## AngularJS Directives:

We used directives in our first AngularJS application section. Here, we will learn directives in detail.

Directives are markers on a DOM element that tell AngularJS to attach a specified behavior to that DOM element or even transform the DOM element and its children. In short, it extends the HTML.

Most of the directives in AngularJS are starting with ng- where ng stands for Angular. AngularJS includes various built-in directives. In addition to this, you can create custom directives for your application.

The following table lists the important built-in AngularJS directives.

Directive Description

ng-app Auto bootstrap AngularJS application.

ng-init Initializes AngularJS variables

ng-model Binds HTML control's value to a property on the $scope object.

ng-controller Attaches the controller of MVC to the view.

ng-bind Replaces the value of HTML control with the value of specified AngularJS expression.

ng-repeat Repeats HTML template once per each item in the specified collection.

ng-show Display HTML element based on the value of the specified expression.

ng-readonly Makes HTML element read-only based on the value of the specified expression.  
  
Click here to make the input field readonly:<input type="checkbox" ng-model="all"><br>

<br>

<input type="text" ng-readonly="all">

ng-disabled Sets the disable attribute on the HTML element if specified expression evaluates to true.

ng-if Removes or recreates HTML element based on an expression.

ng-click Specifies custom behavior when an element is clicked.

Ng-Repeat Example

<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>

<body ng-app="myApp" ng-controller="myCtrl">

<h1 ng-repeat="x in records">{{x}}</h1>

<script>

var app = angular.module("myApp", []);

app.controller("myCtrl", function($scope) {

$scope.records = [

"Alfreds Futterkiste",

"Berglunds snabbköp",

"Centro comercial Moctezuma",

"Ernst Handel",

]

});

</script></body></html>

**//Element Directive**  
<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>

<body ng-app="myApp">

<my-directive></my-directive>

<script>

var app = angular.module("myApp", []);

app.directive("myDirective", function() {

return {

template : "<h1>Made by a directive!</h1>"

};

});

</script></body></html>  
  
//Attribute Directive  
  
|<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>

<body ng-app="myApp">

<div w3-test-directive></div>

<script>

var app = angular.module("myApp", []);

app.directive("w3TestDirective", function() {

return {

template : "<h1>Made by a directive!</h1>"

};

});

</script>

</body>

</html>

//Comment Directive  
<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>

<body ng-app="myApp">

<!-- directive: my-directive -->

<script>

var app = angular.module("myApp", []);

app.directive("myDirective", function() {

return {

restrict : "M",

replace : true,

template : "<h1>Made by a directive!</h1>" };});</script>

<p><strong>Note:</strong> We've added the <strong>replace</strong> property in this example, otherwise the comment would be invisible.</p>

<p><strong>Note:</strong> You must add the value "M" to the <strong>restrict</strong> property to be able to invoke the directive from a comment.</p>

</body>

</html>

//Class

<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>

<body ng-app="myApp">

<div class="w3-test-directive"></div>

<script>

var app = angular.module("myApp", []);

app.directive("w3TestDirective", function() {

return {

restrict : "C",

template : "<h1>Made by a directive!</h1>"

};

});

</script>

<p><strong>Note:</strong> You must add the value "C" to the restrict property to be able to invoke the directive from a class name.</p>

</body>

</html>