

# Module Overview



Selecting a Language

Selecting an Editor

Setting up an Angular 2 Application

About Modules

# JavaScript Language Specification

A yellow square containing the letters 'JS' in a large, bold, dark grey sans-serif font.

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/>

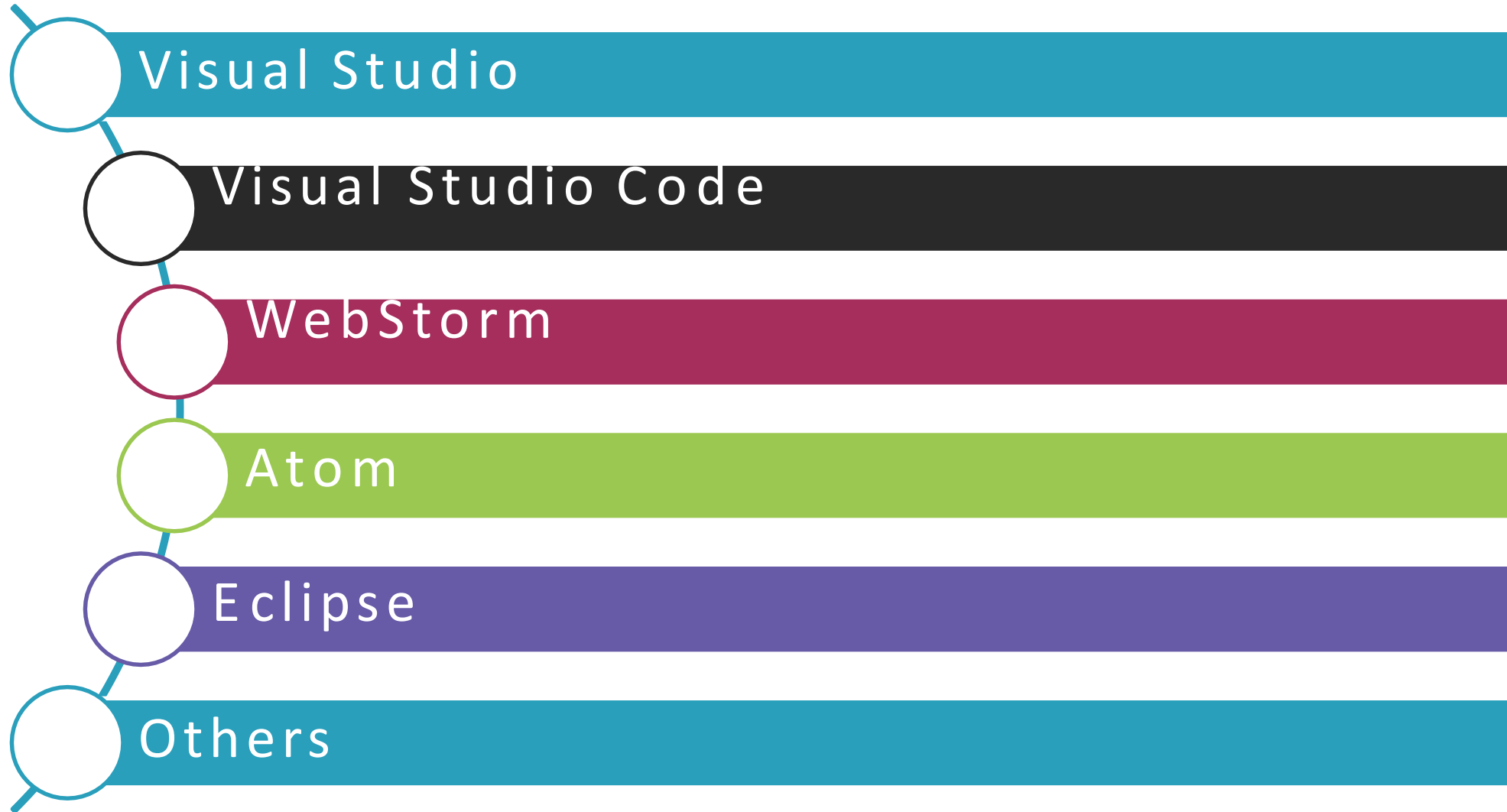
Pluralsight Courses

"TypeScript Fundamentals"

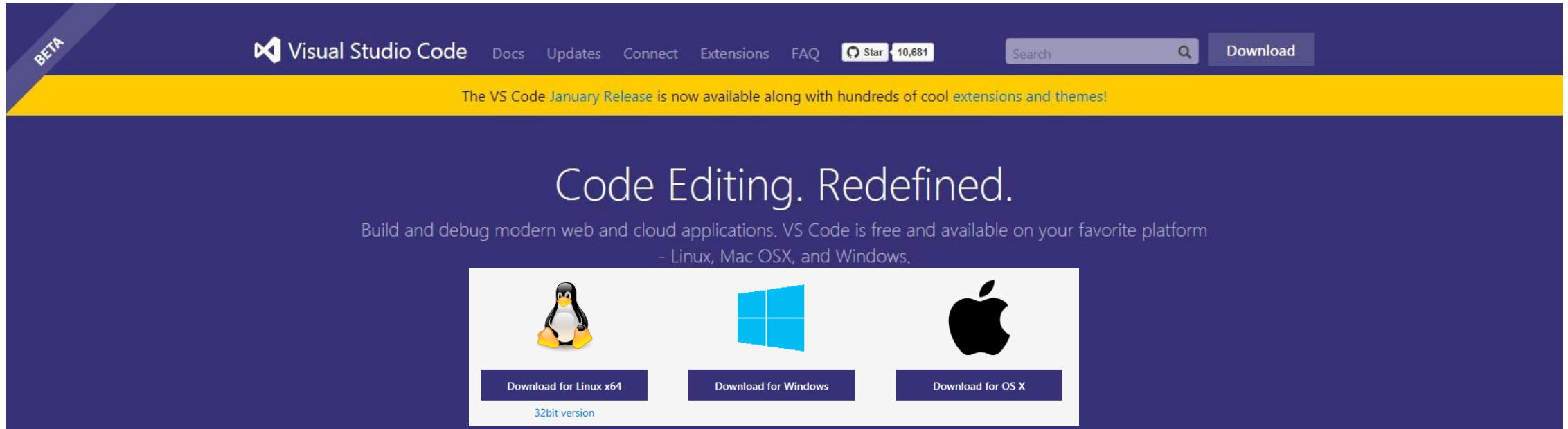
"Angular with TypeScript"

"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 2 application



# npm



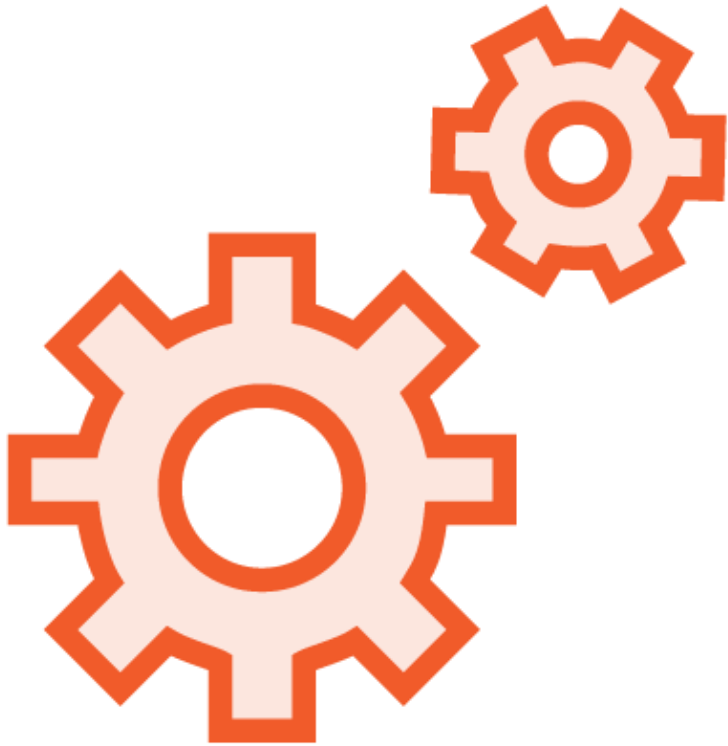
Node Package Manager

Command line utility

Installs libraries, packages, and applications

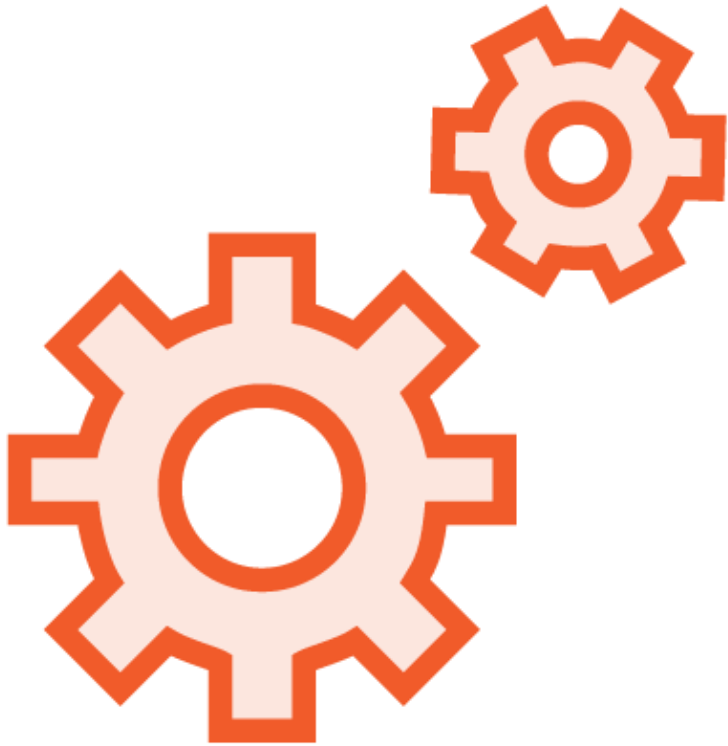
<https://www.npmjs.com/>

# Setting up an Angular 2 Application



1. Create an application folder
2. Create the tsconfig.json file
3. Create the package.json file
4. Create the typings.json file
5. Install the libraries and typings
6. Create the host Web page (index.html)
7. Create the main.ts file (bootstrapper)

# Setting up an Angular 2 Application



Manually perform each step

[www.angular.io](http://www.angular.io) Quick Start

Download the results of these steps

[www.angular.io](http://www.angular.io) Quick Start

AngularCli

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

Starter files

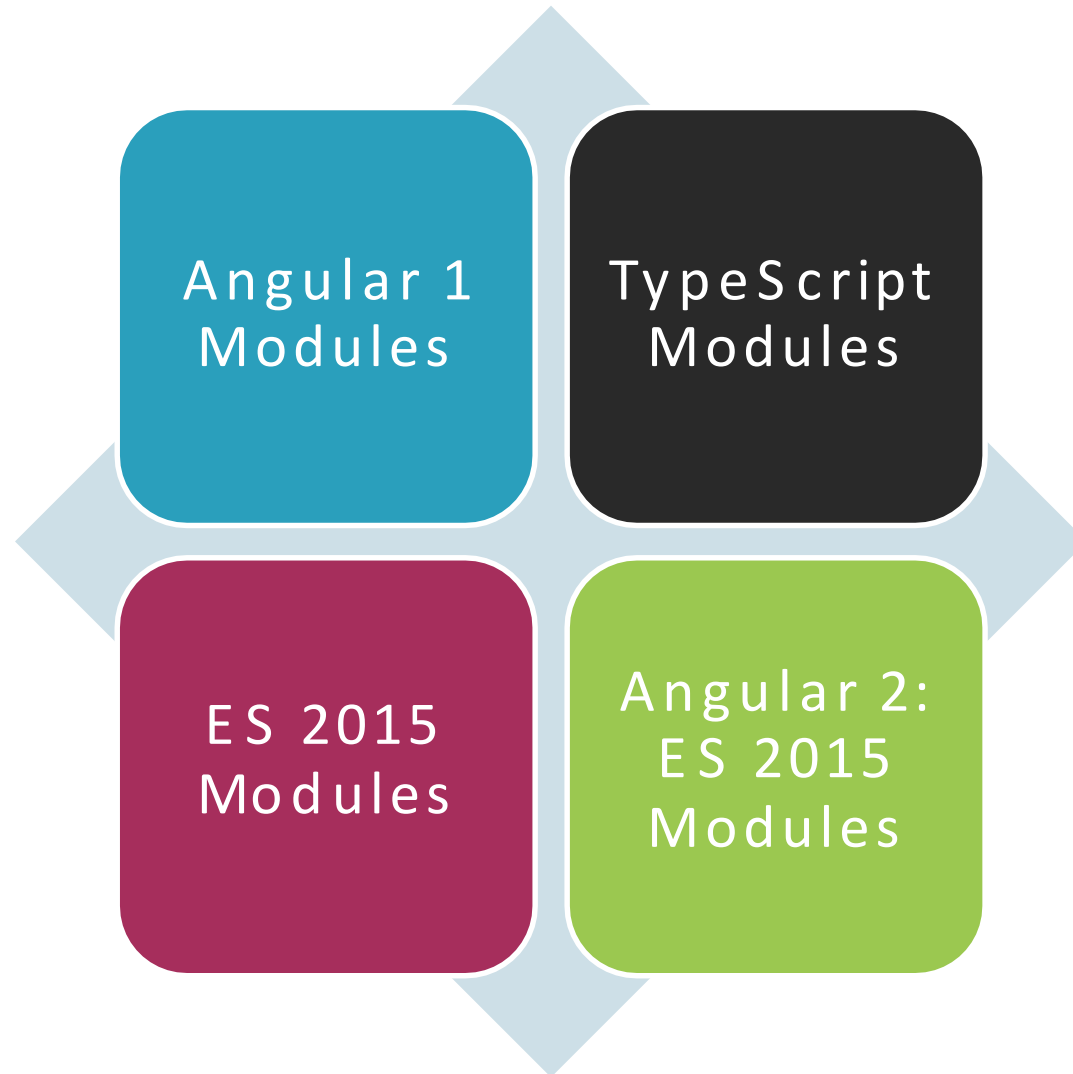
<https://github.com/DeborahK/Angular2>  
– GettingStarted



*Namespaces*

# Modules

*Code Organization*



# ES 2015 Modules

## Export

product.ts

```
export class Product{  
}
```

product.js

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



Transpile

## Import

product-list.ts

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





Web Browser

Web  
Server

URL Request (www.mysite.com)

Response

index.ht ml

JavaScript



# Summary



Selecting a Language

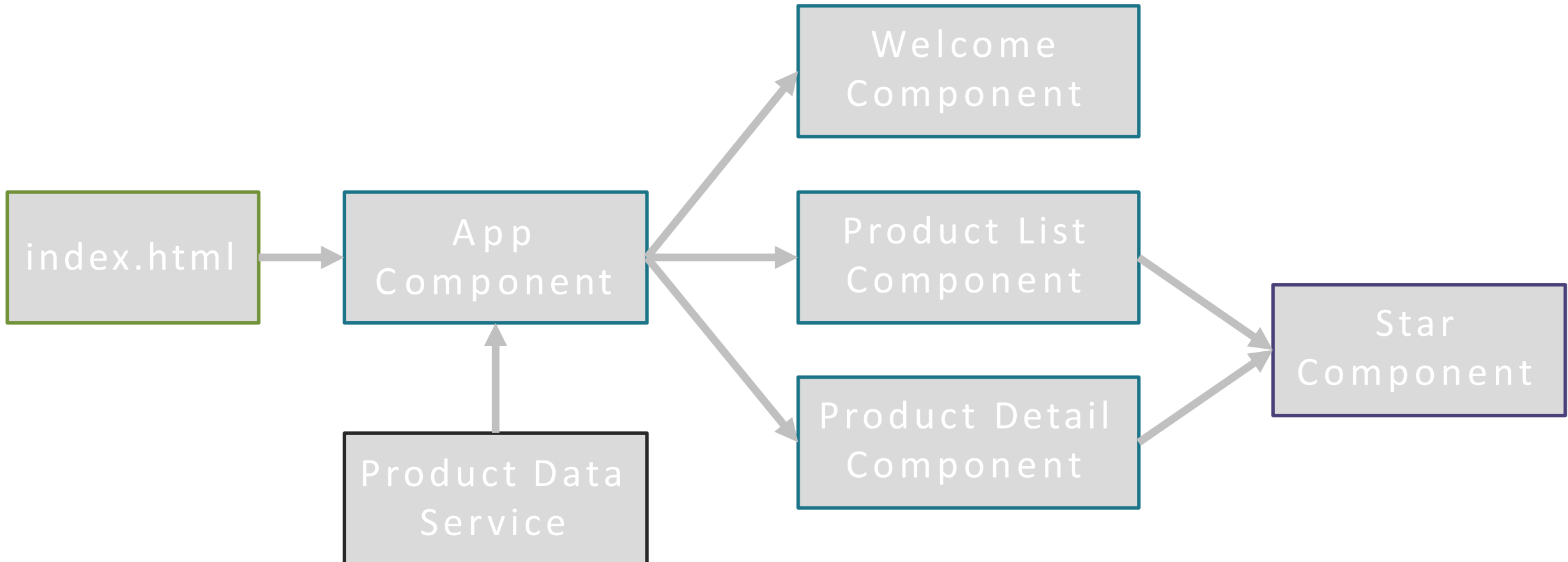
Selecting an Editor

Setting up an Angular 2 Application

About Modules



# Application Architecture



# Application Architecture

