First Things First

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ASSPORT

Module Overview

Introduce TypeScript

Install what we need

Set up and run our Angular application

Create an Angular application with the Angular CLI

TypeScript
is the programming language
we use
when building
Angular applications

JavaScript

The language for the Web

ECMAScript (ES)

ES 3/5

ES 2015 (formerly known as ES 6)

- **Classes**
- **Arrow functions**

Newer JavaScript transpiled to older JavaScript

TypeScript

- Open-source language
- Superset of JavaScript
- Transpiles to plain JavaScript
- Strongly typed
- Class-based object-orientation

Learning More

TypeScript Playground

https://www.typescriptlang.org/play

Pluralsight Course

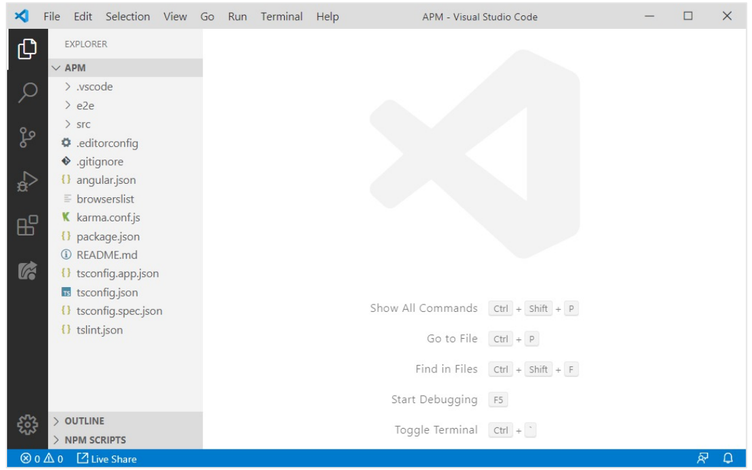
"TypeScript: Getting Started"

Installing What We Need

Editor

- **Visual Studio (VS) Code**

VS Code



Created by Microsoft

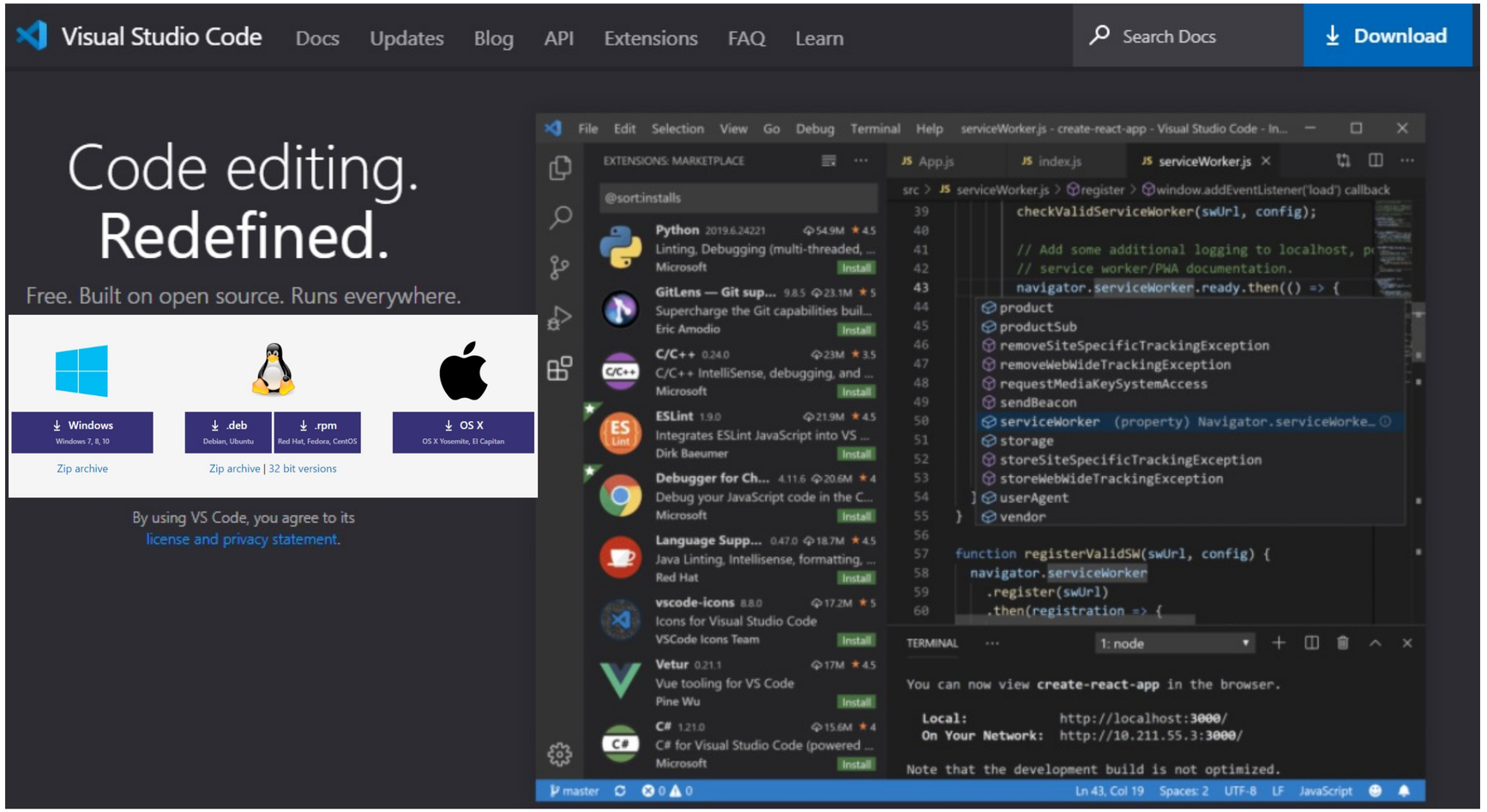
Runs in Linux, Windows, and OS X

Has numerous features that support TypeScript

- **Auto-completion**
- **Intellisense**
- **Syntax checking**
- **Refactorings**

It's FREE

Visual Studio Code



https://code.visualstudio.com/

Learning More

Visual Studio Code Site

https://code.visualstudio.com/

Pluralsight Course

"Visual Studio Code"

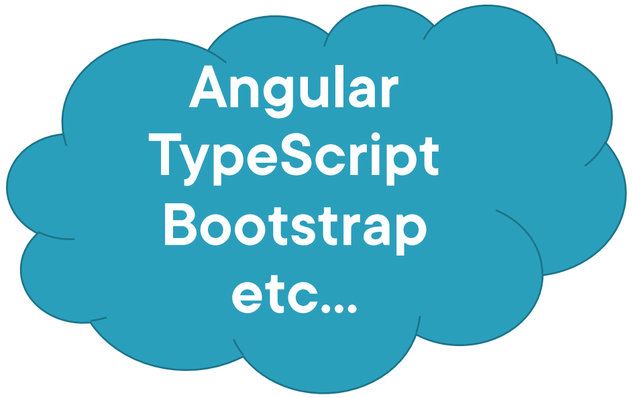
Installing What We Need

- ✓ **Editor**
  - **VS Code**

Installing What We Need

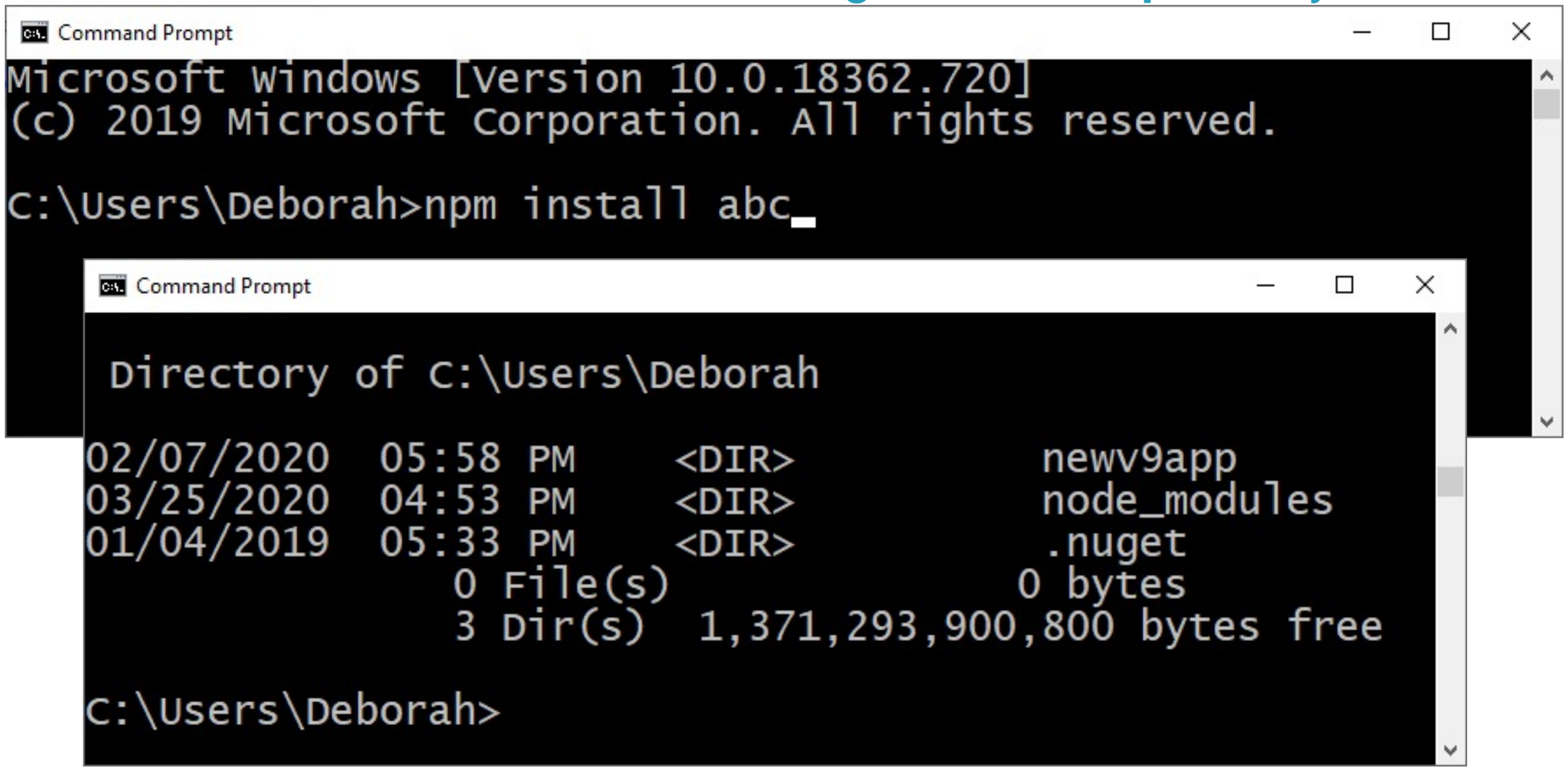
- ✓ **Editor**
  - **VS Code**
- **npm**
  - **Node package manager**

npm



Open-source repository

Command-line utility for interacting with the repository



npm

Installs libraries, packages, and applications

Executes scripts

https://nodejs.org/en/download

Installing What We Need

- ✓ **Editor**
  - **VS Code**
- ✓ **npm**
  - **Node package manager**

What Else Do We Need?

Angular

- **Framework and libraries**

Angular CLI

- **Command line interface for Angular**

TypeScript

- **Programming language**

Testing tools, linters, etc.

package.json

dependencies

- Packages required for development and deployment

devDependencies

- Packages only required for development

```
12    "dependencies": {
13      "@angular/animations": "~12.0.0",
14      "@angular/common": "~12.0.0",
15      "@angular/compiler": "~12.0.0",
16      "@angular/core": "~12.0.0",
17      "@angular/forms": "~12.0.0",
18      "@angular/platform-browser": "~12.0.0",
19      "@angular/platform-browser-dynamic": "~12.0.0",
20      "@angular/router": "~12.0.0",
21      "rxjs": "~6.6.0",
22      "tslib": "^2.1.0",
23      "zone.js": "~0.11.4"
24    },
25    "devDependencies": {
26      "@angular-devkit/build-angular": "~12.0.0",
27      "@angular/cli": "~12.0.0",
28      "@angular/compiler-cli": "~12.0.0",
29      "@types/jasmine": "~3.6.0",
30      "@types/node": "^12.11.1",
31      "jasmine-core": "~3.7.0",
32      "karma": "~6.3.0",
33      "karma-chrome-launcher": "~3.1.0",
34      "karma-coverage": "~2.0.3",
35      "karma-jasmine": "~4.0.0",
36      "karma-jasmine-html-reporter": "^1.5.0",
37      "typescript": "~4.2.3"
38    }
```

When Setting Up Existing Angular Code

#1

Navigate down to the project folder

The project folder contains the package.json **file**

#2

Run: npm install

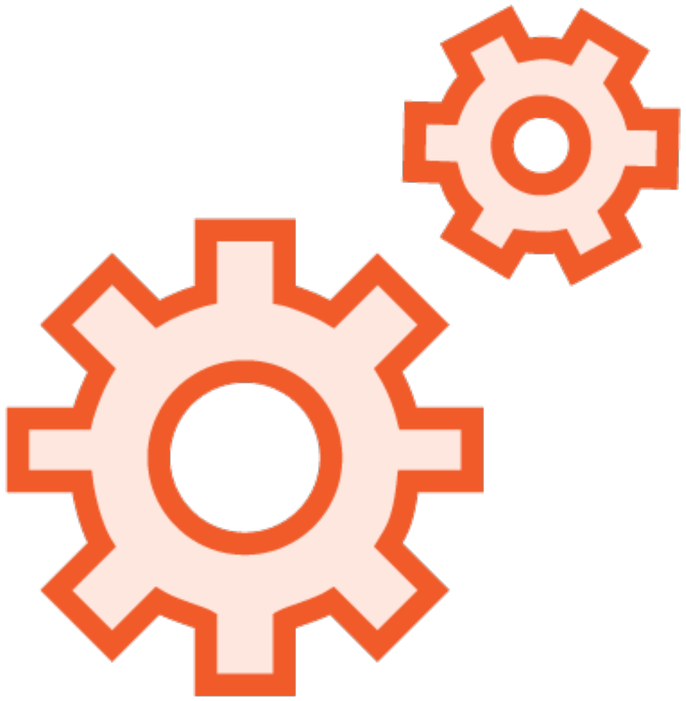
To install the packages defined in the package.json file

#3

Run: npm start

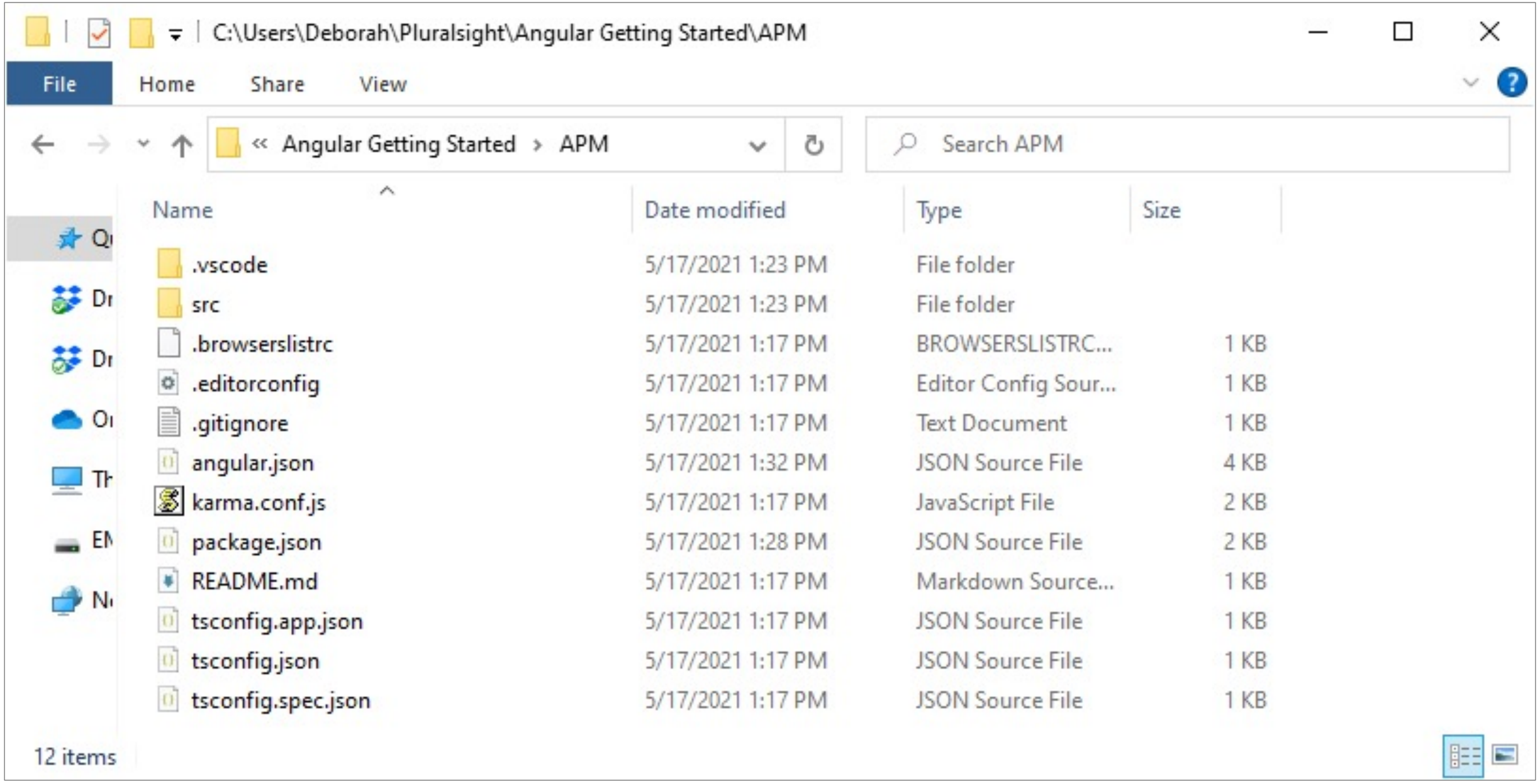
To start the installed Angular application

Setting up Our Angular Application



Starter files

https://github.com/DeborahK/Angular-GettingStarted


C:\Users\Deborah\Pluralsight\Angular Getting Started\APM
File
Home
Share
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Angular Getting Started
APM
Search APM
Name
Date modified
Type
Size
.vscode 5/17/2021 1:23 PM File folder
src 5/17/2021 1:23 PM File folder
.browserslistrc 5/17/2021 1:17 PM BROWSERSLISTRC... 1 KB
.editorconfig 5/17/2021 1:17 PM Editor Config Sour... 1 KB
.gitignore 5/17/2021 1:17 PM Text Document 1 KB
angular.json 5/17/2021 1:32 PM JSON Source File 4 KB
karma.conf.js 5/17/2021 1:17 PM JavaScript File 2 KB
package.json 5/17/2021 1:28 PM JSON Source File 2 KB
README.md 5/17/2021 1:17 PM Markdown Source... 1 KB
tsconfig.app.json 5/17/2021 1:17 PM JSON Source File 1 KB
tsconfig.json 5/17/2021 1:17 PM JSON Source File 1 KB
tsconfig.spec.json 5/17/2021 1:17 PM JSON Source File 1 KB
12 items

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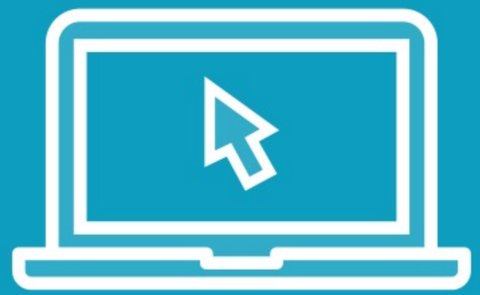
Demo



Create an Angular app using the Angular CLI

Summary

Introduced TypeScript

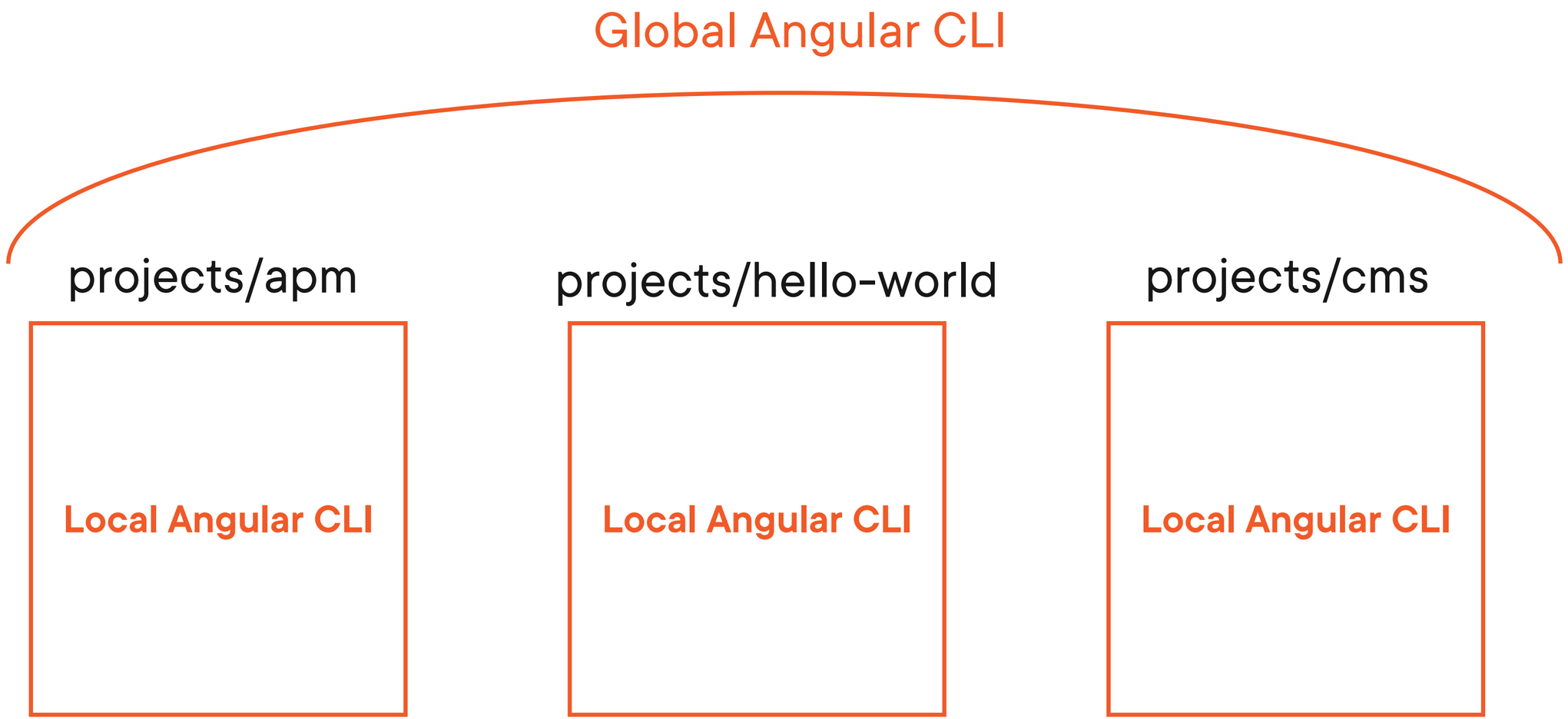
Installed what we need

- **Editor (VS Code)**
- **npm (node)**

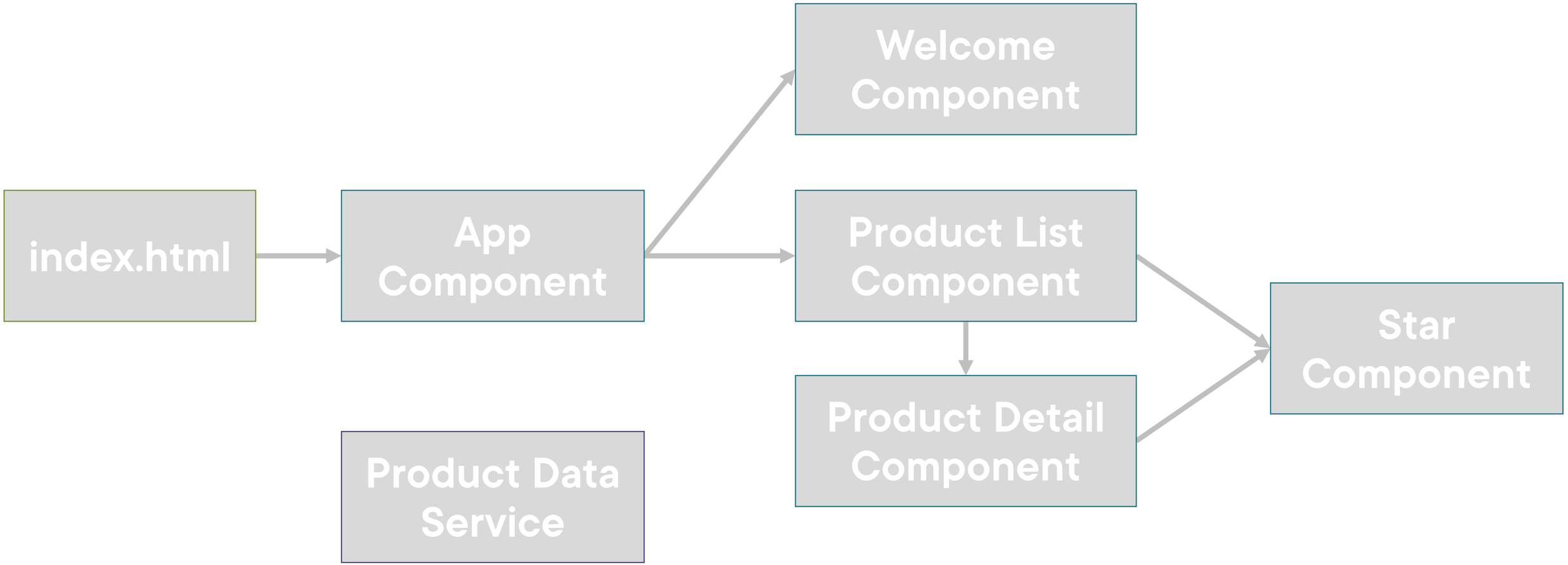
Set up and ran our Angular application

Used the Angular CLI to create a new Angular application

Angular CLI


Global Angular CLI
projects/apm
Local Angular CLI
projects/hello-world
Local Angular CLI
projects/cms
Local Angular CLI

Application Architecture



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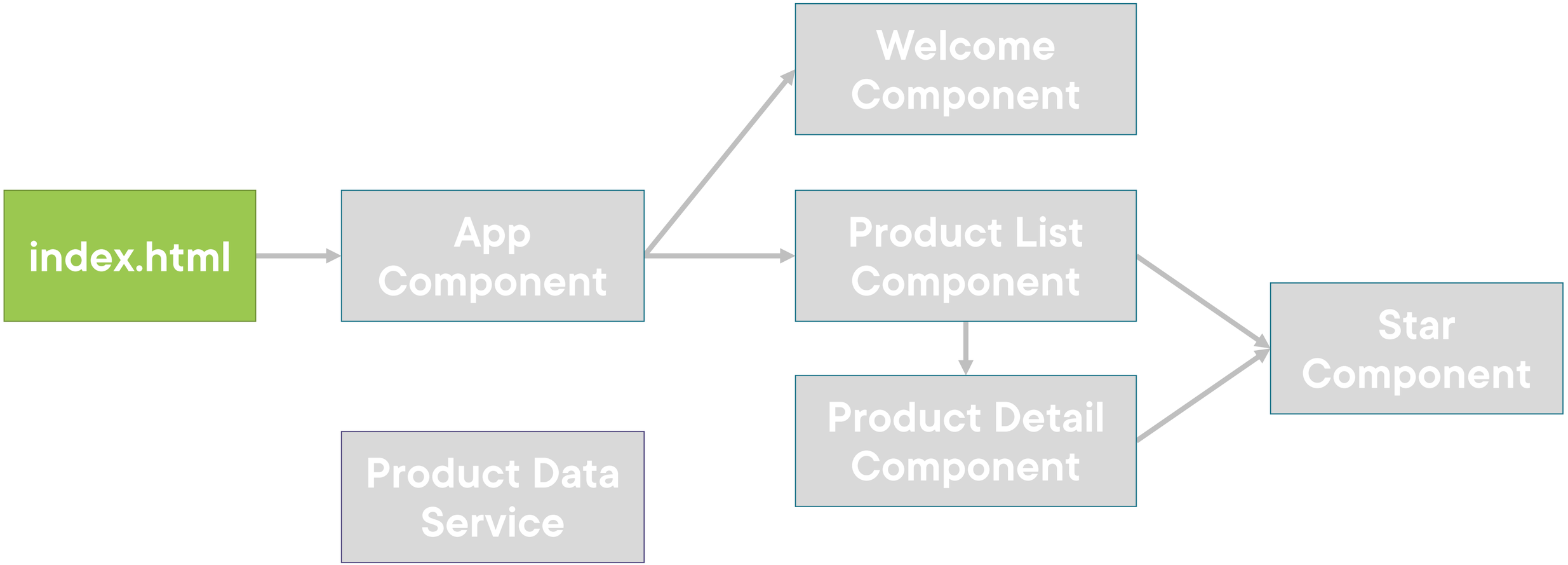
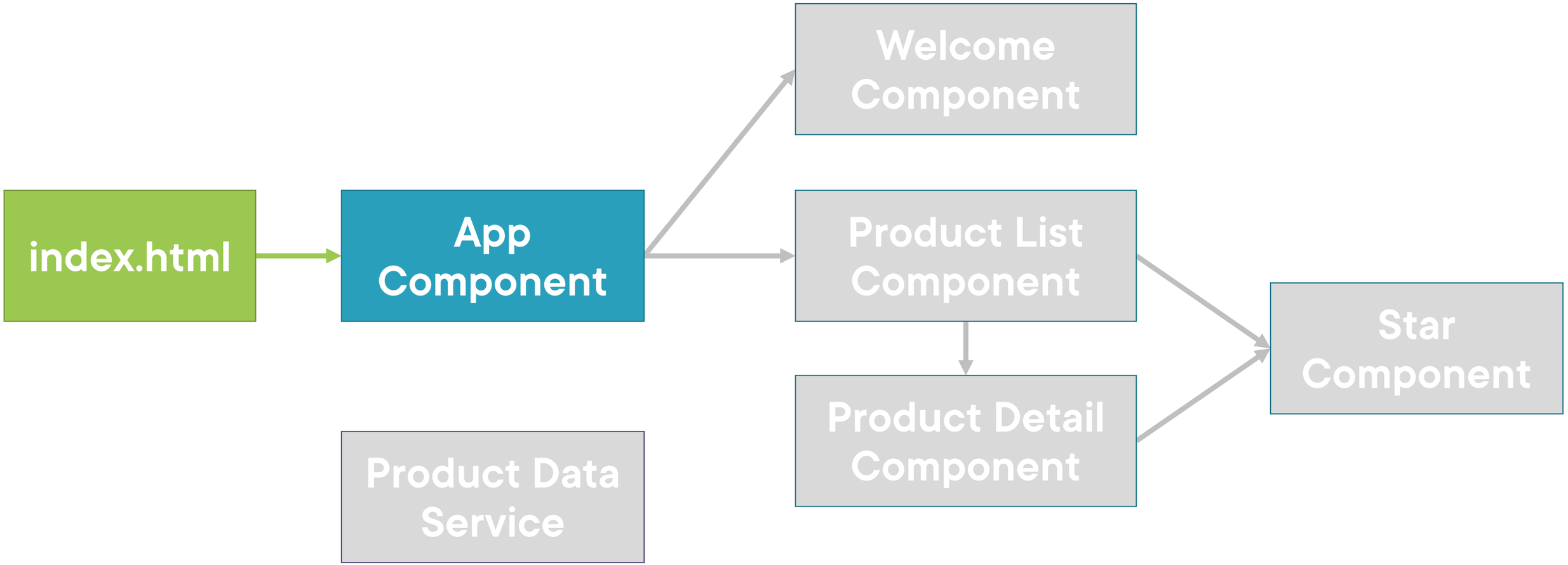


Application Architecture



Coming up next ...

Introduction to Components