# Create Angular Custom Directive

## 1. Setup Project

### 1.1 Install Dependencies

1. Change directory to calab:

* cd calab

1. Install dependencies by running the following command:

* npm install

## 2. Create Directive

### 2.1 Create a new Directive and Implement it’s logic

1. Create a new IsAuth directive using CLI:

* npx -p @angular/cli ng generate directive is-auth

1. Open src/app/is-auth.directive.ts file and do the following:
   * Import TemplateRef, and ViewContainerRef from @angular/core.
   * Update current constructor with following parameters:
   * constructor(private templateRef: TemplateRef<any>, private viewContainer: ViewContainerRef) {   
     }

### 2.2 Implement @Input property

1. Open src/app/is-auth.directive.ts file and do the following:
   * Import Input from @angular/core.
   * Define an input property appIsAuth with a setter. This allows you to pass a condition to the directive from the template.
   * @Input() set appIsAuth(condition: boolean) {  
      if (condition) {  
      this.viewContainer.createEmbeddedView(this.templateRef);  
      } else {  
      this.viewContainer.clear();  
      }  
     }
   * *Use the setter to conditionally create or clear the embedded view in the ViewContainerRef based on the provided condition.*

## 3. Use Directive

### 3.1 Apply the Directive using Long-form syntax

1. Open src/app/app.component.ts file and do the following:
   * Import IsAuthDirective.
   * import { IsAuthDirective } from './is-auth.directive';
   * Update imports to include IsAuthDirective.
   * imports: [RouterOutlet, IsAuthDirective],
2. Open src/app/app.component.html file and do the following:
   * Inside <div class="content"> insert the following:
   * <!-- Long-form syntax: -->  
     <ng-template [appIsAuth]="true">  
      <p>You have access to privileged information.</p>  
     </ng-template>
   * *In this example, the content within the <p> will only be rendered if the appIsAuth property in the component is true. Otherwise, the content will not be displayed.*

### 3.2 Inspect Changes

1. Start Angular Development Server if not yet started:

* npx -p @angular/cli ng serve
* *Otherwise refresh the browser tab to see updated view.*

1. Inspect the Rendered Screen, you should see “You have access to privileged information.” paragraph.

### 3.3 Apply the Directive using Short-form syntax

1. Open src/app/app.component.html file and do the following:
   * Inside <div class="content"> replace Long-form directive declaration syntax with the Shorthand one
   * <!-- Shorthand syntax: -->  
     <p \*appIsAuth="true">You have access to privileged information.</p>
   * *In this example, the content within the <p> will only be rendered if the appIsAuth property in the component is true. Otherwise, the content will not be displayed.*

### 3.4 Inspect Changes

1. Start Angular Development Server if not yet started:

* npx -p @angular/cli ng serve
* *Otherwise refresh the browser tab to see updated view.*

1. Inspect the Rendered Screen, you should see “You have access to privileged information.” paragraph.