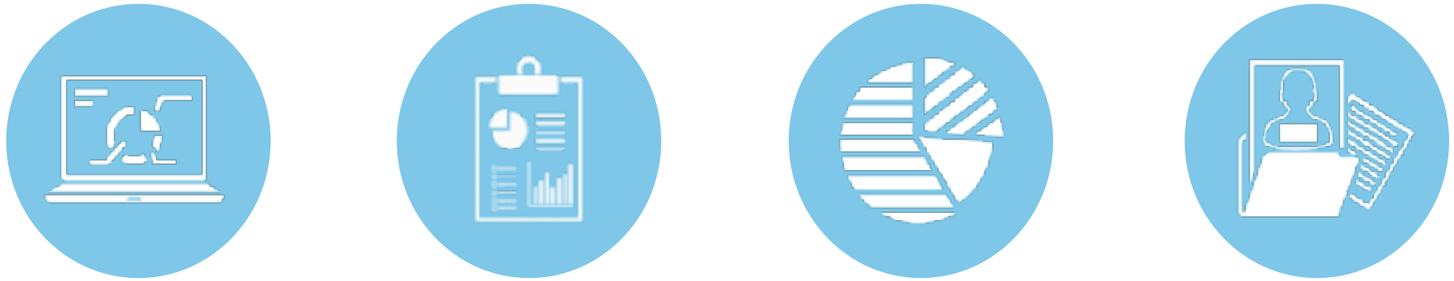
Angular 2

Lesson 3—Building with A2 Components



Learning Objectives

- Describe a Component
- Explain Nested Components
- Explain Deeper Nesting Components

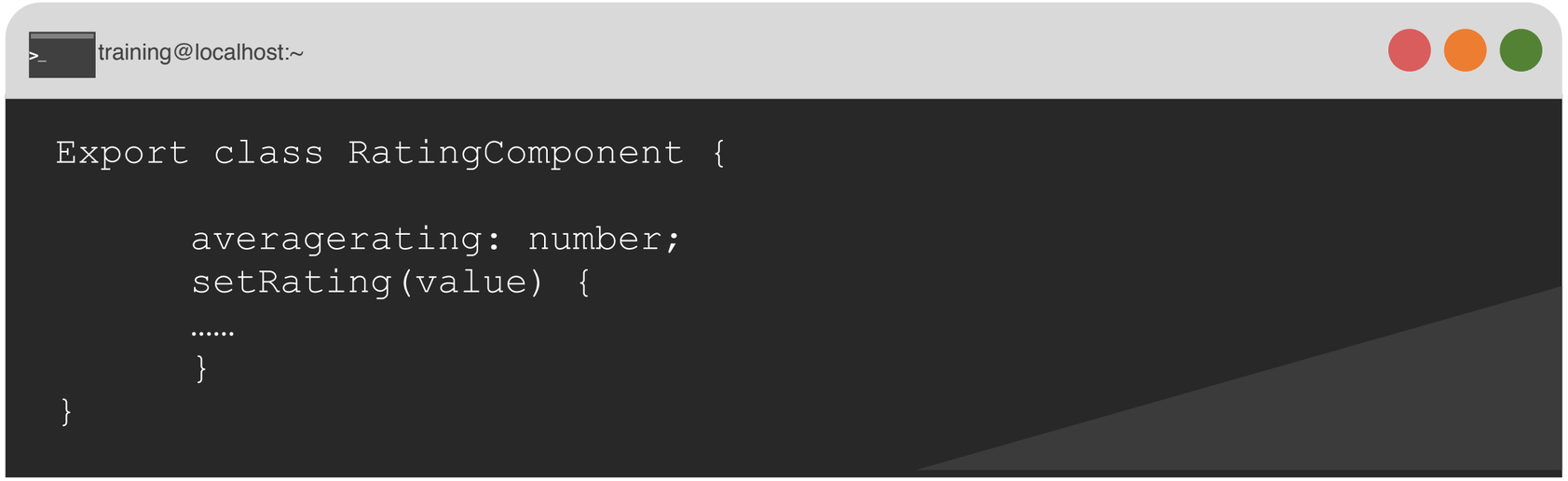
Building with A2 Components

Topic 1—Component

Components

In Angular 2, “everything is a component.”

- Components are the source to build and specify elements and to add logic on the page, through both custom elements and attributes that add functionality to existing components.
- Component is a controller class with a template which mainly deals with a view of the application and logic on the page.
- It is a piece of code that can be used throughout an application.
- It knows how to render itself and configure dependency injection.

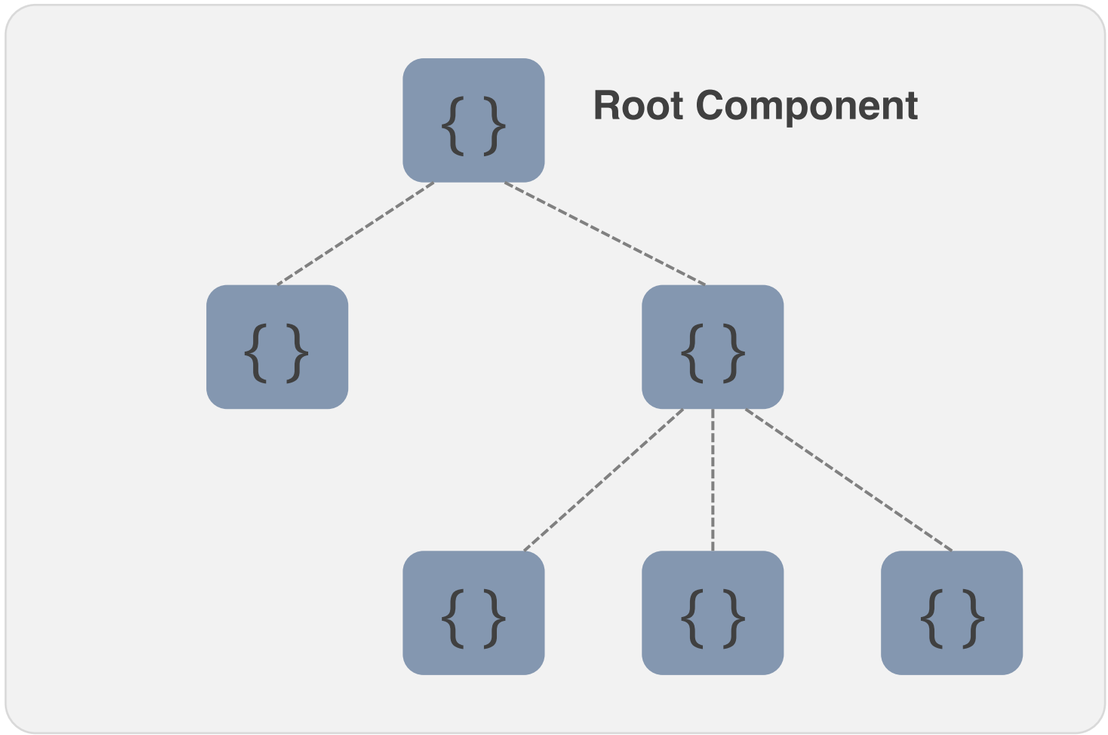


Components

{ } Components encapsulate the template, data, and the behavior of view.

Components are also known as View Components.

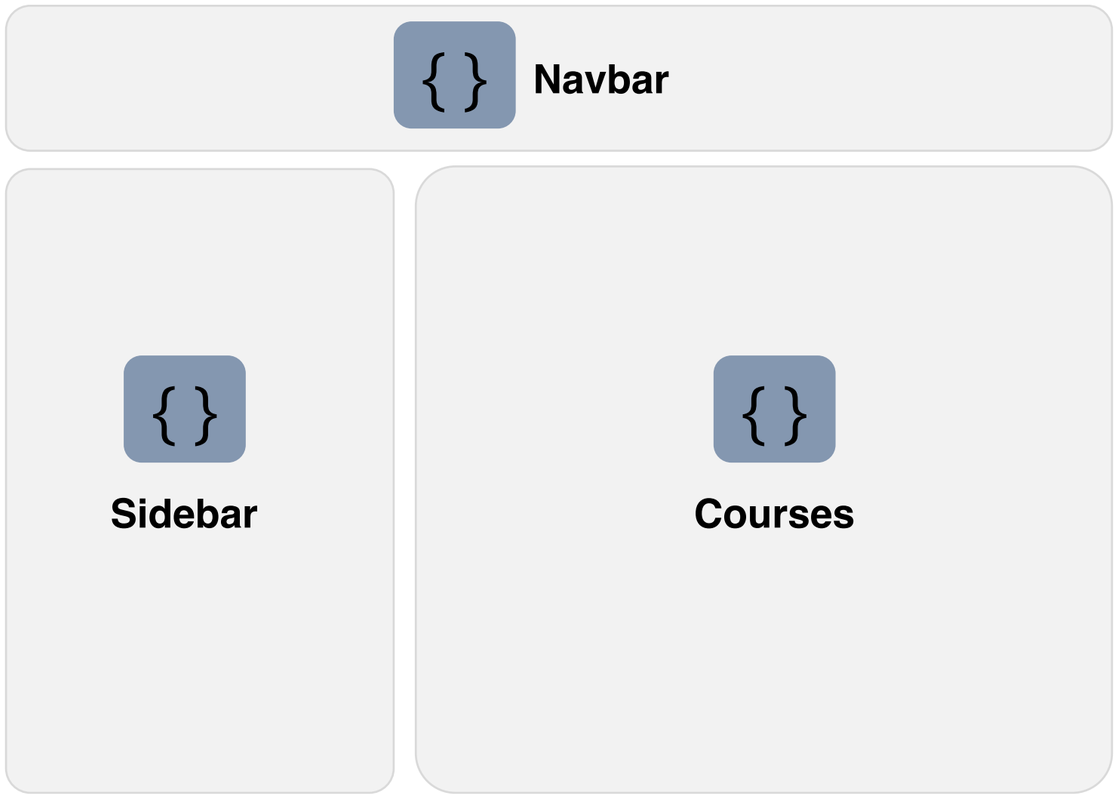
Every app has at least one component called root component.



Components

However, in real world an application encapsulates many components.

Here is an example:



Demo—Components

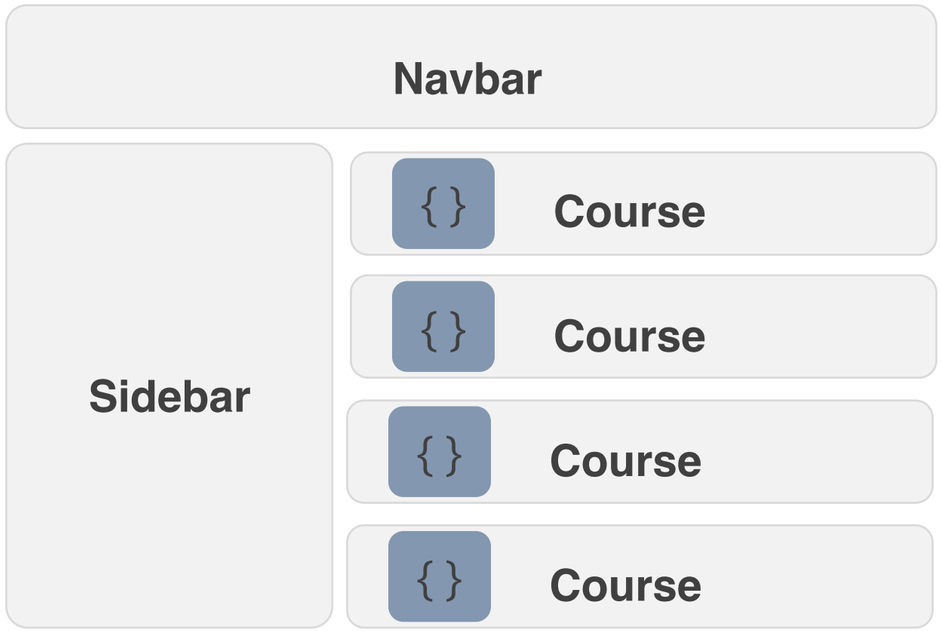
Building with A2 Components

Topic 2—Nested Component

Nested Components

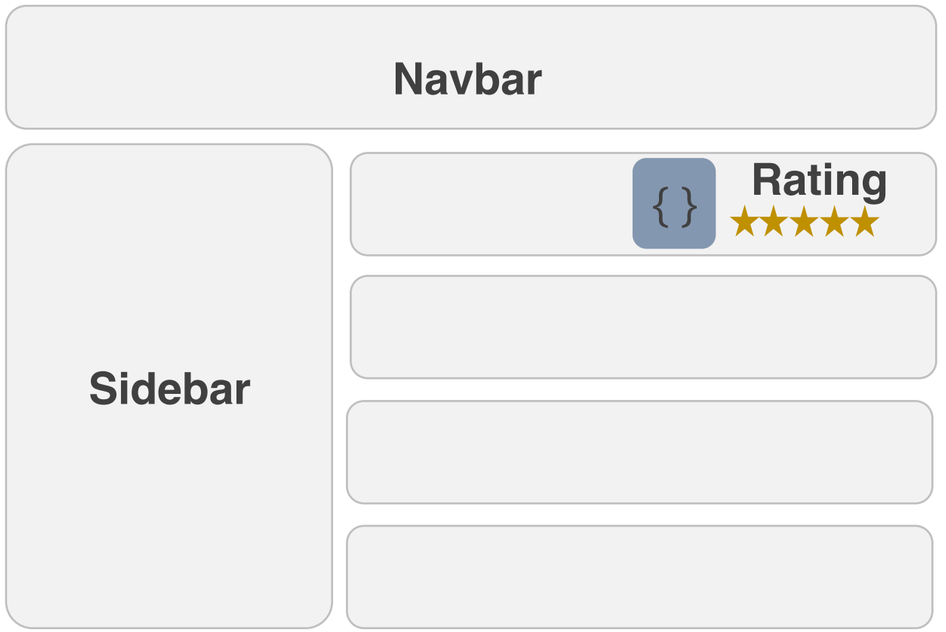
- Each component has a template for the view and data or logic behind the view.
- Components can also contain other components called nested components.

In the diagram, courses are components.



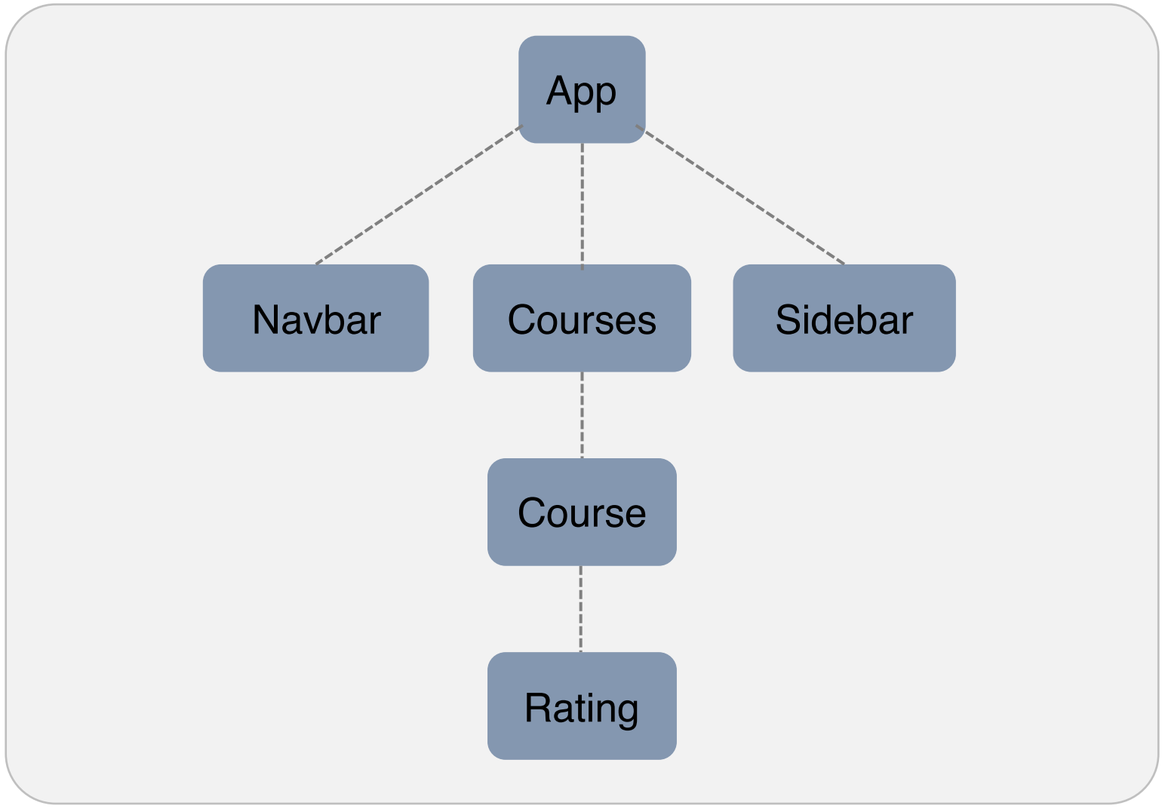
Nested Components

In this example, each component may have another component called rating.



Nested Components

- The diagram shows the flow of nested components.
- The benefit is that you can break a large app into smaller parts.



Relation Between DOM and Components

- In Angular2, components are absolutely decoupled from the DOM.
- This will help you make the components unit testable without DOM.

Binding Components

This is how your HTML elements will bind with your components.

`title = “Hello”` `<h1>Hello</h1>`

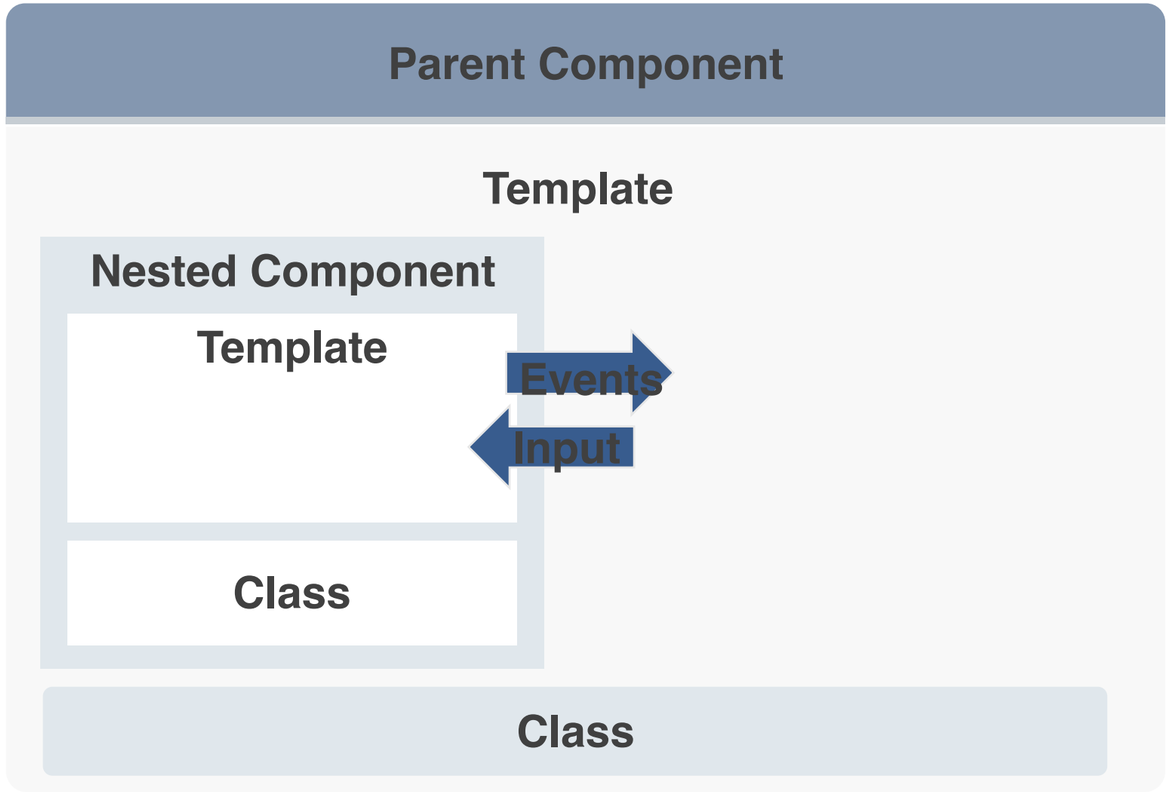
Demo—Nested Components

Building with A2 Components

Topic 3—Deeper Nesting

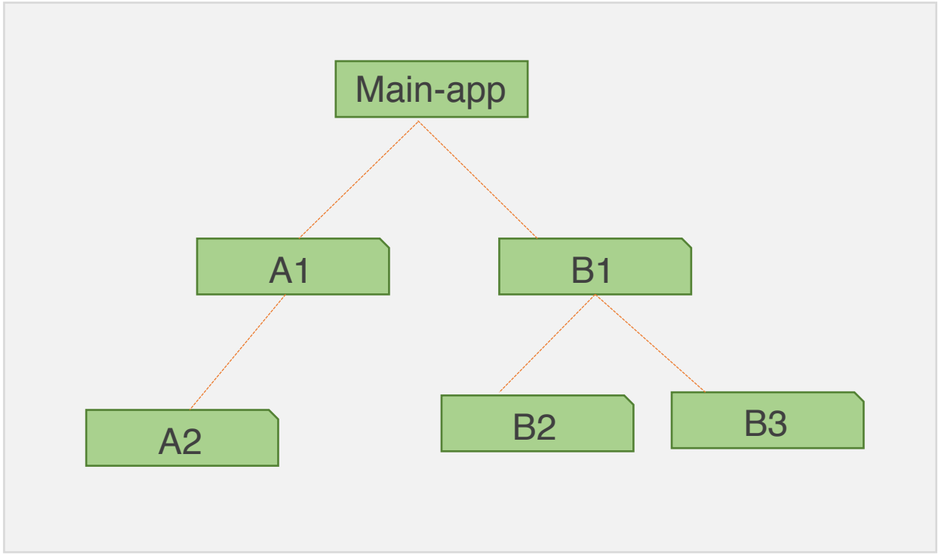
Deeper Nesting

The diagram shows the communication between deep nested components in Angular2.



Deeper Nesting

As you write a complex app and reuse more and more components, the components get smaller and more nested as part of the process. So it is important to understand the working of nested components.



Demo—Deeper Nesting

Key Takeaways

- Component is a controller class with a template which mainly deals with a view of the application and logic on the page.
- Angular2 implements component model in plain TypeScript class, containing properties and methods.
- Nested component helps you write a complex app and reuse more and more components; the components get smaller and more nested as part of the process.

Quiz

QUIZ

1

Angular2 is entirely component based. Controllers and $scope are no longer used. They have been replaced by _____ and _____.

a. components, controllers

b. $scopes, components

c. components, directives

d. controllers, directives

QUIZ

1

Angular2 is entirely component based. Controllers and $scope are no longer used. They have been replaced by _____ and _____.

a. components, controllers

b. $scopes, components

c. components, directives

d. controllers, directives

The correct answer is **c.**

Angular2 is entirely component based. Controllers and $scope are no longer used. They have been replaced by components and directives.

QUIZ

2

In Angular2, applications rely upon the _____ method to load top-level components.

a. loadstrap

b. bootstrap

c. bootload

d. None of the above

QUIZ

2

In Angular2, applications rely upon the _____ method to load top-level components.

a. loadstrap

b. bootstrap

c. bootload

d. None of the above

The correct answer is **b.**

In Angular 2, applications rely upon the bootstrap method to load top-level components.

QUIZ

3

Angular 2 can detect when component data changes, and then automatically re-renders the view to reflect that change.

a. True

b. False

QUIZ

3

Angular 2 can detect when component data changes, and then automatically re-renders the view to reflect that change.

a. True

b. False

The correct answer is **a.**

Angular 2 can detect when component data changes, and then automatically re-renders the view to reflect that change.

QUIZ

4

Which statement is correct about Angular2 component?

a. They encapsulate template, data logic of a view

b. They are plain TS Classes

c. They can be reused

d. All of the above

QUIZ

4

Which statement is correct about Angular2 component?

a. They encapsulate template, data logic of a view

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c. They can be reused

d. All of the above

The correct answer is **d.**

In Angular 2, applications rely upon the bootstrap method to load top-level components.