

**Name: Kaushik Kotian**

**Roll no.:30**

**Div : D15B**

**Batch : B**

## **EXPERIMENT NO.:3**

**Aim:** To study and implement angularjs.

### **Theory:**

AngularJS is a very powerful JavaScript Framework. It is used in Single Page Application (SPA) projects. It extends HTML DOM with additional attributes and makes it more responsive to user actions. AngularJS is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

## **Why to Learn AngularJS?**

AngularJS is an open-source web application framework. It was originally developed in 2009 by Misko Hevery and Adam Abrons. It is now maintained by Google. Its latest version is 1.2.21.

- AngularJS is a efficient framework that can create Rich Internet Applications (RIA).
- AngularJS provides developers an options to write client side applications using JavaScript in a clean Model View Controller (MVC) way.
- Applications written in AngularJS are cross-browser compliant. AngularJS automatically handles JavaScript code suitable for each browser.
- AngularJS is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

Overall, AngularJS is a framework to build large scale, high-performance, and easy-to-maintain web applications.

## 1. Create a simple html hello world project using angular js framework and apply ng-controller, ng-model and expressions

```
<!DOCTYPE html>

<html>

<head>

    <title>Hello World Project</title>

    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>

</head>

<body ng-app="helloWorldApp">

    <div ng-controller="HelloWorldController">

        <input type="text" ng-model="name" placeholder="Enter your
name">

        <p>Hello, {{name}}!</p>

    </div>

    <script>

        var app = angular.module('helloWorldApp', []);

        app.controller('HelloWorldController', function($scope) {

            $scope.name = 'World';

        });

    </script>

</body>
```

</html>

Kaushik

Hello, Kaushik!

## **2. Events and form validations in angular js.Create functions and add events, add html validators and use \$valid property of angular.js:**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>Student Registration Form</title>
```

```
  <script  
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">  
  </script>
```

```
  <style>
```

```
    body {  
      font-family: Arial, sans-serif;  
      background-color: #f4f4f4;  
    }
```

```
    .container {  
      display: flex;
```

```
    justify-content: center;
    align-items: flex-start;
    padding: 20px;
    flex-wrap: wrap;
}
```

```
form, .preview {
    margin: 10px;
    padding: 20px;
    border: 1px solid #ccc;
    border-radius: 5px;
    background-color: #fff;
}
```

```
form {
    border-color: #007bff;
}
```

```
.preview {
    border-color: #28a745;
}
```

```
label {
```

```
    color: #333;  
}  
  
input, select, button {  
    margin-top: 5px;  
    margin-bottom: 15px;  
    padding: 10px;  
    border-radius: 5px;  
    border: 1px solid #ccc;  
}
```

```
button {  
    background-color: #007bff;  
    color: white;  
    cursor: pointer;  
}
```

```
button:hover {  
    background-color: #0056b3;  
}
```

```
@media (max-width: 768px) {  
    .container {
```

```
        flex-direction: column;

        align-items: center;
    }
}
</style>

</head>

<body>

<div ng-app="studentApp" ng-controller="StudentFormController"
class="container">

    <form name="studentForm" ng-submit="submitForm()" novalidate>

        <div>

            <label for="name">Name: </label>

            <input type="text" id="name" name="name"
ng-model="student.name" required>

            <span ng-show="studentForm.name.$touched &&
studentForm.name.$invalid">Name is required.</span>

        </div> <br>

        <div>

            <label for="rollno">Roll No: </label>

            <input type="text" id="rollno" name="rollno"
ng-model="student.rollno" required>
```

```
<span ng-show="studentForm.rollno.$touched &&
studentForm.rollno.$invalid">Roll No is required.</span>
```

```
</div><br>
```

```
<div>
```

```
<label for="class">Class:</label>
```

```
<input type="text" id="class" name="class"
ng-model="student.class" required>
```

```
<span ng-show="studentForm.class.$touched &&
studentForm.class.$invalid">Class is required.</span>
```

```
</div><br>
```

```
<div>
```

```
<label for="email">Email:</label>
```

```
<input type="email" id="email" name="email"
ng-model="student.email" required>
```

```
<span ng-show="studentForm.email.$touched &&
studentForm.email.$invalid">Valid email is required.</span>
```

```
</div><br>
```

```
<div>
```

```
<label for="phone">Phone Number:</label>
```

```
<input type="tel" id="phone" name="phone"
ng-model="student.phone" required pattern="[0-9]{10}">
```

<span ng-show="studentForm.phone.\$touched &&  
studentForm.phone.\$invalid">Valid phone number is required.</span>

</div><br>

<div>

<label for="branch">Branch:</label>

<input type="text" id="branch" name="branch"  
ng-model="student.branch" required>

<span ng-show="studentForm.branch.\$touched &&  
studentForm.branch.\$invalid">Branch is required.</span>

</div><br>

<div>

<label>Gender:</label>

<input type="radio" id="male" name="gender"  
ng-model="student.gender" value="Male" required>

<label for="male">Male</label>

<input type="radio" id="female" name="gender"  
ng-model="student.gender" value="Female" required>

<label for="female">Female</label>

<span ng-show="studentForm.gender.\$touched &&  
studentForm.gender.\$invalid">Gender is required.</span>

</div><br>

<div>



```
<label for="year">Year of Study:</label>
<select id="year" name="year" ng-model="student.year" required>
  <option value="">Select Year</option>
  <option value="1">1st Year</option>
  <option value="2">2nd Year</option>
  <option value="3">3rd Year</option>
  <option value="4">4th Year</option>
</select>
<span ng-show="studentForm.year.$touched &&
studentForm.year.$invalid">Year of Study is required.</span>
</div><br>
```

```
<div>
  <label for="dob">Date of Birth:</label>
  <input type="date" id="dob" name="dob" ng-model="student.dob"
required>
  <span ng-show="studentForm.dob.$touched &&
studentForm.dob.$invalid">Date of birth is required.</span>
</div><br>
```

```
<button type="submit"
ng-disabled="studentForm.$invalid">Register</button>
</form>
```

```
<div class="preview">

  <h2>Form Validation Status:</h2>

  <p>Form Valid? <strong>{{studentForm.$valid ? 'Yes' :
'No'}}</strong></p>

  <h2>Student Information Preview:</h2>

  <p><strong>Name:</strong> {{student.name | uppercase}}</p>

  <p><strong>Roll No:</strong> {{student.rollno | uppercase}}</p>

  <p><strong>Class:</strong> {{student.class | uppercase}}</p>

  <p><strong>Email:</strong> {{student.email }}</p>

  <p><strong>Phone Number:</strong> {{student.phone |
uppercase}}</p>

  <p><strong>Branch:</strong> {{student.branch | uppercase}}</p>

  <p><strong>Gender:</strong> {{student.gender| uppercase}}</p>

  <p><strong>Year of Study:</strong> {{student.year|
uppercase}}</p>

  <p><strong>Date of Birth:</strong> {{student.dob |
date:'fullDate'}}</p>

</div>
```

```
</div>
```

```
<script>
```

```
angular.module('studentApp', [])
```

```
.controller('StudentFormController', ['$scope', function($scope) {
```

```
$scope.student = {  
    name: "",  
    rollno: "",  
    class: "",  
    email: "",  
    phone: "",  
    branch: "",  
    gender: "",  
    year: "",  
    dob: ""  
};  
  
$scope.submitForm = function() {  
    if ($scope.studentForm.$valid) {  
        alert('Form submitted successfully!');  
    } else {  
        alert('Please fill out the form correctly!');  
    }  
};  
}]);  
</script>  
</body>  
</html>
```

Name: KAUSHIK KOTIAN

Roll No: 30

Class: d15b

Email: kaushikkotian003@gmail.cc

Phone Number: 9321534299

Branch: inft

Gender: ☒ Male ☐ Female

Year of Study: 3rd Year ▼

Date of Birth: 14 - 02 - 2003 📅

Register

## Form Validation Status:

Form Valid? **Yes**

## Student Information Preview:

**Name:** KAUSHIK KOTIAN

**Roll No:** 30

**Class:** D15B

**Email:** kaushikkotian003@gmail.com

**Phone Number:** 9321534299

**Branch:** INFT

**Gender:** MALE

**Year of Study:** 3

**Date of Birth:** Friday, February 14, 2003