

# Full stack Development Lab

## Week 13: Write a Program on ngModel in Angular

### Description:

The ng-model directive binds the value of HTML controls (input, select, textarea) to application data.

## The ng-model Directive

With the **ng-model** directive you can bind the value of an input field to a variable created in AngularJS.

```
<div ng-app="myApp" ng-controller="myCtrl">  
  Name: <input ng-model="name">  
</div>
```

```
<script>  
var app = angular.module('myApp', []);  
app.controller('myCtrl', function($scope) {  
  $scope.name = "John Doe";  
});  
</script>
```

## Two-Way Binding

The binding goes both ways. If the user changes the value inside the input field, the AngularJS property will also change its value:

```
<div ng-app="myApp" ng-controller="myCtrl">  
  Name: <input ng-model="name">  
  <h1>You entered: {{ name }}</h1>  
</div>
```

## Validate User Input

The **ng-model** directive can provide type validation for application data (number, e-mail, required):

```
<form ng-app="" name="myForm">  
  Email:  
  <input type="email" name="myAddress" ng-model="text">
```

```
<span ng-show="myForm.myAddress.$error.email">Not a valid e-mail address</span>
</form>
```

In the example above, the span will be displayed only if the expression in the `ng-show` attribute returns `true`.

If the property in the `ng-model` attribute does not exist, AngularJS will create one for you.

## Application Status

The `ng-model` directive can provide status for application data (valid, dirty, touched, error):

```
<form ng-app="" name="myForm" ng-init="myText = 'post@myweb.com'">
  Email:
  <input type="email" name="myAddress" ng-model="myText" required>
  <h1>Status</h1>
  {{ myForm.myAddress.$valid }}
  {{ myForm.myAddress.$dirty }}
  {{ myForm.myAddress.$touched }}
</form>
```

## CSS Classes

The `ng-model` directive provides CSS classes for HTML elements, depending on their status:

### Example

```
<style>
input.ng-invalid {
  background-color: lightblue;
}

</style>
<body>

<form ng-app="" name="myForm">
  Enter your name:
  <input name="myName" ng-model="myText" required>
</form>
```

The `ng-model` directive adds/removes the following classes, according to the status of the form field:

- `ng-empty`
- `ng-not-empty`
- `ng-touched`
- `ng-untouched`

- ng-valid
- ng-invalid
- ng-dirty
- ng-pending
- ng-pristine

## Program:

```
<!DOCTYPE html>
<html>
<script src="angular.min.js">
</script>
<style>
.column {
    float: left;
    text-align: left;
    width: 49%;
}

.row {
    content: "";
    display: table;
}
</style>
<body ng-app="myApp" ng-controller="myController">
    <h4>Input Box-</h4>
    <div class="row">
        <div class="column">
            Name- <input type="text" ng-model="name">
            <pre> {{ name }} </pre>
            Checkbox- <input type="checkbox" ng-model="check">
            <pre> {{ check }} </pre>
            Radiobox- <input type="radio" ng-model="choice">
            <pre> {{ choice }} </pre>
            Number- <input type="number" ng-model="num">
            <pre> {{ num }} </pre>
            Email- <input type="email" ng-model="mail">
            <pre> {{ mail }} </pre>
            Url- <input type="url" ng-model="url">
```

```

        <pre> {{ url }} </pre>
    </div>
    <div class="column">
        Date: <input type="date" ng-model="date1"
(change)="log(date1)">
        <pre> Todays date: {{ date1+1 }} </pre>
        Datetime-local- <input type="datetime-local" ng-
model="date2">
        <pre> {{ date2+1 }} </pre>
        Time- <input type="time" ng-model="time1">
        <pre> {{ time1+1 }} </pre>
        Month- <input type="month" ng-model="mon">
        <pre> {{ mon+1 }} </pre>
        Week- <input type="week" ng-model="we">
        <pre> {{ we+1 }} </pre>
    </div>
</div>
</body>
<script>
    var app = angular.module('myApp', []);
    app.controller('myController', function($scope) {
        $scope.name = "full stack developer";
        $scope.check = "";
        $scope.rad = "";
        $scope.num = "";
        $scope.mail = "";
        $scope.url = "";
        $scope.date1 = "";
        $scope.date2 = "";
        $scope.time1 = "";
        $scope.mon = "";
        $scope.we = "";
        $scope.choice = "";
        $scope.c = function() {
            $scope.choice = true;
        };
    });
</script>
</html>

```

## Output:

← → ↻ file:///C:/files/eclipse/fsd\_week13/src/main/webapp/week13.html

**Input Box-**

Name-   
full stack developper

Checkbox- ☒  
true

Radiobox- ☒

Number-   
1

Email-   
subbu@gmail.com

Url-

Date-   
Todays date:Thu Apr 20 2023 00:00:00 GMT+0530 (India Standard Time)1

Datetime-local-   
1

Time-   
Thu Jan 01 1970 04:04:00 GMT+0530 (India Standard Time)1

Month-   
1

Week-   
1

**Result:** Thus, in the above program successfully executed without errors using angular JS in eclipse editor.