ANGULAR WORKSHOP

COMPONENT INTERACTION
SERVICES & DEPENDENCY INJECTION
VIEW ENCAPSULATION

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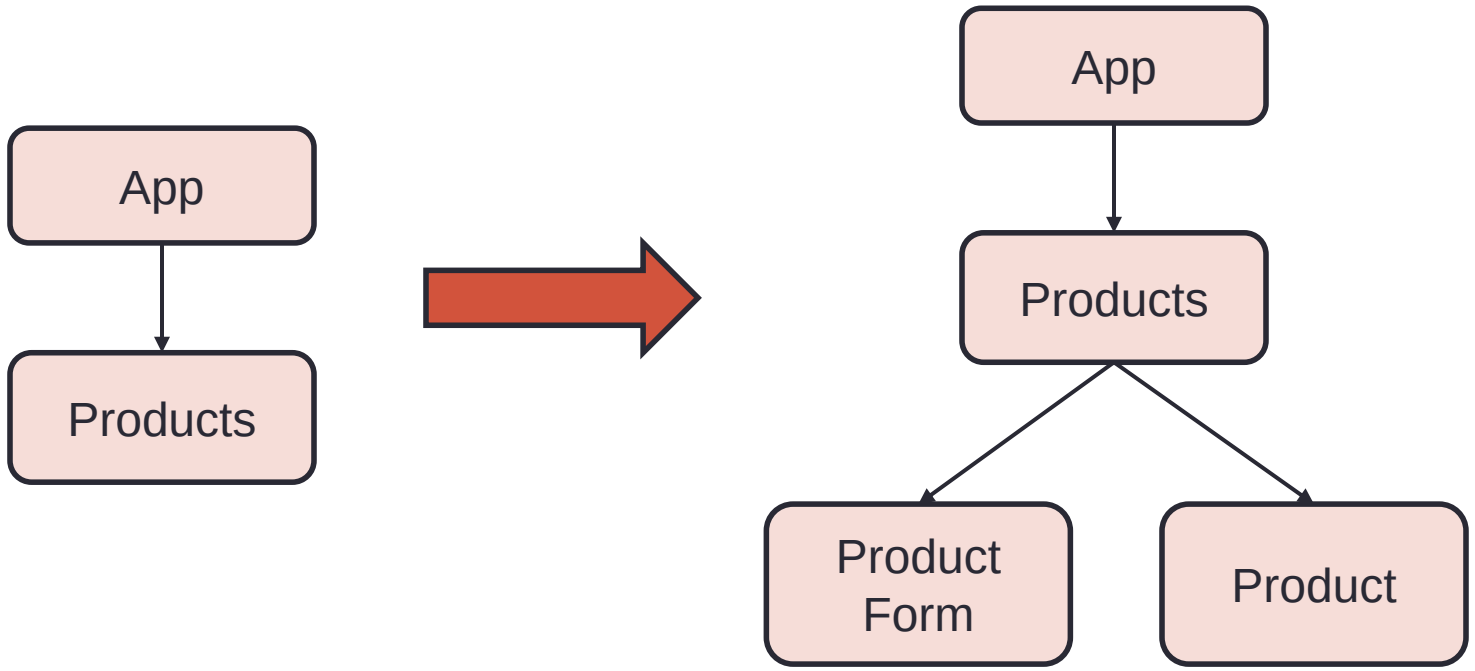
Friday, June 30, 2017

Agenda

- Component Interaction
  - Parent to Child Interaction
  - Child to Parent Interaction
- Services
  - Need for a Service
  - What is a Service?
  - Understanding DI and Angular Injector
  - Creating and Using a Service
  - Cross Component Communication using a Service
- View Encapsulation
- Q & A

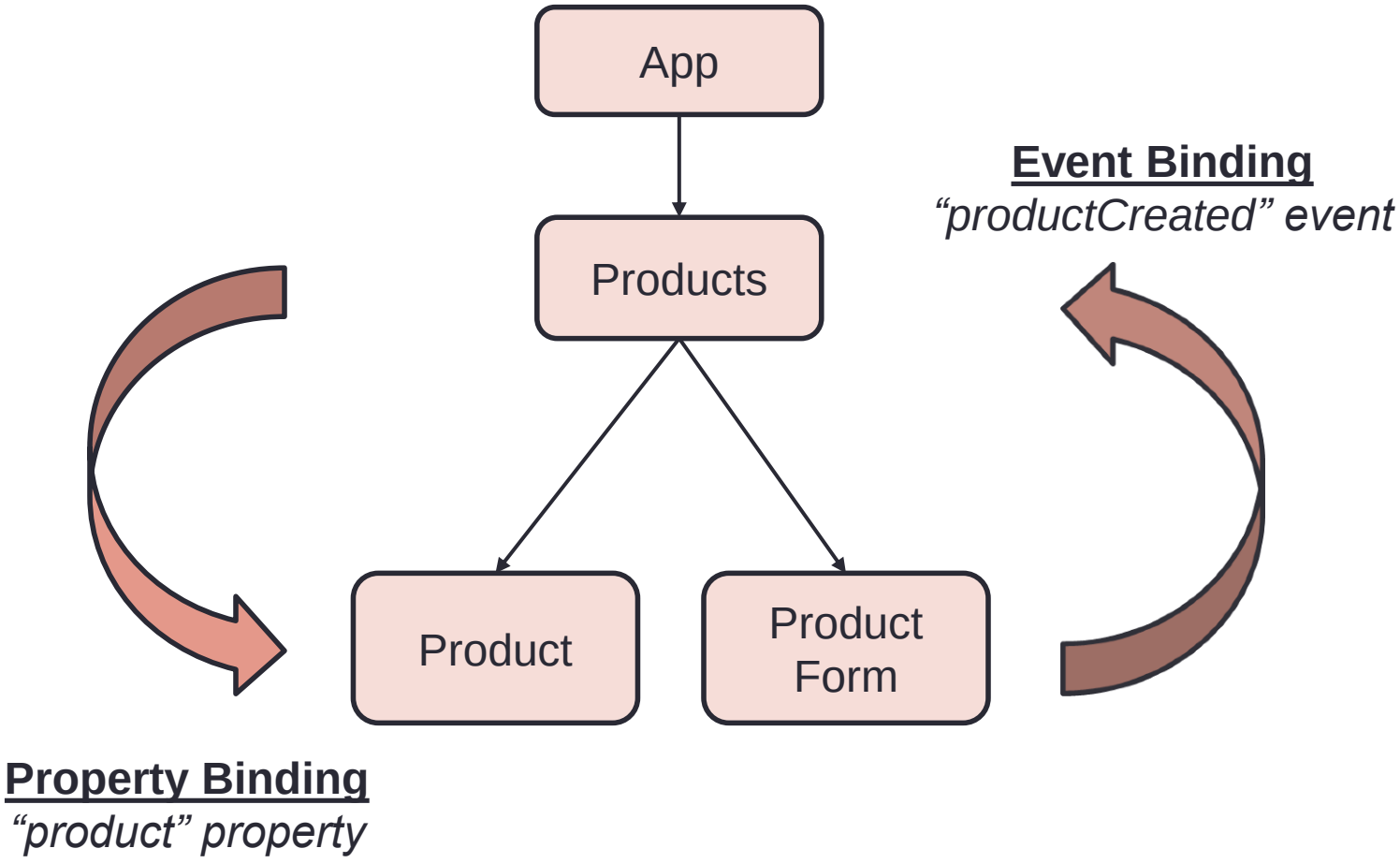
Component Interaction

- Splitting app into multiple components



Component Interaction

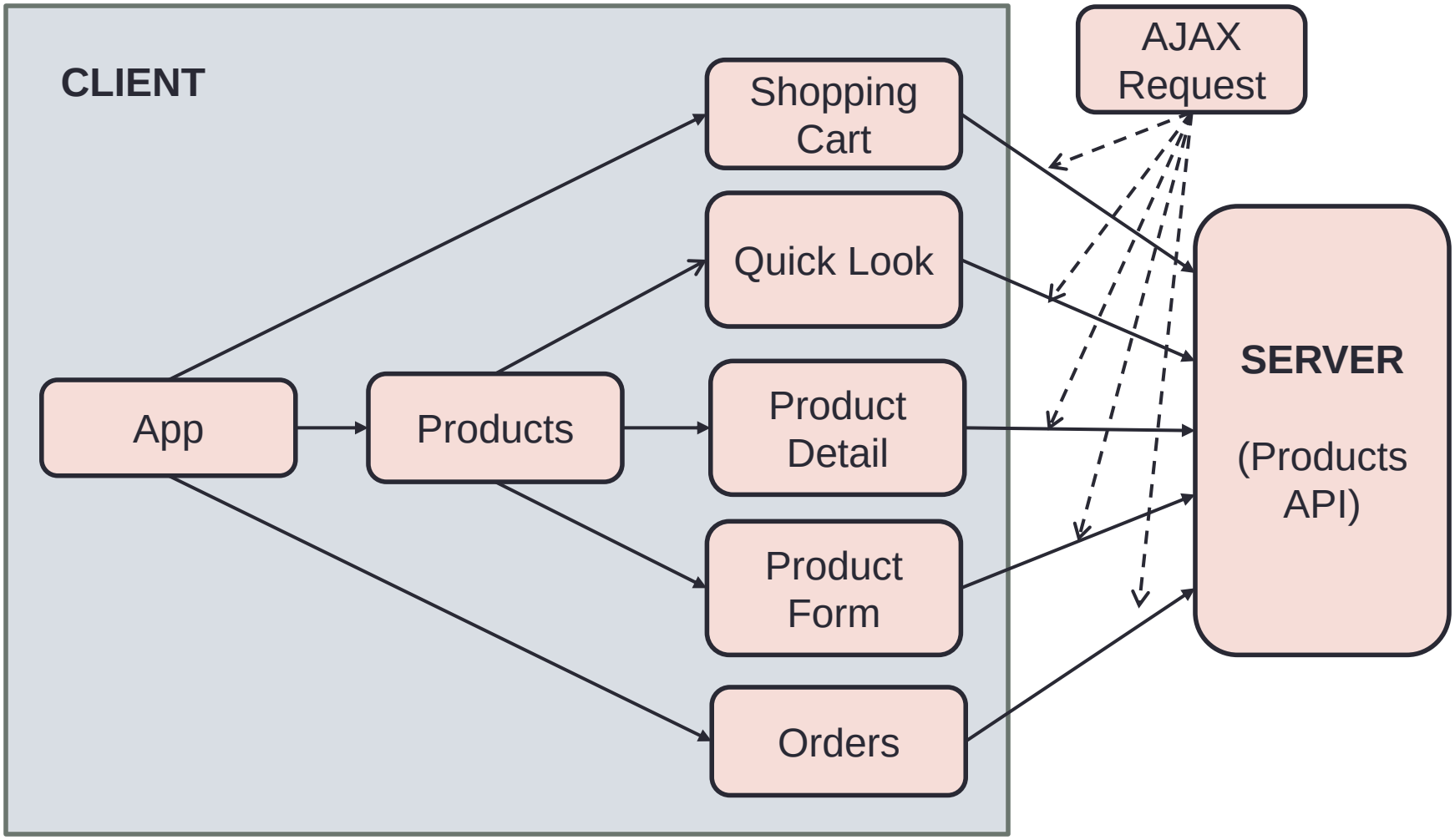
- Overview



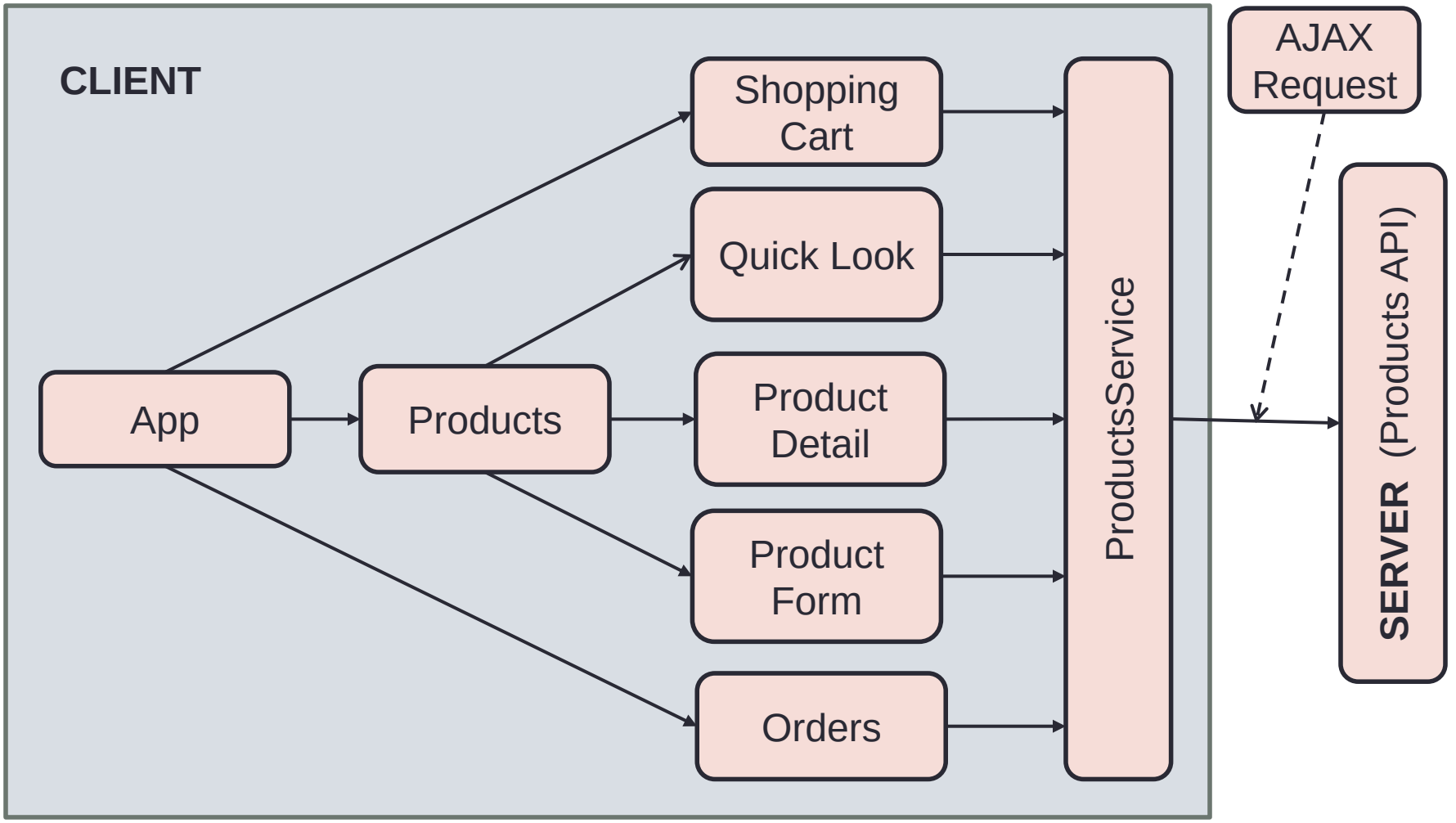
Component Interaction

- Binding to Custom Properties
  - Pass data from parent to child component
    - @Input() decorator
- Binding to Custom Events
  - Emitting event from child component
    - @Output() decorator
    - EventEmitter<T>
    - eventEmitterObj.emit()

Services


CLIENT
App
Products
Shopping Cart
Quick Look
Product Detail
Product Form
Orders
AJAX Request
SERVER
(Products API)

Services


CLIENT
App
Products
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ProductsService
AJAX Request
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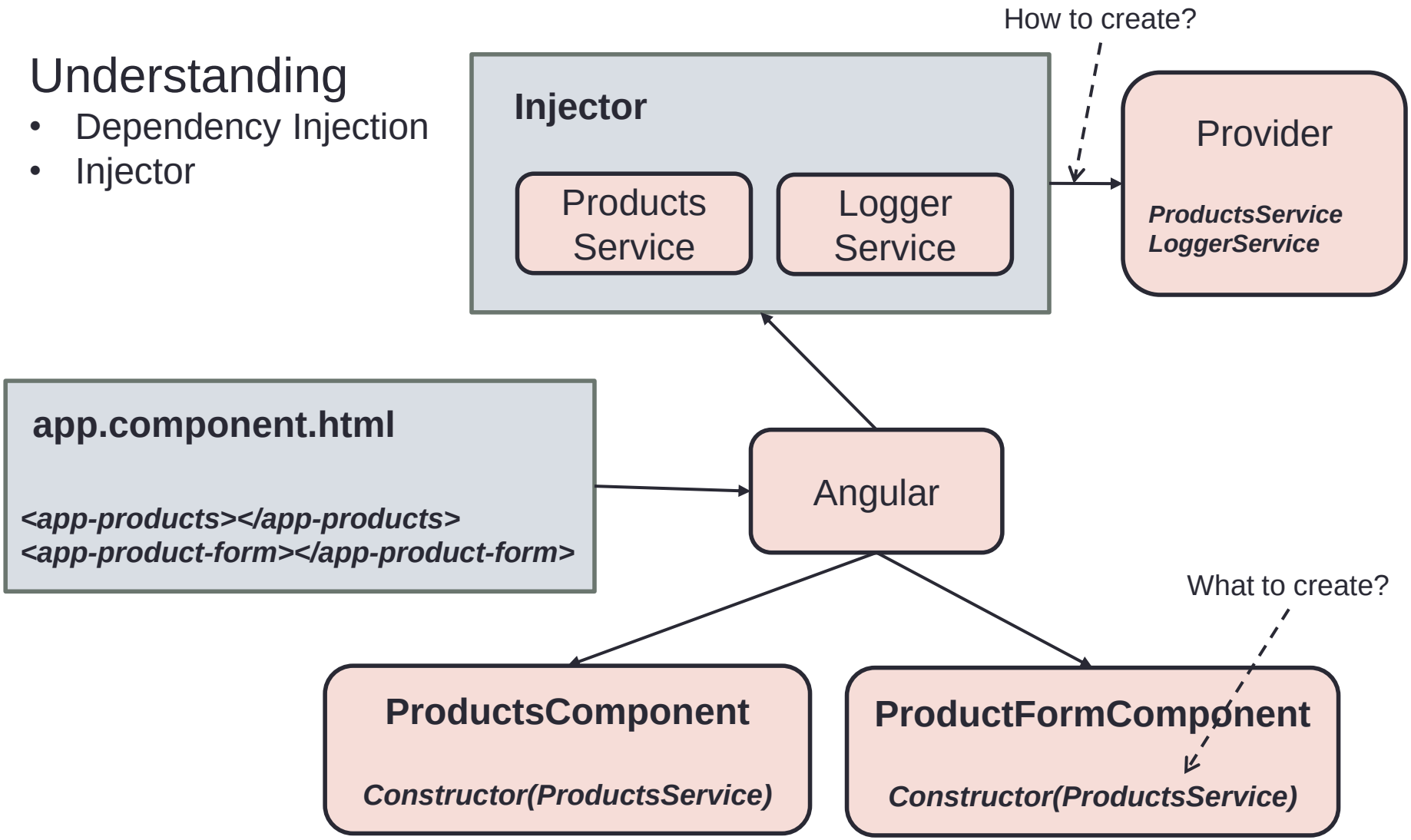
Services

- A class with a narrow, well-defined purpose
  - For e.g.
    - Logging service
    - Data service
    - Tax calculator
    - App configuration
    - Message bus
- Acts as a central repository/business unit
- Creating a service
- Injecting a service into a component
  - Constructor
  - Providers
    - Component level
    - Module level
- Injecting a service into another service
  - @Injectable()

Services

Understanding

- Dependency Injection
- Injector



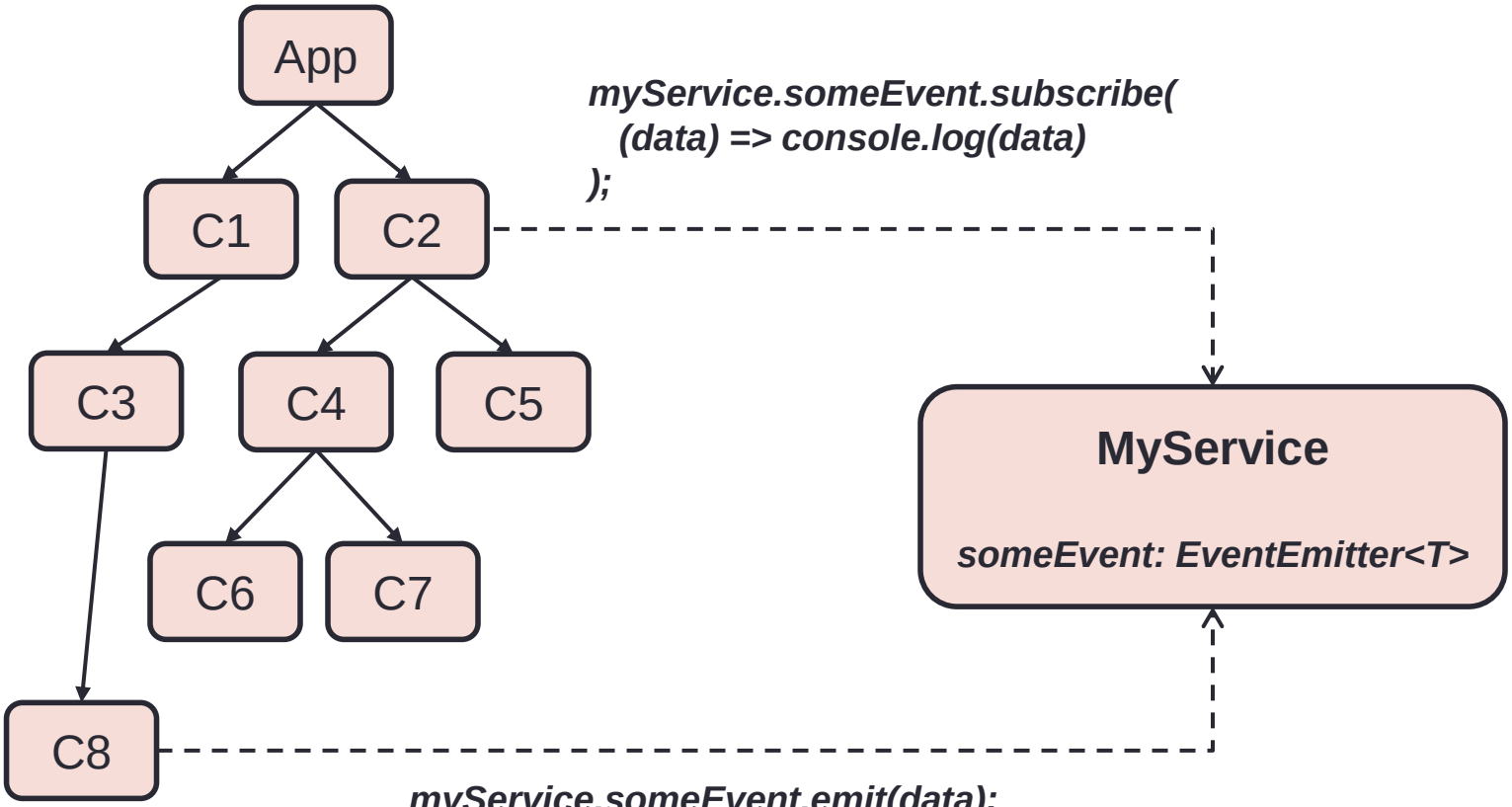
Services

- Controlling the creation of instances of a Service

AppModule	Same instance of Service is available ***Application wide***
AppComponent	Same instance of Service is available for ***all Components*** (but not for other services)
Any other Component	Same instance of Service is available for ***the Component*** and ***all its child Components***

Services

- Cross component communication using a service
  - In the service, expose an event object of type ***EventEmitter***
  - From the source component, invoke ***emit()*** method, pass necessary data as an argument
  - From the destination component subscribe to the service's event object using ***subscribe()*** method, pass callback function as an argument



View Encapsulation

- Understanding View Encapsulation
- @Component()
  - encapsulation: ViewEncapsulation.None
- ViewEncapsulation
  - Emulated – default
  - Native
  - None

Q & A

- Thank you!