First Things First

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ASSPORT

Module Overview

Selecting a Language

Selecting an Editor

Setting up an Angular Application

About Modules

JavaScript Language Specification

ECMAScript (ES)

ES 3

ES 5

ES 2015 (formerly known as ES 6)

- Must be transpiled

Selecting a Language

ES 5

- Runs in the browser
- No compile required

ES 2015

- Lots of new features (classes, let, arrow, etc.)

TypeScript

- Superset of JavaScript
- Strong typing
- Great IDE tooling

Dart

- No JavaScript

What Is TypeScript?

Open source language

Superset of JavaScript

Transpiles to plain JavaScript

Strongly typed

- TypeScript type definition files (*.d.ts)

Class-based object-orientation

Learning More

TypeScript Playground

http://www.typescriptlang.org/Playground/

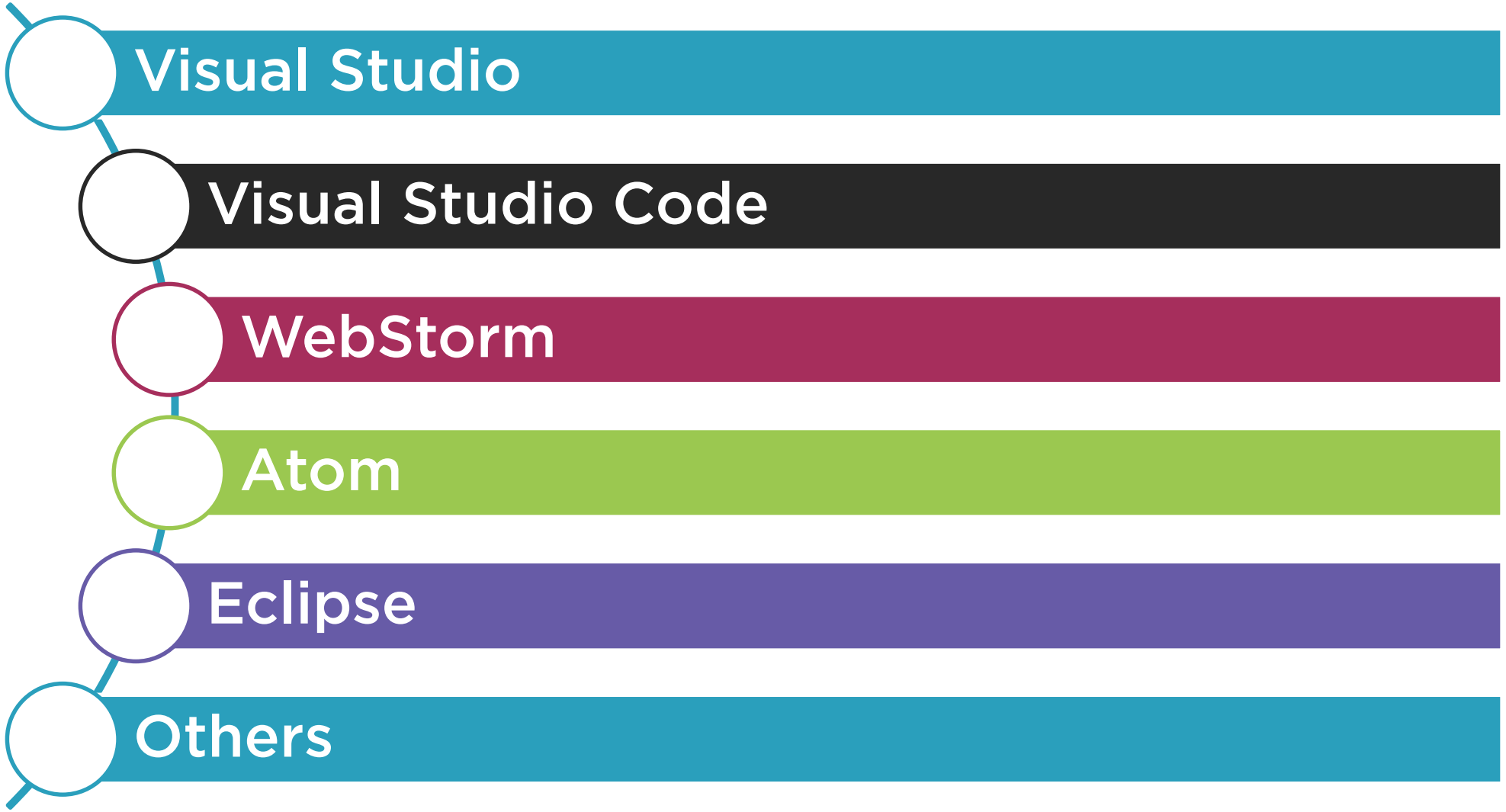
Pluralsight Courses

"TypeScript Fundamentals"

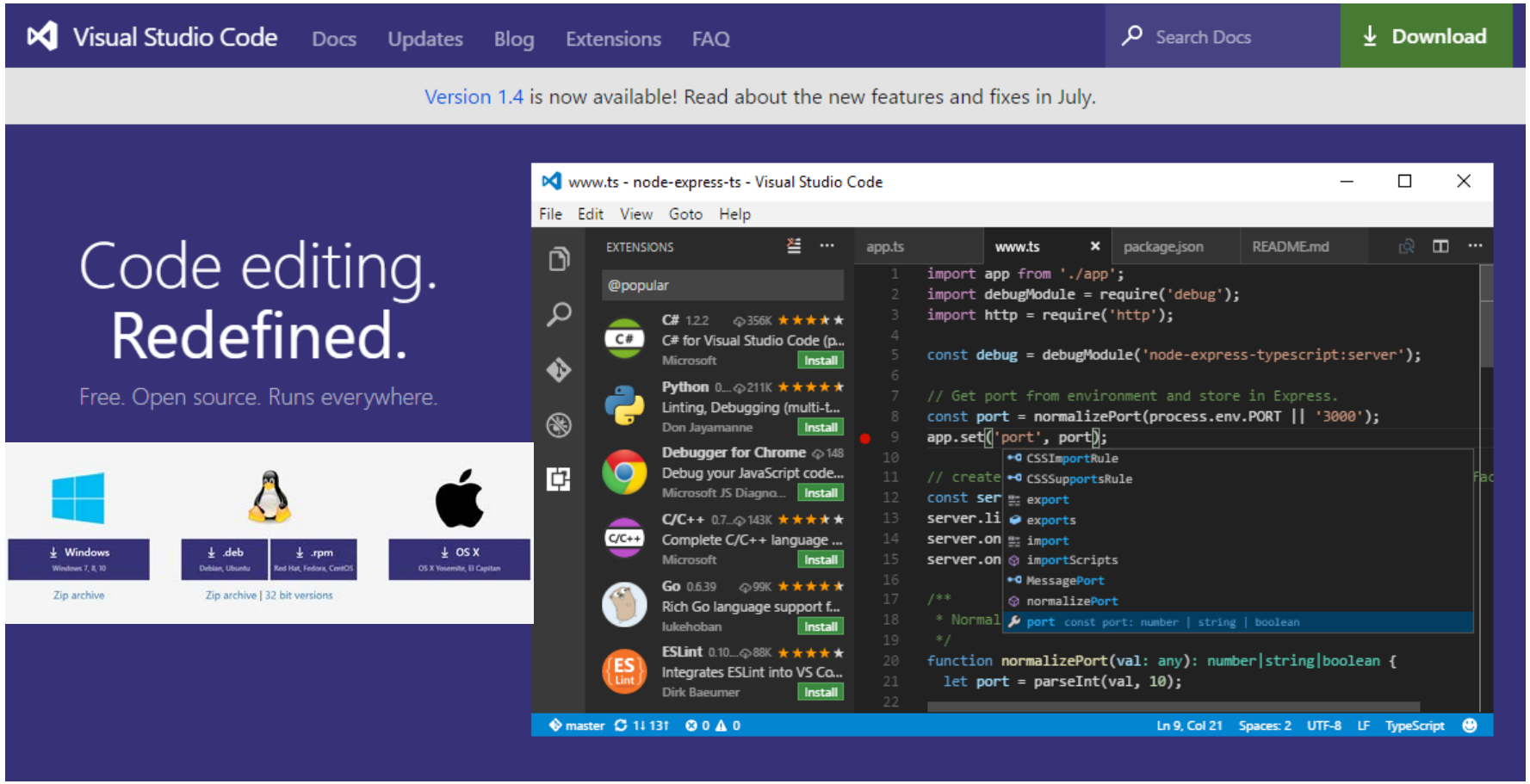
"AngularJS with TypeScript"

"Using ES6 with TypeScript"

TypeScript Editors



Visual Studio Code



https://code.visualstudio.com/

Learning More

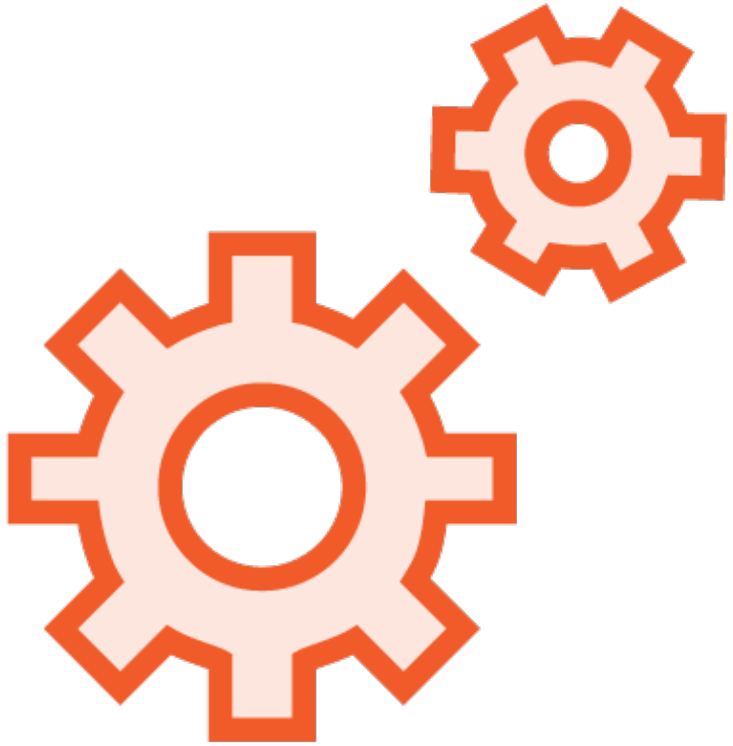
Visual Studio Code Site

https://code.visualstudio.com/

Pluralsight Course

"Visual Studio Code"

Setting up Our Environment



npm

Set up the Angular application

npm

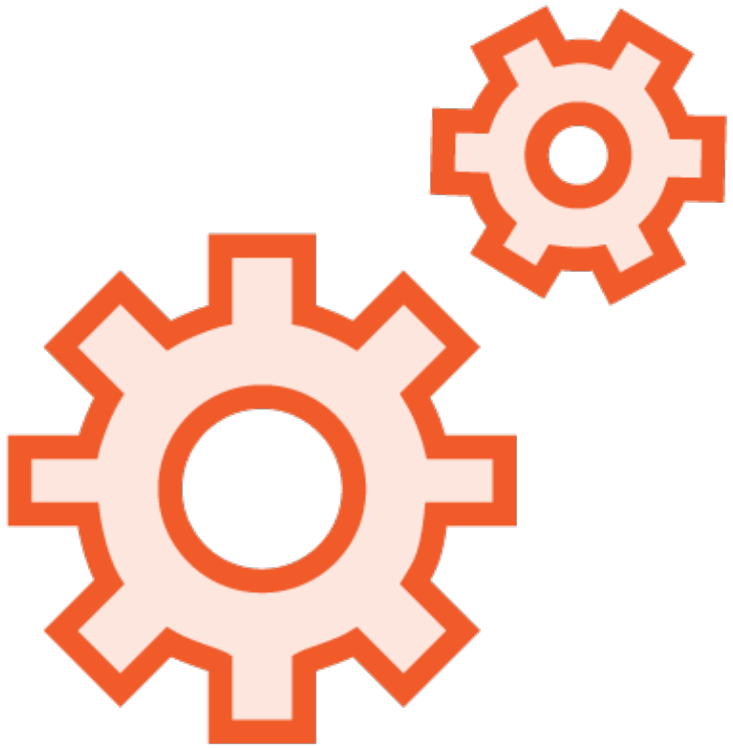
Node Package Manager

Command line utility

Installs libraries, packages, and applications

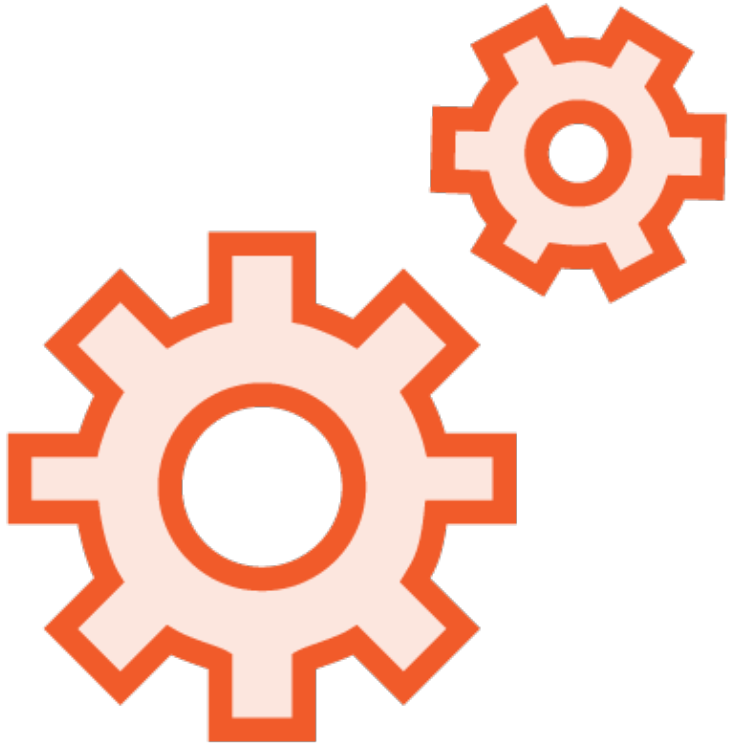
https://www.npmjs.com/

Setting up an Angular Application



1. Create an application folder
2. Add package definition and configuration files
3. Install the packages
4. Create the app's Angular Module
5. Create the main.ts file
6. Create the host Web page (index.html)

Setting up an Angular Application



Manually perform each step

Download the results of these steps

https://github.com/angular/quickstart

Angular CLI

https://github.com/angular/angular-cli

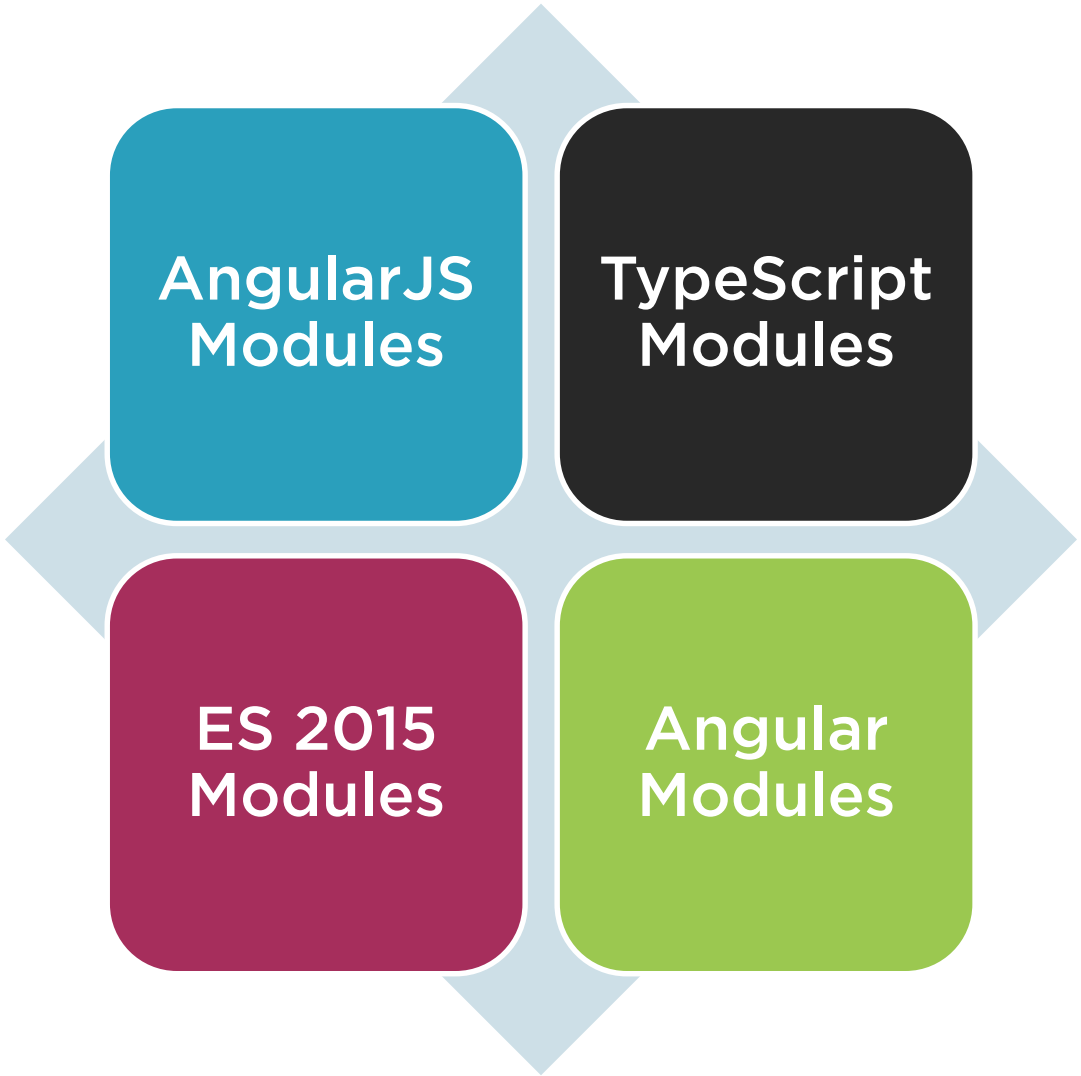
Starter files

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

Modules

Namespaces

Code Organization



ES 2015 Modules

Export

product.ts

```
export class Product{
}
```

Transpile

product.js

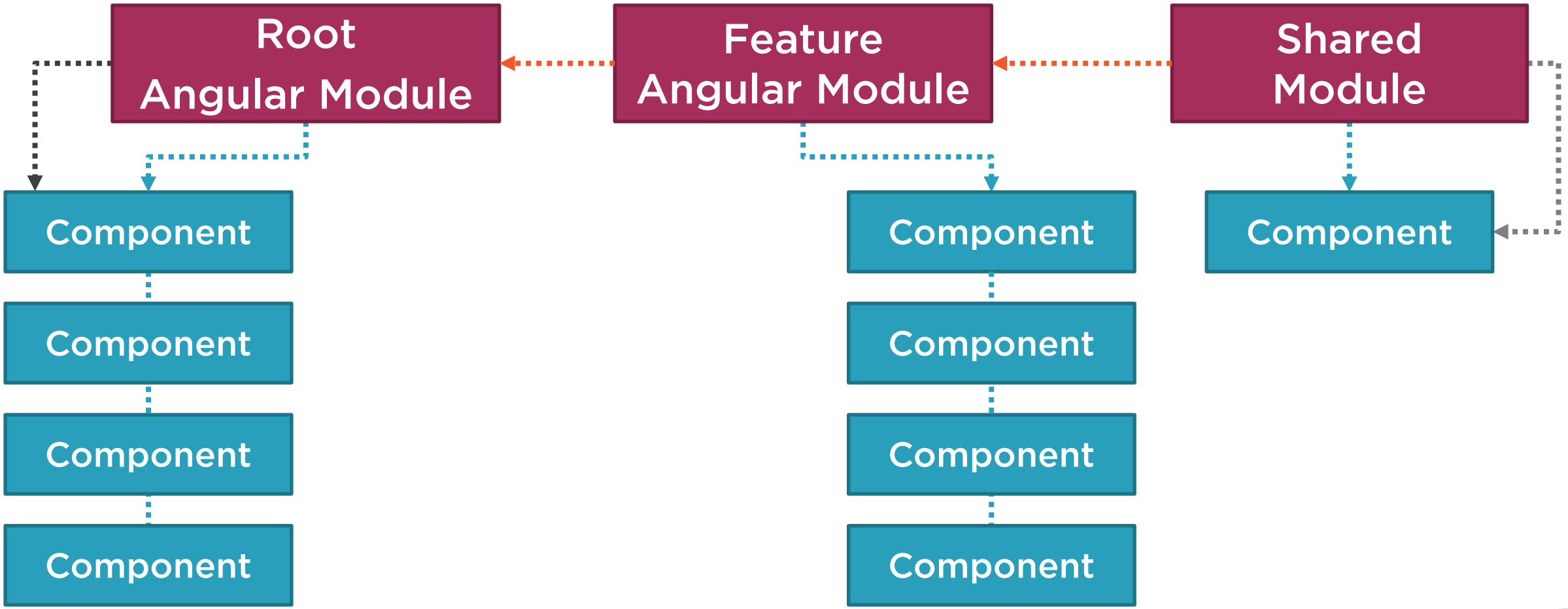
```
function Product() {
}
```

Import

product-list.ts

```
import { Product } from
'./product'
```

Angular Modules



Modules

ES Modules	Angular Modules
Code files that import or export something	Code files that organize the application into cohesive blocks of functionality
Organize our code files	Organize our application
Modularize our code	Modularize our application
Promote code reuse	Promote application boundaries

Web Browser

Web Server

URL Request (www.mysite.com)

Response

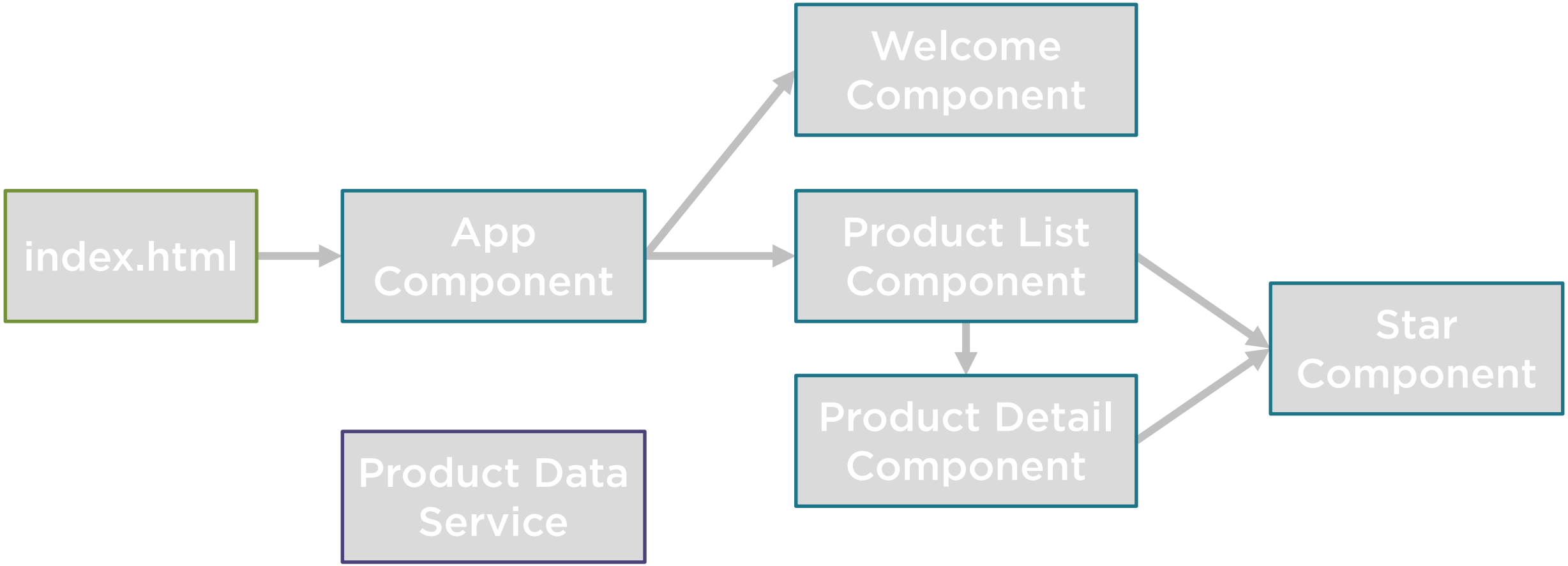
index.html

JavaScript

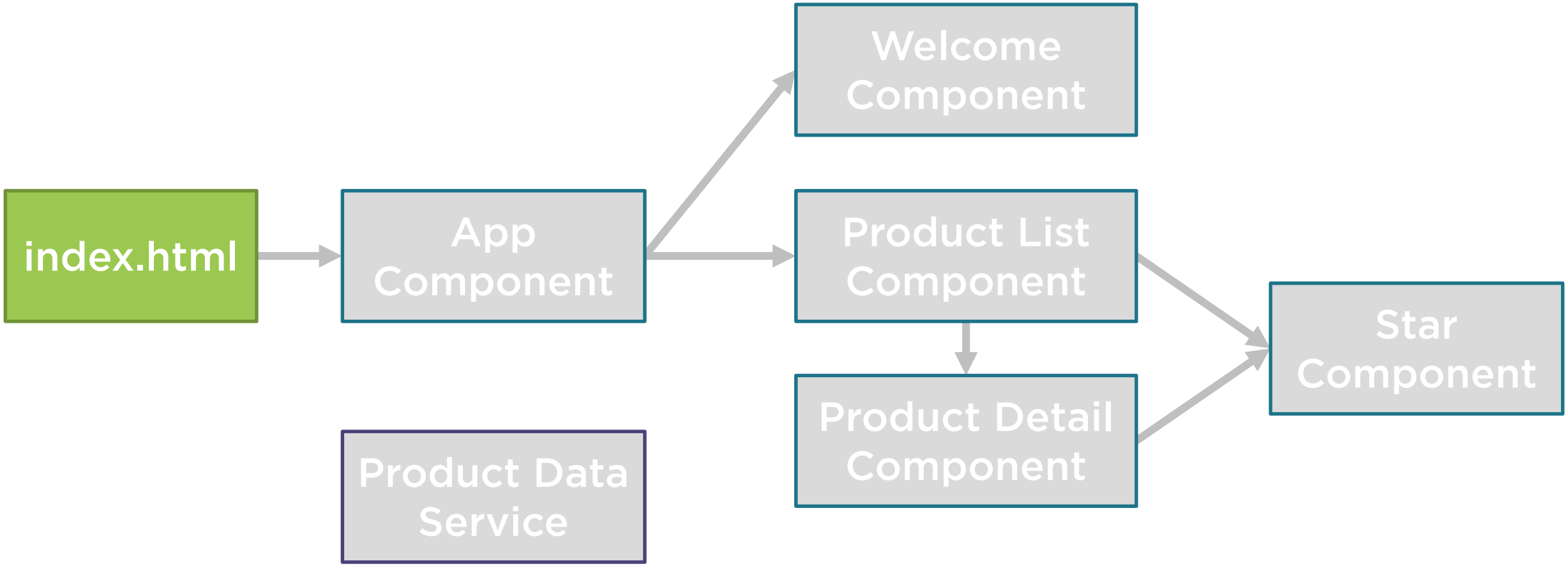
Summary

- Selecting a Language
- Selecting an Editor
- Setting up an Angular Application
- About Modules

Application Architecture



Application Architecture



Application Architecture