of JavaScript

Compiles to plain JavaScript

Strongly typed

Class-based object-orientation

Best of Both Worlds

- At development time:
 - Better type checking
 - More powerful refactoring experience
 - Class-based object-oriented programming techniques
- At deployment time:
 - It's just JavaScript

Angular 2 is coming!
Angular 2 is coming!

Use TypeScript

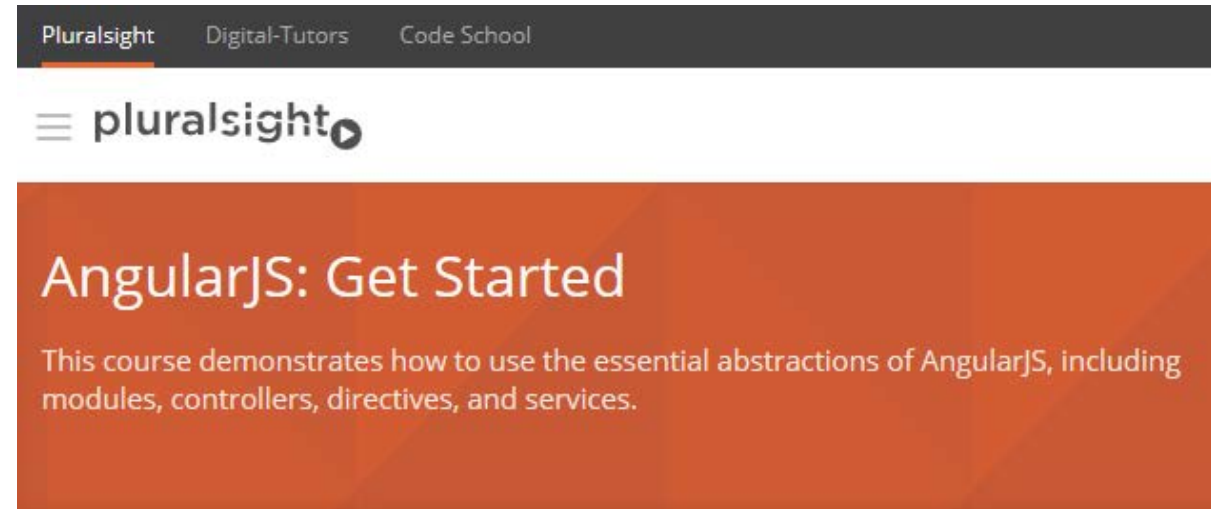
TypeScript will ease the migration to Angular 2

Prerequisites

Angular
JavaScript
HTML
CSS

Recommended Viewing

"AngularJS: Get Started"



Recommended Viewing

"AngularJS: Get Started"

"Shaping up with AngularJS"



For More Information

"TypeScript Fundamentals"

[Pluralsight](#) [Digital-Tutors](#) [Code School](#)

≡ PLURALSIGHT

TypeScript Fundamentals

The TypeScript Fundamentals course will walk you through the key concepts and features that you need to know to get started with TypeScript, and use it to build large (and small) scale JavaScript applications.

by [Wahlin, Papa](#)

GitHub

<https://github.com/DeborahK/Angular-TypeScript>

Thoughts? Comments? Questions?

Course content

 **Table of contents**

 Description

 Transcript

 Exercise files

 Assessment

 Discussion

What This Course Covers



Getting Started

Angular Modules and Controllers

TypeScript Modules

Building Business Objects

Building Angular Services

Routing

Final Words

