# Common AngularJS Pieces in TypeScript

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# Using TypeScript Classes and Interfaces

# AngularJS Pieces to Cover in This Module

Controllers

Services

Providers

Factories

Directives

# TypeScript Elements to Use

TypeScript Classes | TypeScript Interfaces | TypeScript Modules

# TypeScript for AngularJS Controllers

# AngularJS Controller Structure

## JavaScript

- Scope structure

- Initialization code

- Functions for scope and internal

## TypeScript

- Interface for scope

- Initialization code in structure

- Class functions

# TypeScript for AngularJS Services

# TypeScript for AngularJS Factories

# AngularJS Service

```javascript
angular
    .module('app')
    .service('logger', logger);


function logger() {
    this.logError = function(message) {
    };
}
```

# AngularJS Service as Factory

```javascript
angular
    .module('app')
    .factory('logger', logger);

function logger() {
    return {
        logError: function(message) {
        }
    };
}
```

# TypeScript for AngularJS Providers

# TypeScript for AngularJS Directives

# Recap

# What We've Learned

TypeScript module blocks for IIFEs and classes

Two approaches to AngularJS controller scope

TypeScript interfaces for bindable members in controllers

AngularJS registration code after TypeScript class definitions

Static $inject property on classes for dependencies

Export TypeScript interfaces for use across files

Classes need newing up, we need to do that for AngularJS factories

Use definitely typed AngularJS interfaces along with custom ones

Directives use all kinds of TypeScript techniques