

VALIDATION IN ANGULARJS

- The AngularJS provides many additional supports such as [validation](#), [data-binding](#) to the HTML form.
- These are the input elements used in HTML form and these are validated by using AngularJS.
 - [<button>](#) element.
 - [<input>](#) element.
 - [<select>](#) element.
 - [<textarea>](#) element.
- AngularJS Validations are client-side validation, so we should use the server side validation for security aspects.

Sample code for Form validation 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>
  <h3>AngularJS HTML Form Validation </h3>
  <form ng-app="myApp" ng-controller="inputCtrl" name="myform">
    Enter Mobile Number :
      <input type="text" name="number" ng-model="number" required ng-
minlength="10" ng-maxlength="13" ng-pattern="/^[0-9]+$/" ng-
change="changefun()" >
      <span style="color:red" ng-show="myform.number.$dirty &&
myform.number.$invalid" >
        <span ng-show="myform.number.$error.required" >Number is
required.</span>
        <span ng-show="myform.number.$error.pattern" >Pattern does not
match </span>
        <span ng-show="myform.number.$error.minlength" >Minimum
length 10 char </span>
        <span ng-show="myform.number.$error.maxlength" >Maximum
length 13 char </span>
      </span>
      <p ng-show="myform.number.$valid" >Valid Number </p>
      <p>{{mychange}}</p>
      <input type="submit" value="submit" ng-click="Submit()" />
    </form>
    <script>
      var app = angular.module("myApp", []);
      app.controller("inputCtrl", function($scope) {
        $scope.changefun = function () {
          $scope.mychange = "text changed";
        };
      });
    </script>
  </body>
</html>
```

Code Explanation for Form validation in AngularJS:

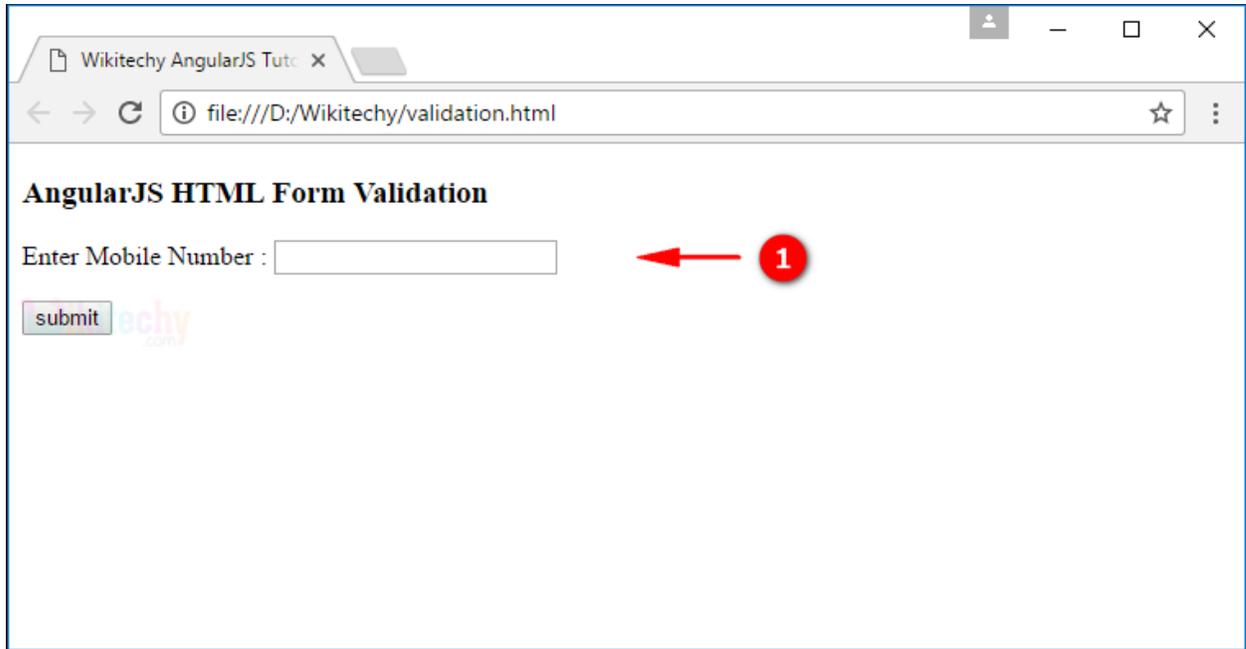
```
<!DOCTYPE html>
<html>
  <head>
    <title>Wikitechy AngularJS Tutorials</title>
    <script src="https://ajax.googleapis.
      com/ajax/libs/angularjs/1.5.6/angular.min.js"> </script>
  </head>
  <body>
    <h3>AngularJS HTML Form Validation </h3>
    <form ng-app="myApp" ng-controller="inputCtrl" name="myform">
      Enter Mobile Number :

      <input type="text" name="number" ng-model="number" required
      3 → ng-minlength="10" ng-maxlength="13" ng-pattern="/^[0-9]+$/"
      4 → ng-change="changefun()"
      5 →
      6 →
      7 →
      <span style="color:red" ng-show="myform.number.$dirty &&
      8 → myform.number.$invalid">
      9 → <span ng-show="myform.number.$error.required">Number is
        required.</span>
      10 → <span ng-show="myform.number.$error.pattern">Pattern does
        not match</span>
      11 → <span ng-show="myform.number.$error.minlength">Minimum
        length 10 char</span>
      12 → <span ng-show="myform.number.$error.maxlength">Maximum
        length 13 char</span>
      </span>
      13 → <p ng-show="myform.number.$valid">Valid Number</p>
      14 → <p>{{mychange}}</p>
      <input type="submit" value="submit" ng-click="Submit()" />
    </form>
    <script>
      var app = angular.module("myApp", []);
      app.controller("inputCtrl", function($scope) {
      15 → $scope.changefun = function() {
        $scope.mychange="text changed";
      };
      });
    </script>
  </body>
</html>
```

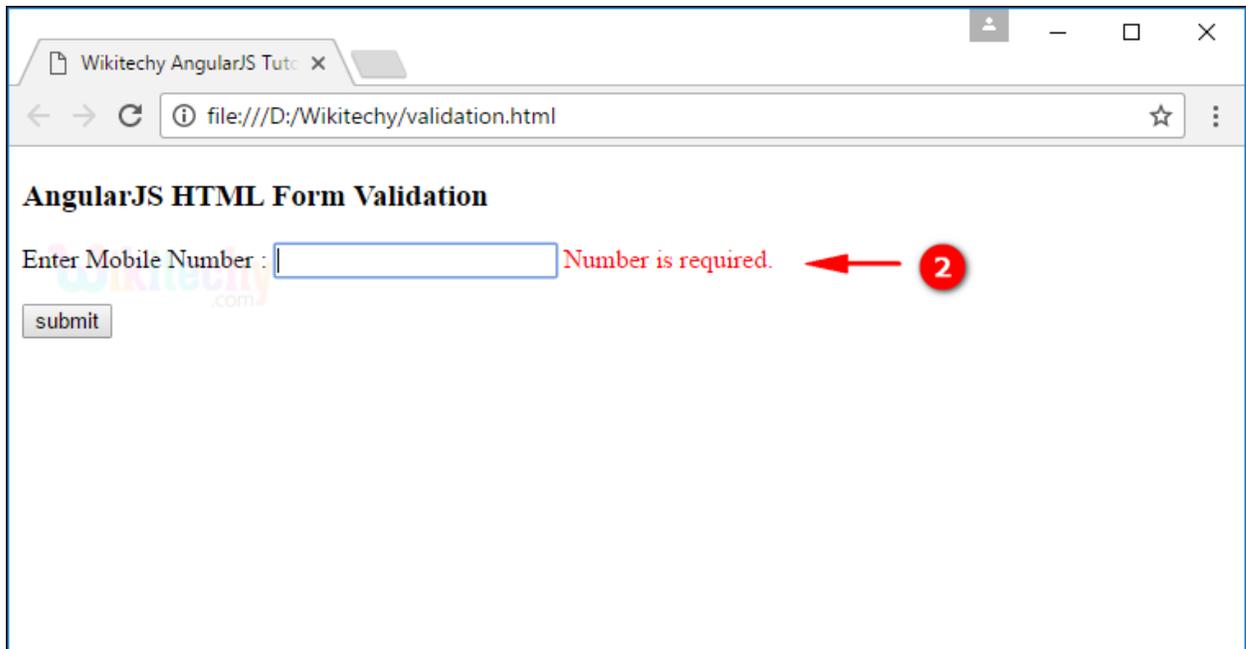
1. The **"myform"** is name of the form.
2. The **"required"** attribute is used to specify the textbox should not be empty on form submission.
3. The **"ng-minlength"** is used to specify the textbox should have minimum length 10 characters.
4. The **"ng-change"** is used to call the function **changefun()** when the value of textbox is changed.
5. The **"ng-maxlength"** is used to specify the textbox should not exceed maximum length 13 characters.
6. The **"ng-pattern"** is used to specify the textbox should match the pattern specified in the **regex**.
7. The **"\$dirty"** is used to check the textbox has been modified or not.
8. The **"\$invalid"** is used to check the textbox whether it has been modified or not.
9. The **** is used to display the warning on the required field error.
10. The **** is used to display the warning on pattern error.
11. The **** is used to display the warning on minlength error.
12. The **** is used to display the warning on maxlength error.
13. The **"\$valid"** is used to specify the textbox value should be valid.
14. The **"mychange"** is used to bind the mychange variable value.
15. The **"changefun"** is used to set the **mychange** value as **"text changed"**.



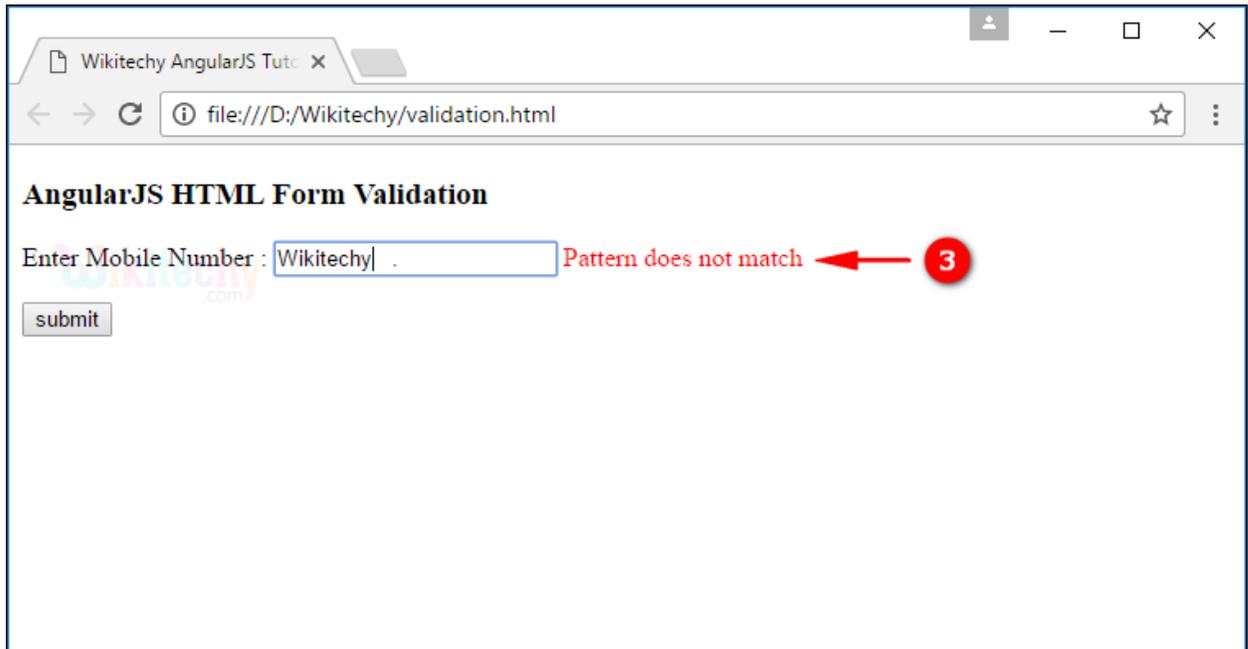
Sample Output for Form validation in AngularJS:



1. The form is displayed on page load.



2. If the textbox is empty then the required field error shows the warning.



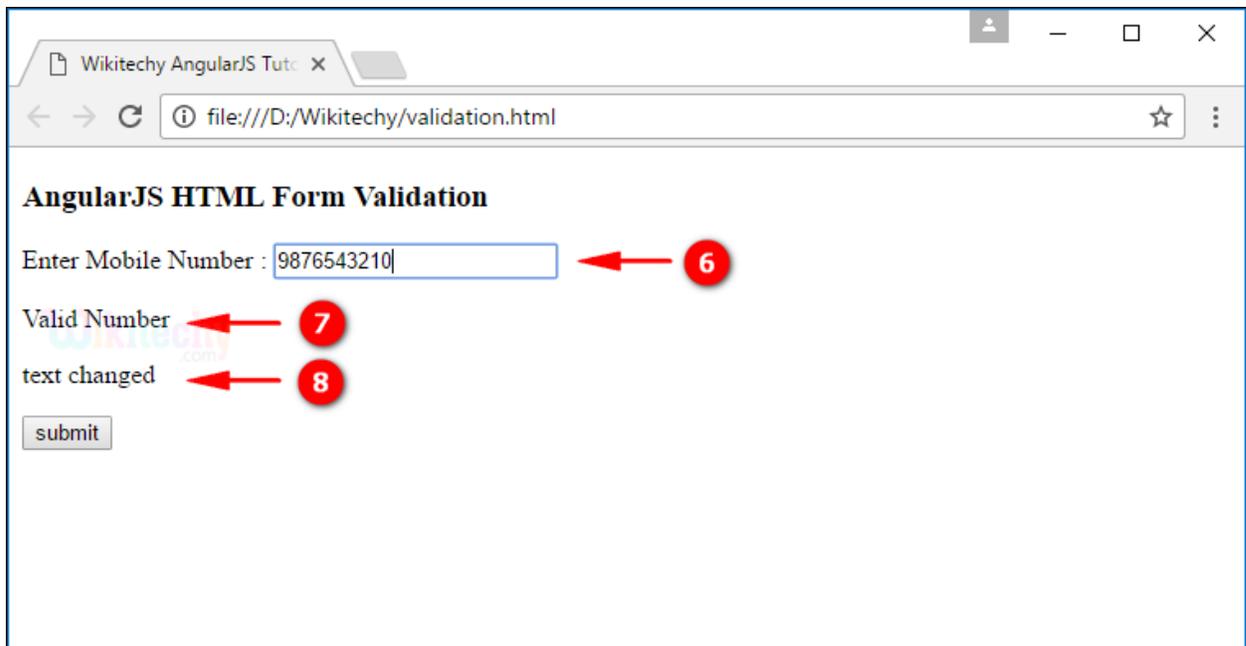
3. If the textbox does not match the pattern then the pattern error shows the warning.



4. If the textbox does not have the minimum character then the minlength error shows the warning.



5. If the textbox exceed the maximum character length then the maxlength error shows the warning.



6. When user enters valid mobile number there is no warning displayed.

7. **Valid Number** text shows when the **\$valid** is true.

8. **“text changed”** shows when the user change the textbox value.

