Benjamin Longearet
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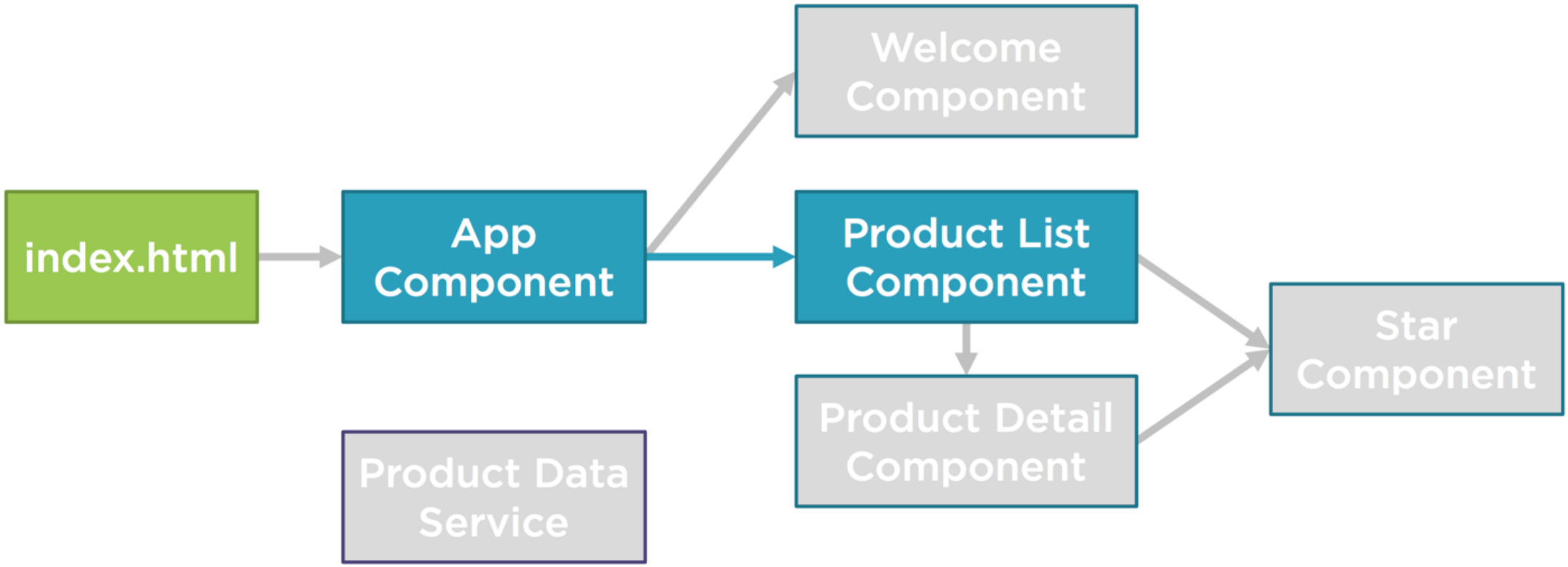
Angular

Data bindings & Pipes

Module Overview

- Property Binding
- Event Binding
- Two-way binding
- Transforming data with Pipes

Application Architecture



Property Binding

```
<img [src]='product.imageUrl'>

 <img src={{product.imageUrl}}>

 <img src='http://mydomain.com/{{imageUrl}}'>
```

Event Binding

Template

Class

```
<h1>{{pageTitle}}</h1>
<img [src]='product.imageUrl'>
<button (click)='toggleImage()'>
```

Event Property
()

Template statement
''

```
export class ListComponent {
  product: IProduct = {
    imageUrl: 'http://image'
  };
  toggleImage(): void {
    this.imageUrl =
'http://mynewimage'
  }
}
```

Two-way Binding

Template

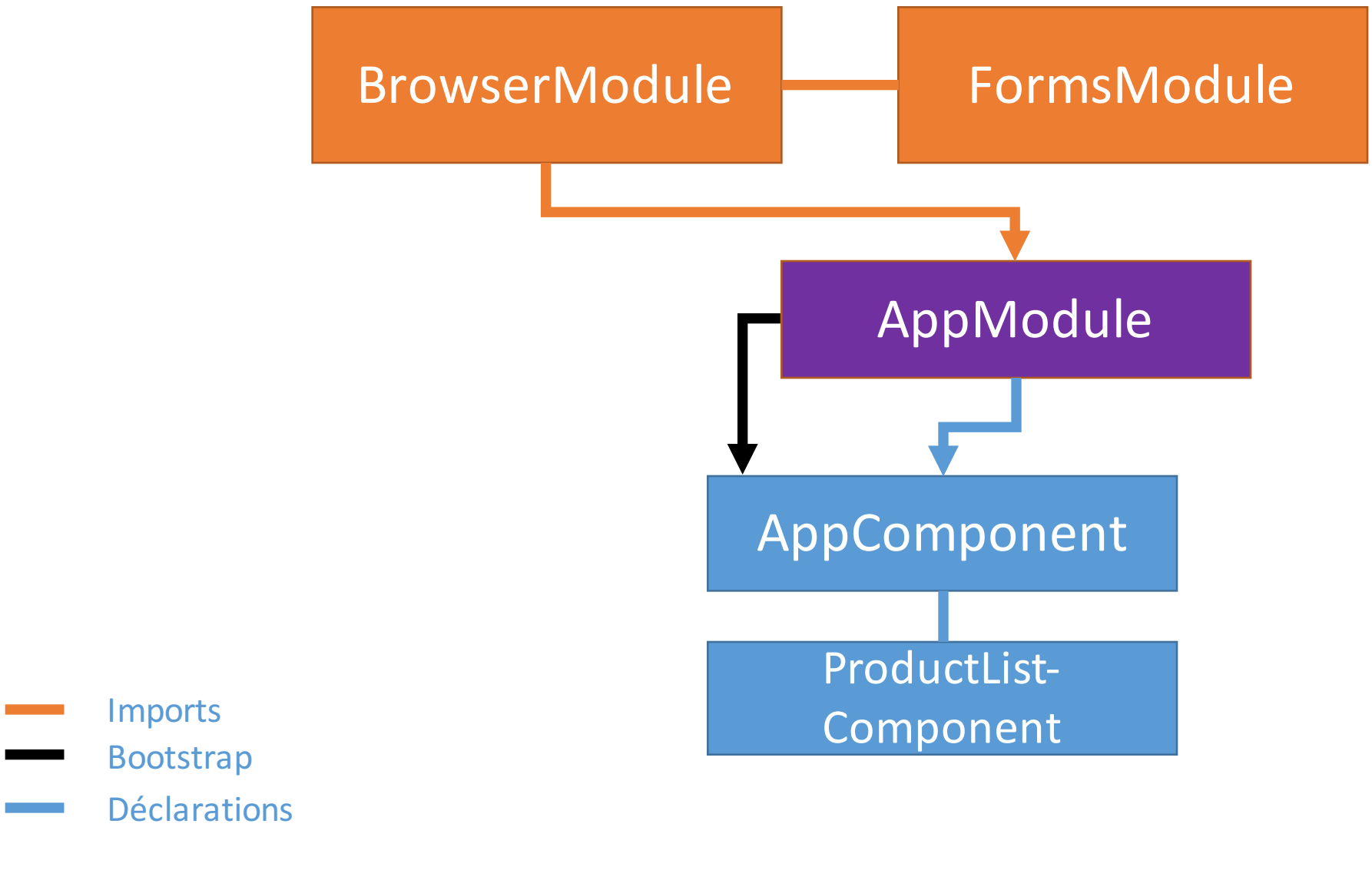
Class

```
<input [(ngModel)]='listFilter'
       type="text"
       value="cart">
```

```
export class ListComponent {
  listFilter: string = 'cart';
}
```

Banana in a box
[()]

Component property
''


BrowserModule
FormsModule
AppModule
AppComponent
ProductList-
Component
Imports
Bootstrap
Déclarations

Transforming Data with Pipes

- Pure functions which transform properties before display
- Built-in pipes
  - date
  - number, decimal, percent, currency
  - json, slice,
  - More on the angular.io documentation http://
- Custom pipes

Pipe Examples

```
{{ product.productCode | lowercase }}

<img src="product.imageUrl"
     [title]="product.productName | uppercase">

{{ product.price | currency | lowercase }}

{{ product.price | currency:'USD':true:'1.2-2'}}
```

Data Binding

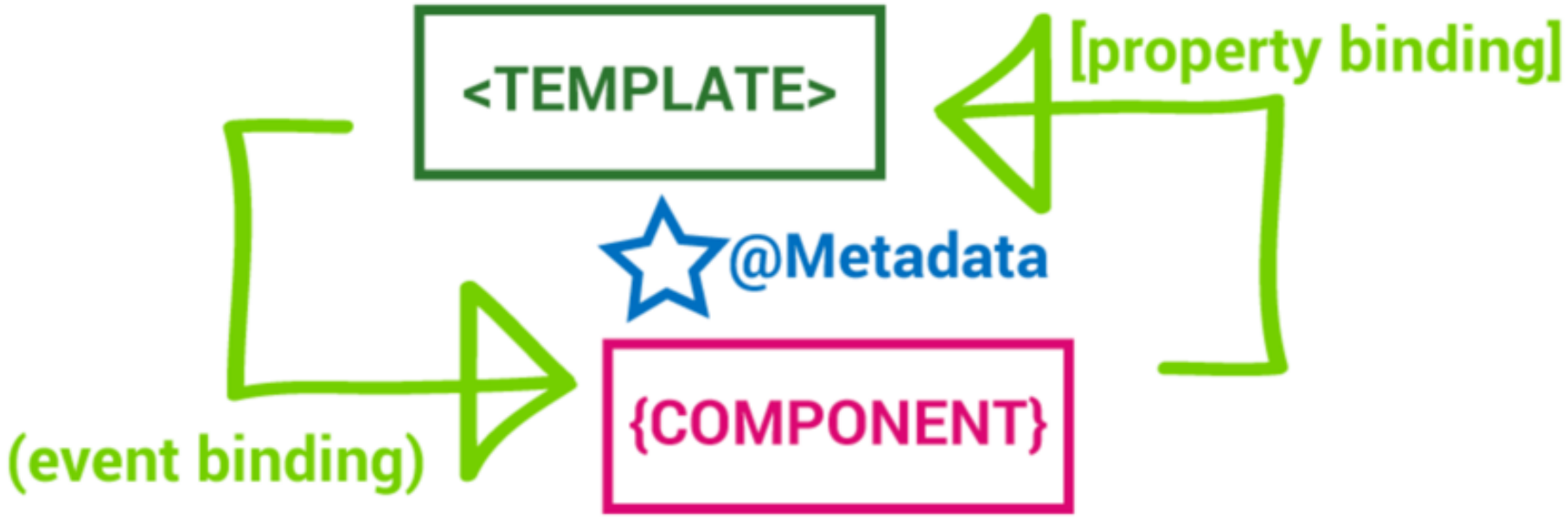
// DOM

```
▼<nat-products>
 ▼<div class="panel panel-primary">
   <div class="panel-heading">
          Product list
     </div>
  ▼<div class="panel-body">
     ::before
    ▼<div class="table-responsive">
       <!--template bindings={
         "ng-reflect-ng-if": "5"
       }-->
      ▼<table class="table">
       ▼<thead>
        ▶<tr>…</tr>
         </thead>
        ▼<tbody>
           <!--template bindings={
             "ng-reflect-ng-for-of": "[object
           Object],[object Object],[object Object],
           [object Object],[object Object]"
           }-->
          ▶<tr>…</tr>
          ▶<tr>…</tr>
          ▶<tr>…</tr>
          ▶<tr>…</tr>
          ▶<tr>…</tr>
          </tbody>
        </table>
      </div>
      ::after
    </div>
  </div>
</nat-products>
```

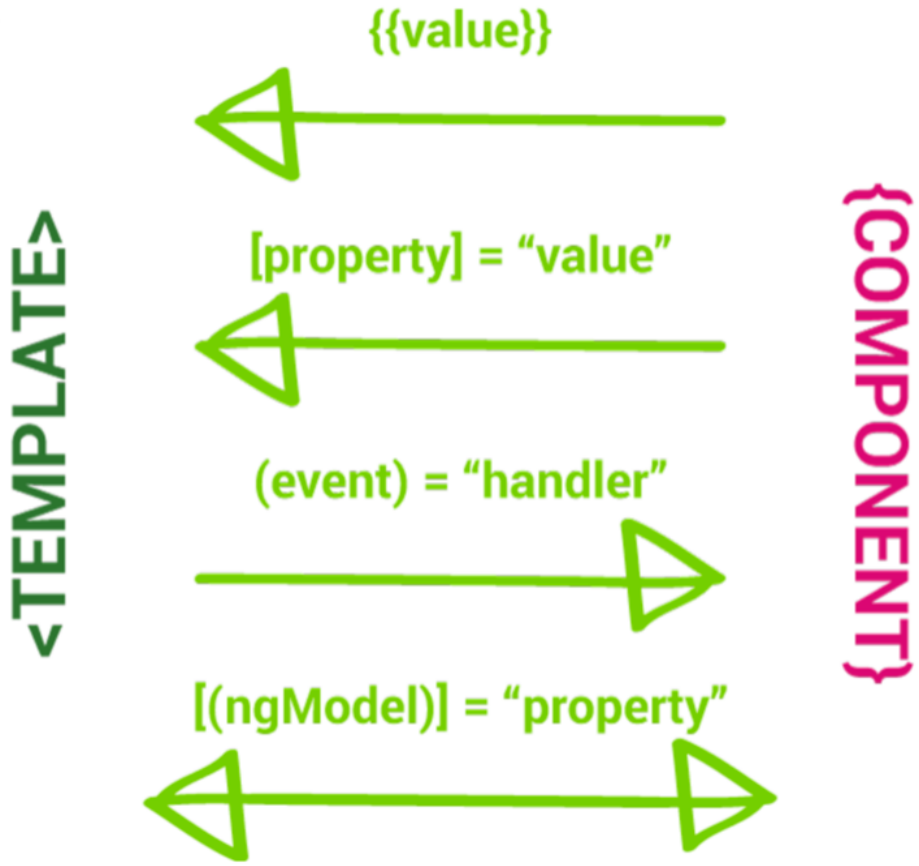
// product-list.components.ts

```
import { Component } from '@angular/core';
@Component({
  selector: 'nat-products',
  templateUrl: 'app/products/product-
list.component.html'
})
export class ProductListComponent {
  pageTitle: string = 'Product List';
  listFilter: string = 'cart';
  products: Array<any> = […];
  toggleImage(): void {…}
}
```

Data Binding



Data Binding



Checklist: [(ngModel)]

```
// product-list.component.html

<div class="col-md-4">
  <input type="text"
    [(NgModel)]="listFilter" />
</div>
```

```
// app.module.ts

import { NgModule } from '@angular/core';
@NgModule({
  imports: [
    BrowserModule,
    FormsModule
  ],
  declarations: [
    AppComponent,
    ProductListComponent
  ],
  bootstrap: [ AppComponent ]
})
export class AppModule {}
```

Checklist: Pipes

- ✓ Pipe character is **|**
- ✓ Pipe name
- ✓ Pipe parameters
  - ✓ Colons-separated
- ✓ Example
  - ✓ {{ product.price | currency:'USD':true:'1.2-2'

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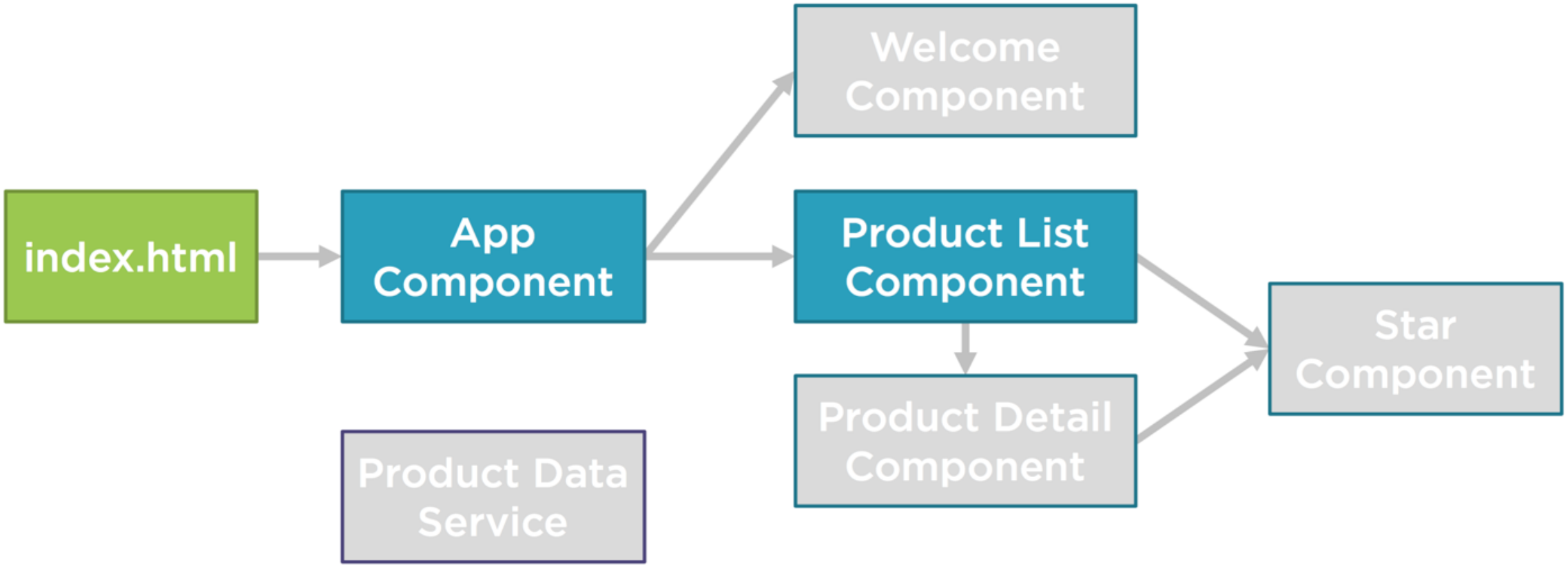
Application Architecture