form DIRECTIVE IN ANGULARJS

- AngularJS alters the default behavior of the **<form**> element.
- Form Directive in AngularJS is used to create a **FormController**.
- The form is specified with the name attribute, then the form controller available on the current scope.
- In AngularJS forms are nested which means the outer form is valid when all the sub forms are said to be valid.
- Browser does not allow the **nesting <form>** elements.
- Angular delivers the **ng-form** directive, which acts similarly to the **form** but the form can be nested.
- Nested form is useful, **for example**: if the authority of the sub group control is needs to be determined the form.
- If the action attribute is not specified the forms in AngularJS prevented the default action when submitting the form to the server.
- While submitting the form there are two ways to specify the type of the javascript method they are:
    - ng-submit – **ngsubmit** directive on the form element.
    - ng-click-**ngclick** directive on the input field of type submit.
- To preventing the double execution of the handler the user can use only one directive either ng-submit or ng-click.

Syntax for form directive in AngularJs:

```
<form name="formname"></form>
```

Parameter values:

Value	Description
name (optional)	Name of the form. Denotes the form controller will be published into related scope, under this name.

Properties of the form directive in AngularJS application:

- AngularJS properties defines a current state of the form.
- The current value of each state denotes a Boolean value (i.e true or false)

Properties	Description
$pristine	Denotes no fields has not been modified.
$dirty	One or more fields has been changed.
$invalid	Content in the form is not valid.
$valid	Content in the form is valid.
$submitted	Content in the form is submitted.

CSS Class Properties of the form directive in AngularJS application:

AngularJS classes used to style forms according to their state and the classes are removed means if the current state value is false.

Properties	Description
ng-pristine	Denotes no fields has not been modified.
ng-dirty	One or more fields has been changed.
ng-invalid	Content in the form is not valid.
ng-valid	Content in the form is valid.
ng-valid-key	One key for each validation. (Example: more than one thing to be validated.) ng-valid-required
ng-invalid-key	Example: ng-invalid-required

Sample coding for form directive in AngularJs:

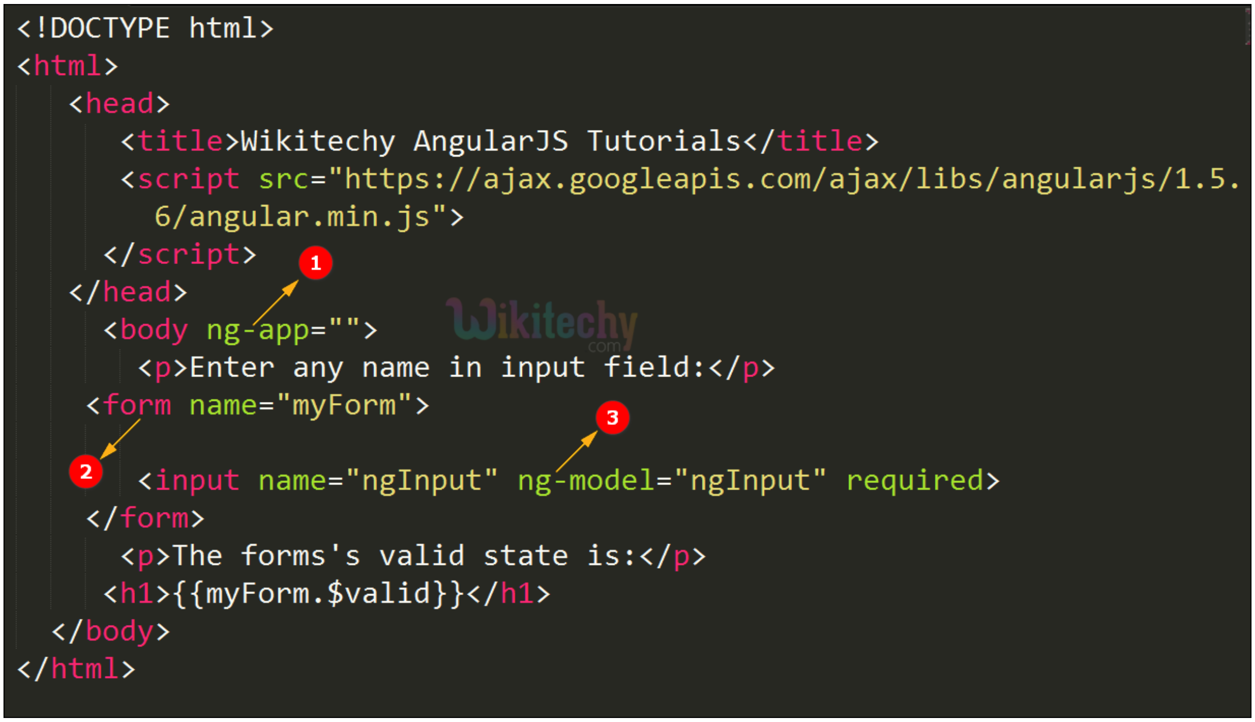
```
<!DOCTYPE html>
<html>
    <head>
        <title>Wikitechy AngularJS Tutorials</title>
       <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.6/angular.min.js" >
       </script>
   </head>
   <body ng-app="">
          <p>Enter any name in input field:</p>
     <form name="myForm">
          <input name="ngInput" ng-model="ngInput" required>
     </form>
           <p>The forms's valid state is:</p>
           <h1>{{myForm.$valid}}</h1>
   </body>
</html>
```

Form directive in AngularJs:

Form name is given as **“myForm”**

```
     <form name="myForm">
          <input name="ngInput" ng-model="ngInput" required>
     </form>
```

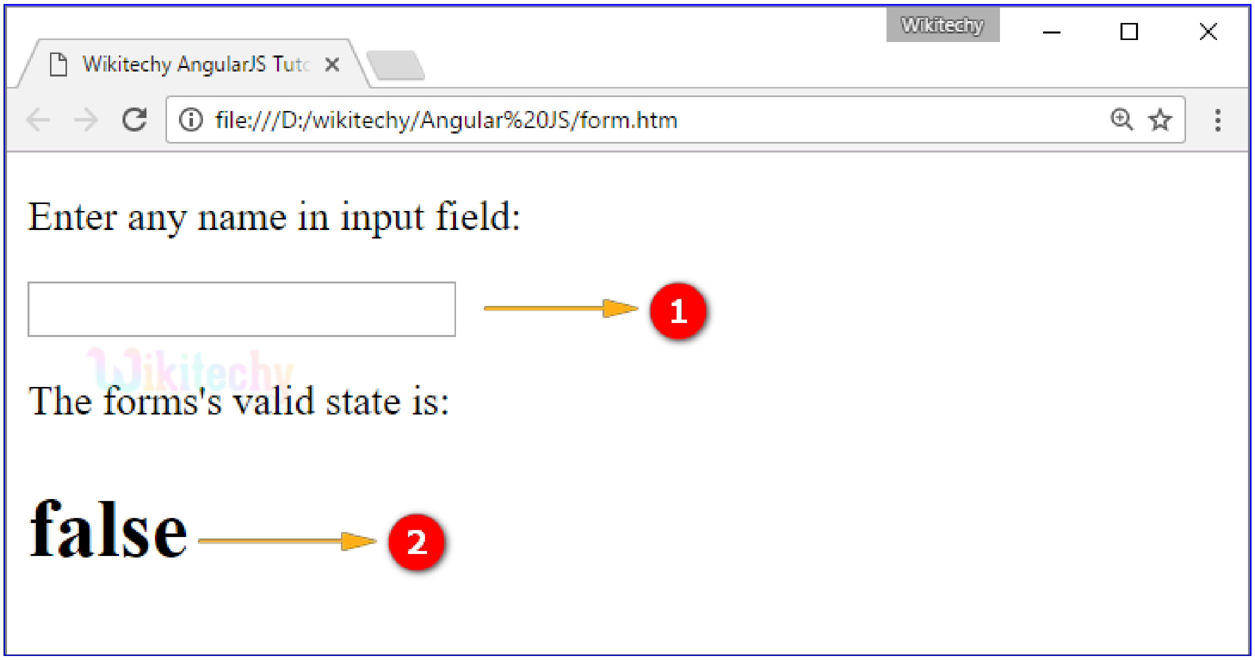
Code Explanation for form directive in AngularJs:



```
<!DOCTYPE html>
<html>
   <head>
      <title>Wikitechy AngularJS Tutorials</title>
      <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.
        6/angular.min.js">
     </script>
   </head>
     <body ng-app="">
       <p>Enter any name in input field:</p>
    <form name="myForm">

       <input name="ngInput" ng-model="ngInput" required>
    </form>
      <p>The forms's valid state is:</p>
     <h1>{{myForm.$valid}}</h1>
  </body>
</html>
```

1. The **ng-app** specifies the root element (e.g. <body> or <html> or <div> tags) to define AngularJS application.
2. Form is used to specify the HTML form in AngularJS.
3. ng-model binds the value from the HTML control to application data.

Sample Output for form directive in AngularJs:

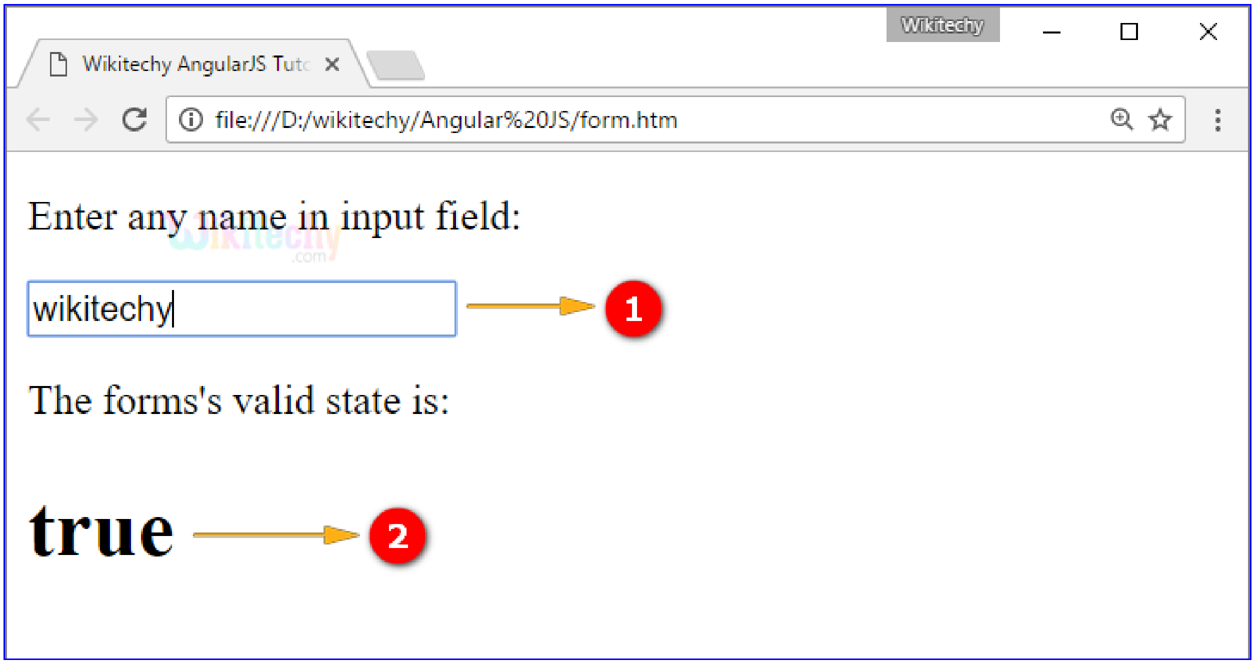


Enter any name in input field:

The forms's valid state is:

false

1. The **empty input field** is displayed in the output.
2. The form valid state is displayed as **false** because of the **empty input field.**



Enter any name in input field:

wikitechy

The forms's valid state is:

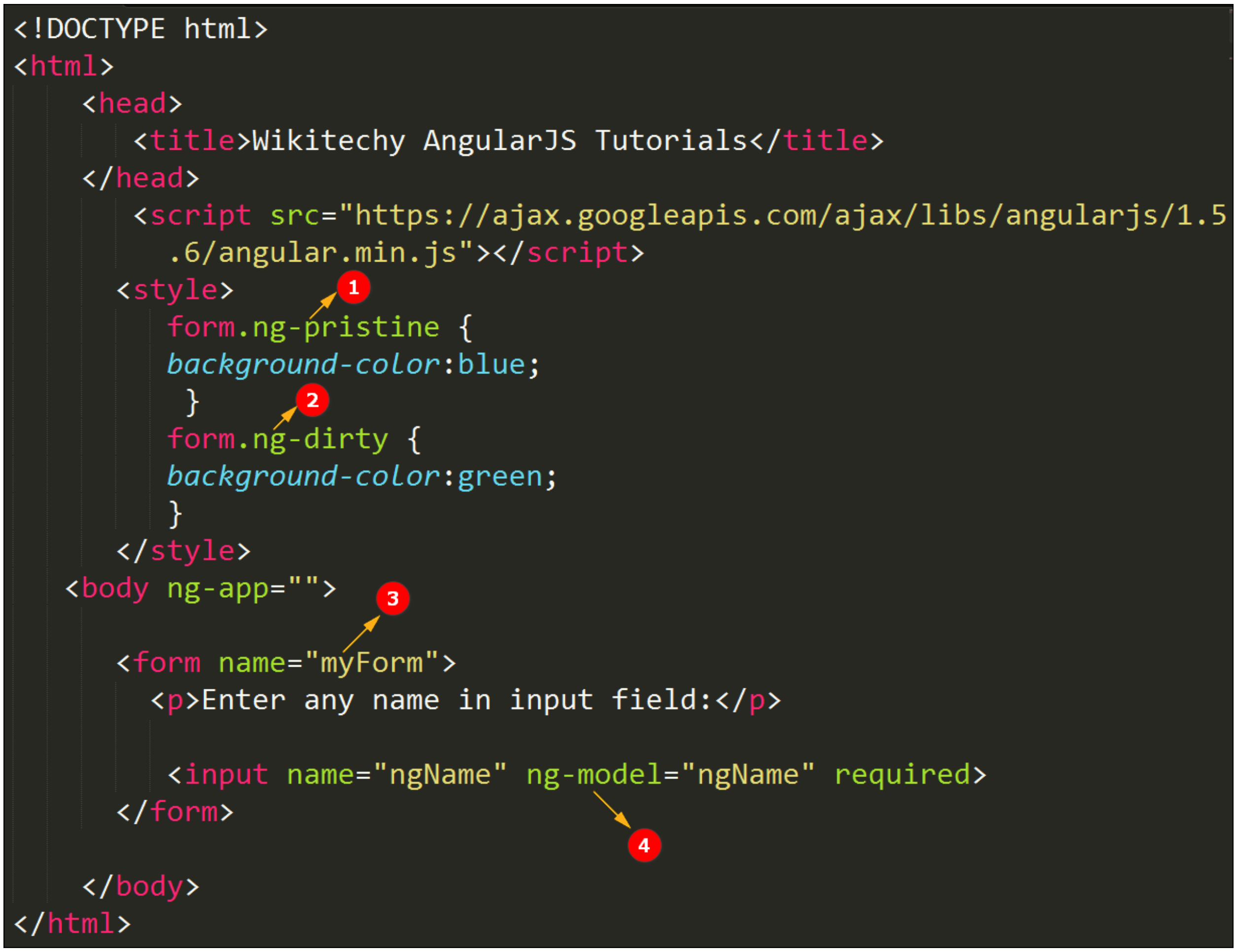
true

1. We can type any name in the input field (here wikitechy is the name which is displayed in the output).
2. The form valid state is displayed as **True** because of **name in input field.**

Sample coding for form directive with CSS Class in AngularJs:

```
<! DOCTYPE html>
<html>
   <head>
      <title>Wikitechy AngularJS Tutorials</title>
   </head>
   <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.6/angular.min.js"></script>
   <style>
      form.ng-pristine {
         background-color:blue;
      }
      form.ng-dirty {
         background-color:green;
      }
   </style>
   <body ng-app="">
      <form name="myForm">
         <p>Enter any name in input field:</p>
         <input name="ngName" ng-model="ngName" required>
      </form>
   </body>
</html>
```

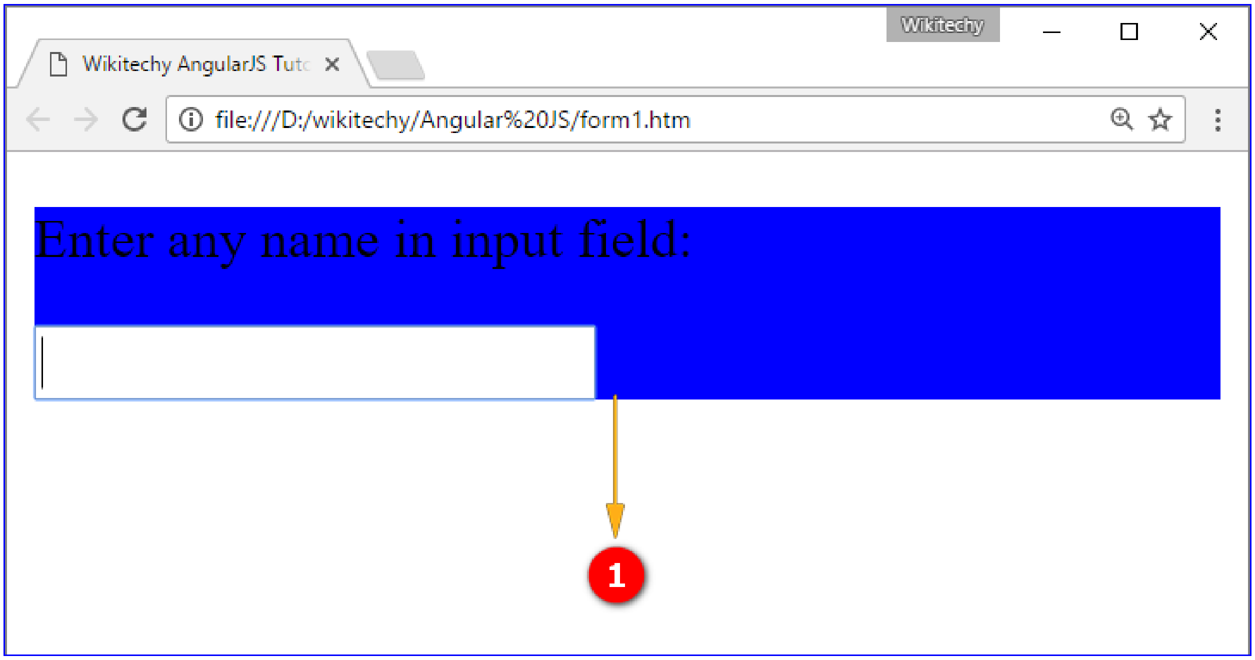
Code Explanation for form directive with CSS Class in AngularJs:



```
<!DOCTYPE html>
<html>
    <head>
        <title>Wikitechy AngularJS Tutorials</title>
    </head>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5
          .6/angular.min.js"></script>
      <style>
         form.ng-pristine {
         background-color:blue;
          }
         form.ng-dirty {
         background-color:green;
         }
      </style>
   <body ng-app="">

      <form name="myForm">
        <p>Enter any name in input field:</p>

          <input name="ngName" ng-model="ngName" required>
      </form>

    </body>
</html>
```

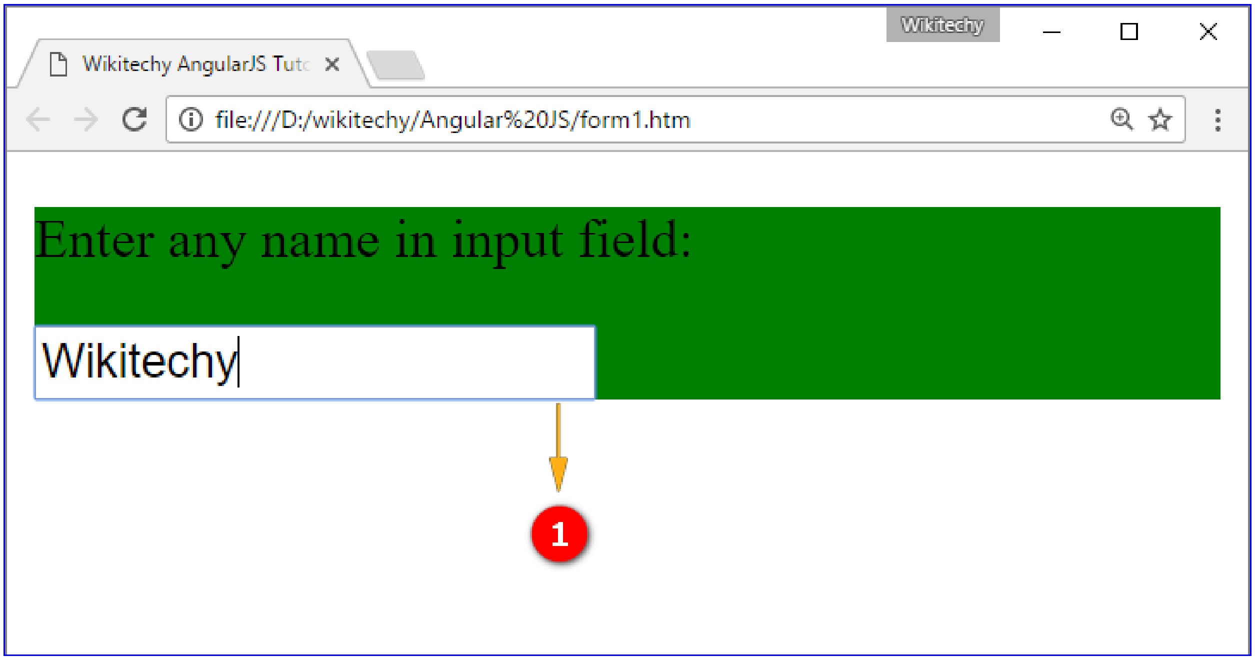
1. Ng-pristine is given for the model when the control has not been changed from the first compilation.
2. Ng-dirty is used to remove the ng-pristine class and sets into dirty state when the control has been changed from first compilation.
3. Myform is given as form name of the Angular application.
4. ng-model binds the value from the HTML control to application data.

Output for form directive with CSS Class in AngularJs:



Enter any name in input field:

1. The background color is displayed as blue in the output with empty input field.


Wikitechy AngularJS Tuto ×
Wikitechy
file:///D:/wikitechy/Angular%20JS/form1.htm
1

Enter any name in input field:

Wikitechy

1. The background color is displayed as green in the output when we type name in input field.