

Angular - Getting Started



Angular

- Angular is a framework for building modern single-page applications



Official docs
Tutorials

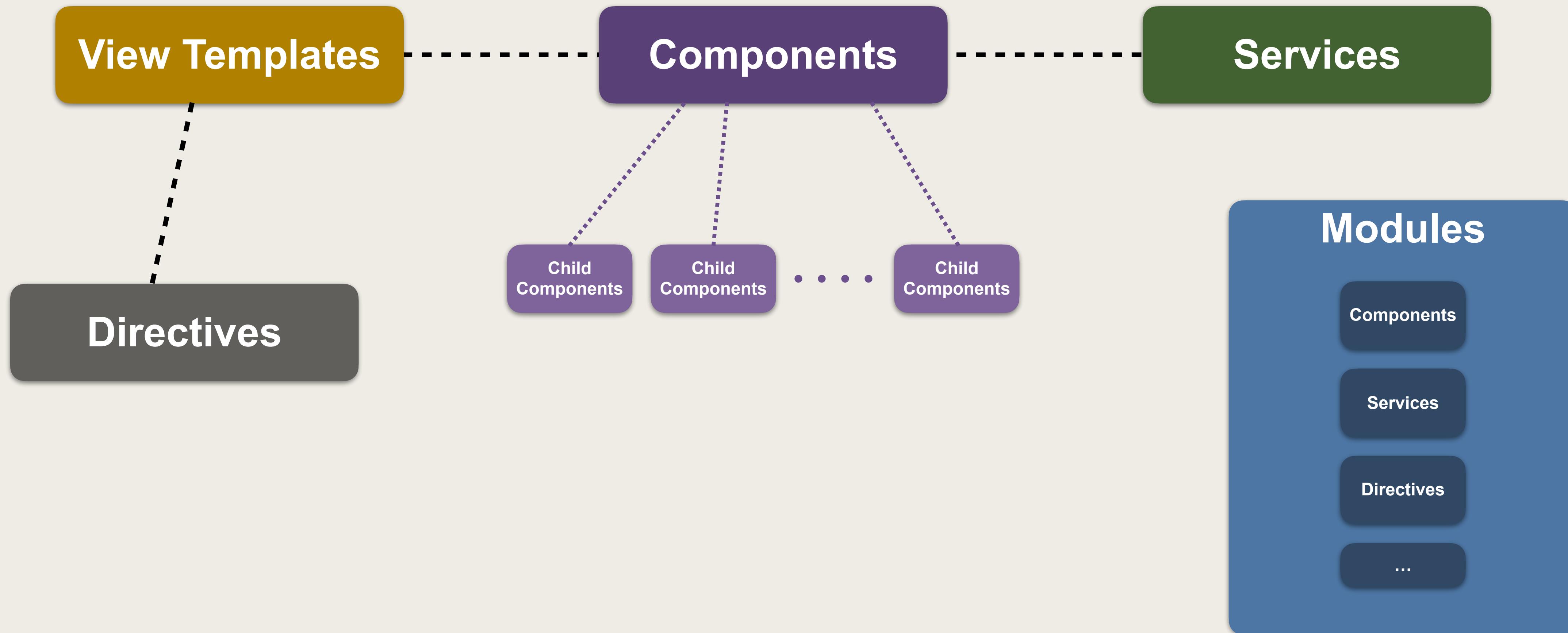
www.angular.io

Angular Features



- Component-based framework
- Clean separation of template coding and application logic
- Built-in support for data-binding and dependency injection
- Supports responsive web design and modern frameworks
 - Bootstrap, Google Material Design (Angular Material) and others ...

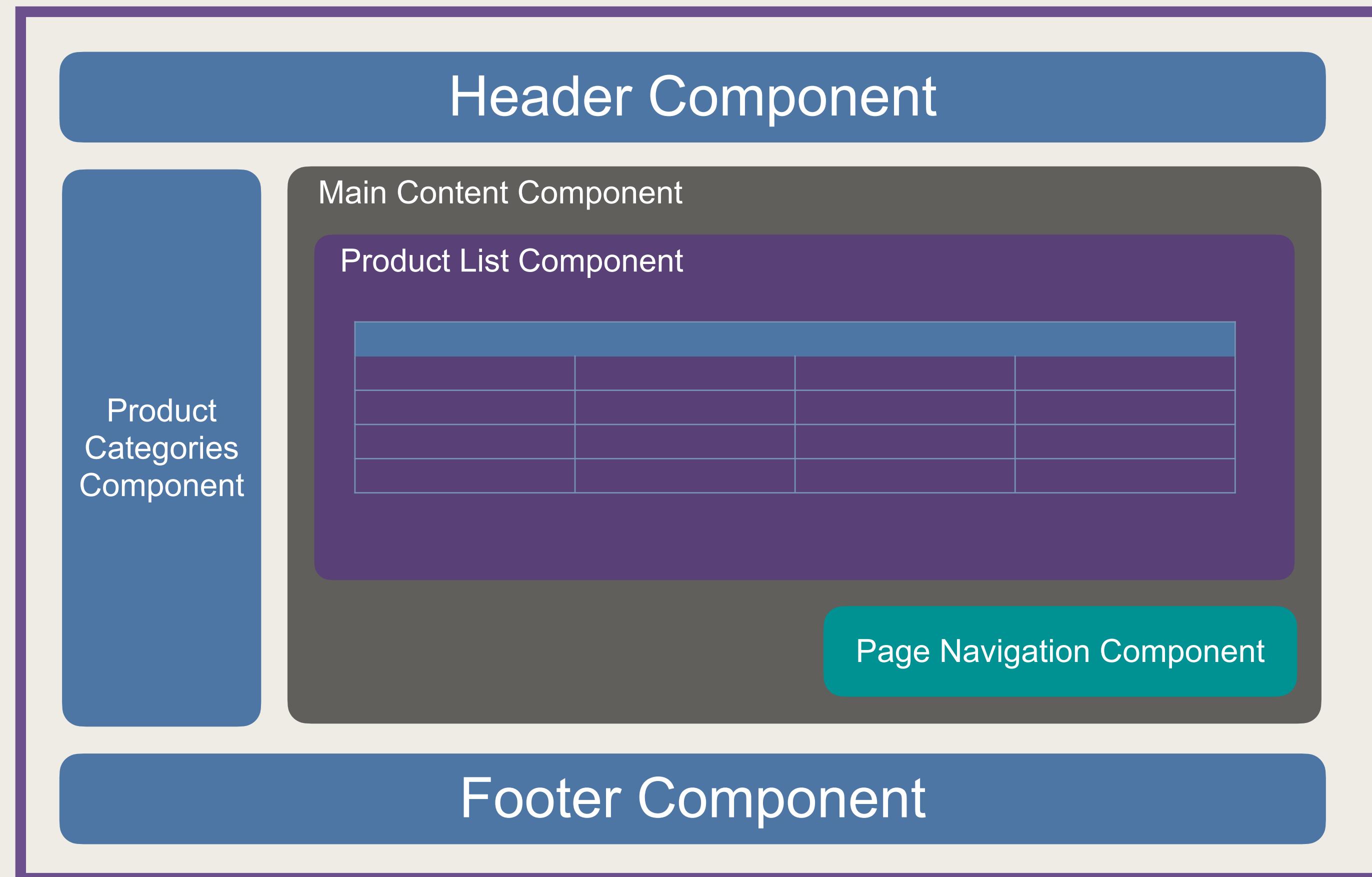
Angular Architecture



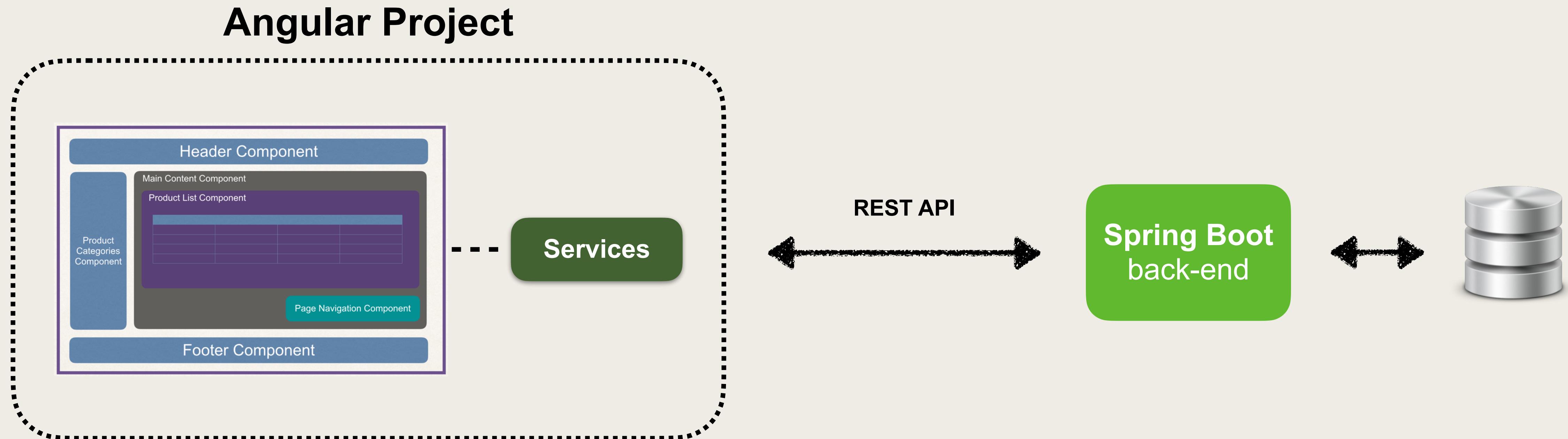
Key Terms

Term	Definition
Component	<p>Main player in an Angular application. Has two parts:</p> <ol style="list-style-type: none">1. View for user interface2. Class that contains application logic / event handling for the view
View Template	<p>The user interface for the component Static HTML with dynamic elements</p>
Directive	<p>Adds custom behavior to HTML elements Used for looping, conditionals etc</p>
Service	<p>Helper class that provides desired functionality Retrieving data from a server, performing a calculation, validation etc</p>
Module	<p>A collection of related components, directives, services etc</p>

Application UI Composition



Application Interaction



Angular Project

- An Angular project is composed of multiple files



Creating an Angular Project

- Angular provides a command-line tool to generate a project
- Generates the starter files to help you bootstrap your project

<http://cli.angular.io>

Angular CLI

```
> npm install -g @angular/cli
```

```
> ng version
```

```
> ng help
```

Creating New Project with Angular CLI

```
> ng new <your-project-name>  
> ng new my-first-angular-project
```

Running the Angular App

```
> cd <your-project>
```

```
> cd my-first-angular
```

```
> ng serve
```

```
> ng serve --open
```

1. Builds the app (compile / transpile)
2. Starts the server
3. Watches the source files
4. Rebuilds the apps when source is updated (hot reload)

By default listens on port 4200

http://

Same as above ...

But also opens a web browser to
http://localhost:4200

Changing the Server Port

```
> ng serve --port 5100
```

Server listens on port 5100
<http://localhost:5100>

```
> ng serve --port 5100 --open
```

Same as above ...
But also opens a web browser to
<http://localhost:5100>

Project Files



<http://www.angular.io/guide/file-structure>