input[text] DIRECTIVE IN ANGULARJS

- **input [text]** is one of the AngularJS input directive in **module ng.**

- AnguarJS directive **input [text]** is used to create a standard HTML text input with angular data binding.

- It is inherited by the **input** elements.

- This directive executes at priority level 0.

Syntax for input [text] directive in AngularJS:

```
<input type="text"

 [name="string"]

 [required="string"]

 [ng-required="string"]

 [ng-minlength="number"]

 [ng-maxlength="number"]

 [pattern="string"]

 [ng-pattern="string"]

 [ng-change ="string"]

 <ng-trim="boolean"]>
```

Parameter Values:

Parameters	Type	Description
ngModel	string	Defines angular expression to data-bind to.
name (optional)	string	Name of the form under which the control is available
required (optional)	string	Denotes the required validation error key if the value is not entered.
ngRequired (optional)	string	Denotes required attribute and required validation limit to the element when the ngRequired expression evaluates to true. Instead of required use ngRequired for data-bind to the required attribute.
ngMinlength (optional)	number	States the minlength validation error key if the value is shorter than minlength.
ngMaxlength (optional)	number	States the maxlength validation error key if the value is longer than maxlength.
pattern (optional)	string	It is related to ngPattern except that the attribute value is the actual string. It contains the regular expression body that is converted to a regular expression as in the ngPattern directive.
ngPattern (optional)	string	States pattern validation error key if the ng model value does not match RegExp found by evaluating the Angular expression given in the attribute value.

		If the expression evaluates to a RegExp object, then this is used directly.
		If the expression evaluates to a string, then it will be converted to a RegExp after wrapping it in ^ and $ characters.
		For instance, "abc" will be converted to new RegExp ('^abc$').
ngChange (optional)	string	An expression of Angular to be executed when input changes due to user interaction with the input element.
ngTrim (optional)	boolean	If set to false Angular will not automatically trim the input. Parameter is ignored for input [type=password] controls, which will never trim the input and the default value is true.

Sample coding for input[text] directive in AngularJS

```html
<!DOCTYPE html>
<html>
   <head>
      <title>Wikitechy AngularJS Tutorial</title>
      <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.6/angular.min.js">
      </script>
   </head>
   <body>
      <form ng-app="myApp" name="Form" ng-controller="TextCtrl">
         <h3>input[text] directive example in AngularJS</h3>
         Single word:
         <input type="text" name="input" ng-model="text"
            ng-pattern="/^[a-zA-Z]+$/"  ng-trim="false" required >
         <span  ng-show="Form.input.$error.required"><br/><br/>
            Required!</span>
         <span ng-show="Form.input.$error.pattern"><br/><br/>
            Single Word only!</span>
         <p>text = {{ text }}</p>
         <p>Form.input.$valid = {{ Form.input.$valid }}</p>
         <p>Form.input.$error = {{ Form.input.$error }}</p>
         <p>Form.$valid = {{ Form.$valid }}</p>
         <p>Form.$error.required = {{ !!Form.$error.required }}</p>
      </form>
      <script>
         var app = angular.module('myApp', []);
         app.controller('TextCtrl', function($scope) {
         });
      </script>
   </body>
</html>
```

Code Explanation input[text] directive in AngularJS:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Wikitechy AngularJS Tutorial</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/
        1.5.6/angular.min.js"></script>
    </head>
    <body>
        <form ng-app="myApp" name="Form" ng-controller="TextCtrl">
            <h3>input[text] directive example in AngularJS</h3>
            Single word:
            <input type="text" name="input" ng-model="text"

                ng-pattern="/^[a-zA-Z]+$/"  ng-trim="false" required >
        <span  ng-show="Form.input.$error.required"><br/><br/>
            Required!</span>
        <span ng-show="Form.input.$error.pattern"><br/><br/>
            Single Word only!</span>
            <p>text = {{ text }}</p>
            <p>Form.input.$valid = {{ Form.input.$valid }}</p>
            <p>Form.input.$error = {{ Form.input.$error }}</p>
            <p>Form.$valid = {{ Form.$valid }}</p>
            <p>Form.$error.required = {{ !!Form.$error.required }}</p>
        </form>
        <script>
            var app = angular.module('myApp', []);
            app.controller('TextCtrl', function($scope) {
            });
        </script>
    </body>
</html>
```
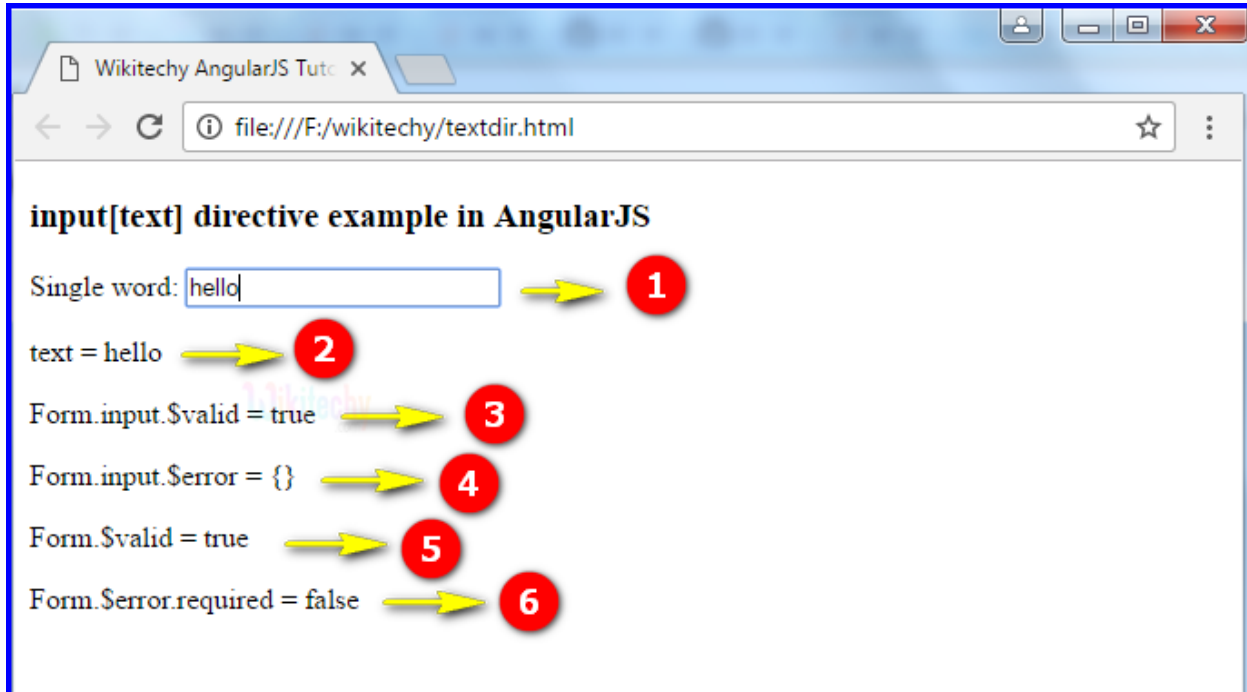
1. The **ng-app** specifies the root element (**"myapp"**) to define AngularJS application.

2. Ng-controller specifies the application controller in AngularJS the controller value is given as **"TextCtrl"**.

3. **"text"** is declare the **type** value of the <input> tag.

4. The **ng-model** bind an input field value to AngularJS application variable (**"text"**).

5. ng-pattern is used to specify pattern model (**like "/^[a-zA-Z]+$/"**)

6. **ng-trim="false"** means it is not automatically trim in the input.

7. ng-show directive is used to hides HTML elements. If the required directive shows an error the content is displayed like **"Required"**

8. ng-show directive is used to hides HTML elements. If the required directive shows an error the content is displayed like **"Single Word Only".**

9. **Form.input.$valid** to checks the valid text or not. If the text in the input field then the output will be displays as true otherwise false.

10. **Form.input.$error** to check whether the valid text or not .If the text specified in error it through the exception (Like "required"="true) otherwise it is an empty curly braces ({ }).

11. **Form.$valid** is used to check whether the form is valid or not and output will be displayed in <p> tag.

12. **Form.error.$required** is used to text is required or not. If the text is required and output will be displayed as false otherwise true.

Sample Output input[text] directive in AngularJS:

1. If the user type any text in the input field.

2. The output will be displays as **text=hello**

3. The output displays true because it is consider as a text.

4. The output displays empty curly braces it means does not thrown any error.

5. The output displays true it is valid text.

6. If the text box does not empty so the output displays as false.

input[text] directive example in AngularJS

Single word: [   ] → **1**

Required! → **2**

text =

Form.input.$valid = false

Form.input.$error = {"required":true}

Form.$valid = false

Form.$error.required = true

1. If the user does not type any text in the input field.
2. The output shows an error **"Required".**

1. If the user type double word in the input field.

2. The output displays as empty (**text=**)

input[text] directive example in AngularJS

Single word: 123456 ⟶ ①

Single Word only!

text = ⟶ ②

Form.input.$valid = false

Form.input.$error = {"pattern":true}

Form.$valid = false

Form.$error.required = false

1. If the user type any number in the input field.

2. The output displays as empty (**text=**) because the pattern is **(a-z).**