

ANGULARJS

AngularJS is a JavaScript Framework

AngularJS Extends HTML

AngularJS extends HTML with **ng-directives**.

- The **ng-app** directive defines an AngularJS application.
- The **ng-model** directive binds the value of HTML controls (input, select, textarea) to application data.
- The **ng-bind** directive binds application data to the HTML view.

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

ANGULARJS EXAMPLE

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_intro

```
<!DOCTYPE html>
<html>
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>
<body>

<div ng-app="">
  <p>Name: <input type="text" ng-model="name"></p>
  <p ng-bind="name"></p>
</div>

</body>
</html>
```

ANGULARJS DIRECTIVES

- AngularJS directives are HTML attributes with an **ng** prefix.

AngularJS Example

The ng-init directive initializes AngularJS application variables.

```
<div ng-app="" ng-init="firstName='John'>  
  
<p>The name is <span ng-bind="firstName"></span></p>  
  
</div>
```

ANGULARJS EXPRESSIONS

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_intro_expression

AngularJS expressions are written inside double braces: **{{ expression }}**.

```
<div ng-app="">
  <p>My first expression: {{ 5 + 5 }}</p>
</div>

</body>
</html>
```

ANGULARJS APPLICATIONS

- AngularJS **modules** define AngularJS applications.
- AngularJS **controllers** control AngularJS applications.
- The **ng-app** directive defines the application, the **ng-controller** directive defines the controller.

ANGULARJS APPLICATION EXAMPLE

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_intro_controller

```
<div ng-app="myApp" ng-controller="myCtrl">  
First Name: <input type="text" ng-model="firstName"><br>  
Last Name: <input type="text" ng-model="lastName"><br>  
<br>  
Full Name: {{firstName + " " + lastName}}  
</div>  
  
<script>  
var app = angular.module('myApp', [ ]);  
app.controller('myCtrl', function($scope) {  
    $scope.firstName= "John";  
    $scope.lastName= "Doe";  
});  
</script>
```

NG_REPEAT

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_scope_repeat

```
<div ng-app="myApp" ng-controller="myCtrl">
<ul>
    <li ng-repeat="x in names">{{x}}</li>
</ul>
</div>

<script>

var app = angular.module('myApp', []);
app.controller('myCtrl', function($scope) {
    $scope.names = [ "Emil" , "Tobias" , "Linus" ];
});

</script>
```

ANGULARJS FILTERS

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_filters_uppercase

AngularJS provides filters to transform data:

- `currency` Format a number to a currency format.
- `date` Format a date to a specified format.
- `filter` Select a subset of items from an array.
- `json` Format an object to a JSON string.
- `limitTo` Limits an array/string, into a specified number of elements/characters.
- `lowercase` Format a string to lower case.
- `number` Format a number to a string.
- `orderBy` Orders an array by an expression.
- `uppercase` Format a string to upper case.

ANGULARJS SERVICES

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_services

What is a Service?

In AngularJS, a service is a function, or object, that is available for, and limited to, your AngularJS application.

- the `$location` service.
- the `$http` service
- the `$timeout` service
- the `$interval` service

ANGULARJS AJAX - \$HTTP

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_services_http

Methods

- `.delete()`
- `.get()`
- `.head()`
- `.jsonp()`
- `.patch()`
- `.post()`
- `.put()`

Properties

- `.config` the object used to generate the request.
- `.data` a string, or an object, carrying the response from the server.
- `.headers` a function to use to get header information.
- `.status` a number defining the HTTP status.
- `.statusText` a string defining the HTTP status.

ANGULARJS TABLES

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_tables_css

```
<div ng-app="myApp" ng-controller="customersCtrl">
<table>
  <tr ng-repeat="x in names | orderBy : 'Country'">
    <td>{{ x.Name }}</td>
    <td>{{ x.Country }}</td>
  </tr>
</table>
</div>
<script>
var app = angular.module('myApp', []);
app.controller('customersCtrl', function($scope, $http) {
  $http.get("customers.php")
    .then(function (response) {$scope.names = response.data.records;});
})
</script>
```

ANGULARJS SELECT BOXES

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_select

```
<div ng-app="myApp" ng-controller="myCtrl">
<select ng-model="selectedName" ng-options="x for x in names">
</select>
</div>

<script>

var app = angular.module('myApp', []);
app.controller('myCtrl', function($scope) {
    $scope.names = [ "Emil", "Tobias", "Linus" ];
} );

</SCRIPT>
```

ANGULARJS HTML DOM

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_html_show

- The **ng-show** directive shows or hides an HTML element.

```
<div ng-app="">

<p ng-show="true">I am visible.</p>

<p ng-show="false">I am not visible.</p>

</div>
```

- The **ng-hide** directive

ANGULARJS EVENTS

- ng-blur
- ng-change
- ng-click
- ng-copy
- ng-cut
- ng-dblclick
- ng-focus
- ng-keydown
- ng-keypress
- ng-keyup
- ng-mousedown
- ng-mouseenter
- ng-mouseleave
- ng-mousemove
- ng-mouseover
- ng-mouseup
- ng-paste

ANGULARJS FORMS

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_form

```
<div ng-app="myApp" ng-controller="formCtrl">
  <form novalidate>
    First Name:<br>
    <input type="text" ng-model="user.firstName"><br>
    Last Name:<br>
    <input type="text" ng-model="user.lastName">
    <br><br>
    <button ng-click="reset()">RESET</button>
  </form>
  <p>form = {{user}}</p>
  <p>master = {{master}}</p>
</div>
```

ANGULARJS FORM VALIDATION

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_validate_email

```
<form name="myForm">

<input type="email" name="myInput" ng-model="myInput">

</form>

<p>The input's valid state is:</p>
<h1>{ myForm.myInput.$valid }</h1>
```

ANGULARJS APPLICATION

https://www.w3schools.com/angular/tryit.asp?filename=try_ng_app5

The screenshot shows a simple AngularJS application titled "My Shopping List". The main content area displays a list of items: "Milk", "Bread", "Cheese", and "wine". Each item has a small "x" icon to its right, likely for deletion. Below the list is a form input field containing "wine" and a green "Add" button to its right. The entire application is contained within a light gray box.

| My Shopping List | |
|------------------|---|
| Milk | x |
| Bread | x |
| Cheese | x |
| wine | x |

wine Add