

# Getting Started with TypeScript

---

INSTALLING TYPESCRIPT AND CONFIGURING A PROJECT



**Brice Wilson**

@brice\_wilson [www.BriceWilson.net](http://www.BriceWilson.net)



# Overview



Course overview

MultiMath demo app

Installing TypeScript

Running the compiler

Configuring a project with *tsconfig.json*



# Course Overview

Taking Advantage  
of Built-in Types

Writing Better  
Functions with  
TypeScript

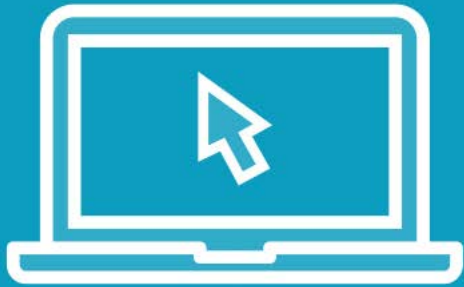
Creating and  
Using Custom  
Types

Creating and  
Consuming  
Modules

Being More  
Productive with  
Type Declaration  
Files



# Demo



Installing TypeScript and running the compiler



# TypeScript Project Files

Simple JSON text file named *tsconfig.json*

Stores compiler options used with the project

Specifies files to be included or excluded in compilation

Supports configuration inheritance



# Adding Compiler Options to tsconfig.json



```
tsconfig.json x
1 {
2     "compilerOptions": {
3         "target": "es5",
4         "noUnusedLocals": true,
5         "outFile": "output.js"
6     },
7     "files": [
8         "app.ts"
9     ]
10 }
```



# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1  {
2      "compilerOptions": { ←
3          "target": "es5",
4          "noUnusedLocals": true,
5          "outFile": "output.js"
6      }, →
7      "files": [
8          "app.ts"
9      ]
10 }
```



# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1  {
2      "compilerOptions": {
3          → "target": "es5",
4            "noUnusedLocals": true,
5            "outFile": "output.js"
6        },
7        "files": [
8            "app.ts"
9        ]
10 }
```





# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1  {
2      "compilerOptions": {
3          "target": "es5",
4      → "noUnusedLocals": true,
5          "outFile": "output.js"
6      },
7      "files": [
8          "app.ts"
9      ]
10 }
```



# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1  {
2      "compilerOptions": {
3          "target": "es5",
4          "noUnusedLocals": true,
5          "outFile": "output.js"
6      },
7      "files": [
8          "app.ts"
9      ]
10 }
```



# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1  {
2      "compilerOptions": {
3          "target": "es5",
4          "noUnusedLocals": true,
5          "outFile": "output.js"
6      },
7  → "files": [
8      "app.ts"
9  ]
10 }
```

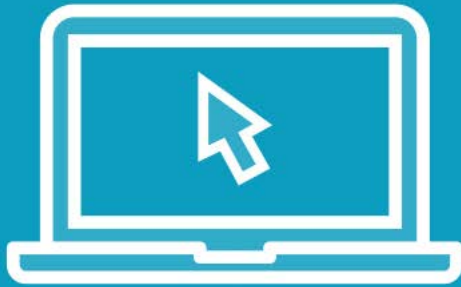


# Adding Compiler Options to tsconfig.json

```
tsconfig.json x
1 {
2     "compilerOptions": {
3         "target": "es5",
4         "noUnusedLocals": true,
5         "outFile": "output.js"
6     },
7     "files": [
8         "app.ts"
9     ]
10 }
```



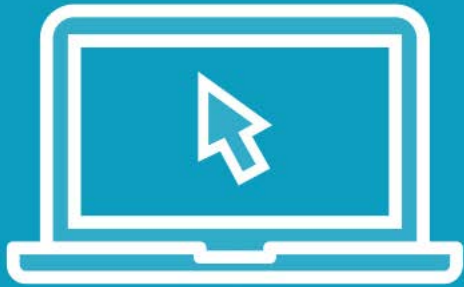
# Demo



Configuring compiler options in  
*tsconfig.json*



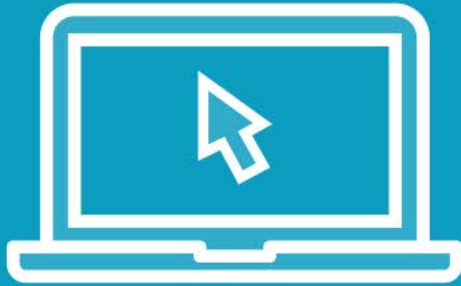
# Demo



Configuration inheritance and glob support in *tsconfig.json*



# Demo



Compiling with a Visual Studio Code  
build task



# Summary



TypeScript website

Installation with npm

Compiler options

Project configuration with *tsconfig.json*

