

## Directives.pdf

## You

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## Genie

AngularJS comes with a variety of inbuilt directives that we can use to manipulate the HTML. Below is the explanation of all AngularJS inbuilt directives with examples:

1. **\*\*ng-app\*\*** - It initializes an AngularJS application and is typically placed at the root element of an HTML document.

Example:

```
...
<!DOCTYPE html>
<html>
<head>
  <title>ng-App Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="">
  <h1>Hello, World!</h1>
  <p>This is an example of ng-app directive.</p>
</body>
</html>
...
```

2. **\*\*ng-model\*\*** - It binds the value of an HTML control (input, select, textarea) to a variable or expression. It creates a two-way binding between the view and the model.

Example:

```
...
<!DOCTYPE html>
<html>
<head>
  <title>ng-Model Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="">
  <div>
    <label for="name">Name:</label>
    <input type="text" id="name" ng-model="name">
    <p>Hello, {{ name }}!</p>
  </div>
</body>
</html>
...
```

3. **\*\*ng-bind\*\*** - It binds the content of an HTML element to a variable or expression. It is a one-way data binding and updates the view whenever the model changes.

Example:

...

```

<!DOCTYPE html>
<html>
<head>
  <title>ng-Bind Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="">
  <div>
    <p ng-bind="'Hello, World!'"></p>
  </div>
</body>
</html>

```

4. **\*\*ng-repeat\*\*** - It repeats an HTML element for each item in an array or object. It is used to generate a list of items dynamically.

Example:

```

<!DOCTYPE html>
<html>
<head>
  <title>ng-Repeat Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="">
  <ul>
    <li ng-repeat="fruit in ['Apple', 'Banana', 'Cherry', 'Grapes']">{{ fruit }}</li>
  </ul>
</body>
</html>

```

5. **\*\*ng-click\*\*** - It defines an AngularJS expression to be executed when an element is clicked.

Example:

```

<!DOCTYPE html>
<html>
<head>
  <title>ng-Click Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="" ng-init="count=0">
  <button ng-click="count = count + 1">Click Me!</button>
  <p>You have clicked the button {{ count }} times.</p>
</body>
</html>

```

6. **\*\*ng-show\*\*** - It shows an HTML element based on the value of an expression. If the expression returns true, the element is displayed; otherwise, it is hidden.

Example:

```

<!DOCTYPE html>
<html>

```

```

<head>
  <title>ng-Show Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="" ng-init="isVisible=true">
  <button ng-click="isVisible=!isVisible">Toggle Visibility</button>
  <p ng-show="isVisible">This paragraph will show or hide based on the button click.</p>
</body>
</html>

```

7. **ng-hide** - It hides an HTML element based on the value of an expression. If the expression returns true, the element is hidden; otherwise, it is displayed.

Example:

```

<!DOCTYPE html>
<html>
<head>
  <title>ng-Hide Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>
</head>
<body ng-app="" ng-init="isVisible=false">
  <button ng-click="isVisible=!isVisible">Toggle Visibility</button>
  <p ng-hide="isVisible">This paragraph will show or hide based on the button click.</p>
</body>
</html>

```

8. **ng-disabled** - It disables an HTML element based on the value of an expression. If the expression returns true, the element is disabled; otherwise, it is enabled.

Example:

```

<!DOCTYPE html>
<html>
<head>
  <title>ng-Disabled Directive</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></script>

```

Sure, here's an explanation of all the inbuilt directives in AngularJS with examples:

#### 1. ng-app:

Defines the root element of an AngularJS application. This directive initializes the application and can be placed on any HTML element.

#### 2. ng-init:

Sets the initial values of variables for a controller. It is mainly used as a quick shortcut to initialize some data.

Example:

```

<div ng-init="name='John'">
  {{name}}
</div>

```

### 3. ng-model:

Binds an input element to a property on the scope. The value updates automatically as the user types.

Example:

```
...  
<input type="text" ng-model="name">  
...
```

### 4. ng-repeat:

Iterates over a collection and creates a new instance of a template for each item in the collection.

Example:

```
...  
<ul>  
  <li ng-repeat="item in items">{{item}}</li>  
</ul>  
...
```

### 5. ng-show/ng-hide:

Conditionally displays or hides an element based on an expression.

Example:

```
...  
<div ng-hide="isVisible">Hide Me!</div>  
...
```

### 6. ng-if:

Conditionally adds or removes an element from the DOM based on an expression.

Example:

```
...  
<div ng-if="isShowing">Show Me!</div>  
...
```

### 7. ng-switch:

Conditionally renders one HTML block from multiple blocks based on an expression.

Example:

```
...  
<div ng-switch="color">  
  <div ng-switch-when="red">This is Red</div>  
  <div ng-switch-when="green">This is Green</div>  
  <div ng-switch-default>Not Sure What Color This Is</div>  
</div>  
...
```

### 8. ng-class:

Applies one or more CSS classes to an element based on an expression.

Example:

```
...  
<div ng-class="{error: isError, warning: isWarning}">Some Content</div>  
...
```

### 9. ng-click:

Specifies custom behavior when an element is clicked.

Example:

```

<<
<button ng-click="doSomething()">Click Me!</button>
>>

```

10. ng-submit:

Executes custom behavior when a form is submitted.

Example:

```

<<
<form ng-submit="doSomething()">
  <input type="text" ng-model="name">
  <button type="submit">Submit</button>
</form>
>>

```

These are the most commonly used built-in directives in AngularJS.

## You

what is ng controller with example

## Genie

In AngularJS, the `ng-controller` directive attaches a controller class to the view. This is usually done in the HTML markup.

Here's an example:

```

<<`html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>ng-controller Example</title>

  <!-- Load AngularJS from CDN -->
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></script>
</head>
<body ng-app="myApp">

  <div ng-controller="MyController">
    {{ greeting }}
  </div>

  <script>
    angular.module("myApp", [])
      .controller("MyController", function($scope) {
        $scope.greeting = "Hello World!";
      });
  </script>

</body>
</html>

```

```\n\nIn this example, we have defined an AngularJS module named `myApp`. The module has a single controller named `MyController`.

We then use the `ng-controller` directive to attach `MyController` to a div element. Inside the div, we use the expression `**{{ greeting }}**` to output the value of the `greeting` property defined on the `\$scope` object inside `MyController`.

When the page is loaded, the output will be "Hello World!".