St. Francis Institute of Technology Borivli (West), Mumbai-400103

(Autonomous Institute)
Department of Information Technology

Academic Year: 2024-25

Class: TE-ITA/B   Semester: VI

Subject: Web Lab

Experiment – 5: **To understand Events and Validations in AngularJS. (Create functions and add events, add HTML validators etc.)**

1. **Aim:** To study AngularJS functions and add events, add HTML validators
2. **Objectives:** Aim of this experiment is that, the students will be able
    * To install AngularJS
    * Read and understand commonly-used AngularJS syntax
    * Environment setup
3. **Outcomes:** After study of this experiment, the students will be able
    * To write code using AngularJS.
    * to handle coding and syntax error
4. **Prerequisite:** Knowledge of HTML, CSS, JAVASCRIPT and any text editor.
5. **Requirements:** Personal Computer, Windows operating system, VSCode, Angular CLI, Node, browser, Internet Connection, google doc.
6. **Pre-Experiment Exercise:**
    Brief Theory: Refer shared material
7. **Laboratory Exercise**
    A. **Procedure:**
        a. **Answer the following:**
            * Explain $scope object in AngularJS

            * Write about angular filters
        b. **Attach screenshots:**
            * AngularJS code and Output with your own comments and indentation.

8. **Post-Experiments Exercise**
    A. **Extended Theory:**
        Nil
    B. **Questions:**
* What is the Angular Template variable, explain it with syntax and example ?

* explain AngularJS "required" and "email" client-side form validation.

* Two-Way Binding?

    C. **Conclusion:**
        * Write what was performed in the experiment.
        * Write the significance of the topic studied in the experiment.
    D. **References:**

1. https://riptutorial.com/ebook/angularjs
2. Practical AngularJS by DinisCruz

File Name: Index.html

```
<!DOCTYPE html>
<html lang="en" ng-app="myApp">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>AngularJS Events & Validations</title>
   <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></script>
   <script src="app.js"></script>
   <link rel="stylesheet" href="styles.css"> <!-- External CSS File -->
</head>
<body ng-controller="MyController">

   <h2>AngularJS Events & Validations</h2>

   <div class="form-container">
      <form name="userForm" ng-submit="submitForm(userForm.$valid)" novalidate>

         <!-- Name Field -->
         <label>Enter Name:</label>
         <input type="text" name="username" ng-model="user.name"
             ng-change="nameChanged()" required minlength="5">
         <span class="error" ng-show="userForm.username.$dirty &&
userForm.username.$error.required">
             Name is required.
         </span>
         <span class="error" ng-show="userForm.username.$dirty &&
userForm.username.$error.minlength">
             Name must be at least 5 characters.
         </span>

         <!-- Email Field -->
         <label>Enter Email:</label>
         <input type="email" name="email" ng-model="user.email" required>
         <span class="error" ng-show="userForm.email.$dirty &&
userForm.email.$error.required">
             Email is required.
         </span>
         <span class="error" ng-show="userForm.email.$dirty &&
userForm.email.$error.email">
             Invalid email format.
         </span>
```

```html
        <!-- Password Field -->
        <label>Enter Password:</label>
        <input type="password" name="password" ng-model="user.password" required
minlength="6">
        <span class="error" ng-show="userForm.password.$dirty &&
userForm.password.$error.required">
            Password is required.
        </span>
        <span class="error" ng-show="userForm.password.$dirty &&
userForm.password.$error.minlength">
            Password must be at least 6 characters.
        </span>

        <button type="submit" ng-disabled="userForm.$invalid">Submit</button>

    </form>
  </div>

  <!-- Display submitted data -->
  <div class="submitted-data" ng-show="submitted">
    <h3>Submitted Data:</h3>
    <p><strong>Name:</strong> {{ user.name }}</p>
    <p><strong>Email:</strong> {{ user.email }}</p>
    <p><strong>Password:</strong> (Hidden for security)</p>
  </div>

</body>
</html>
```

File name: App.js

```javascript
var app = angular.module('myApp', []);

app.controller('MyController', function($scope) {
    $scope.user = {}; // Object to store user data
    $scope.submitted = false; // Flag to track form submission

    $scope.submitForm = function(isValid) {
        if (isValid) {
            $scope.submitted = true; // Show submitted data section
            console.log("Form submitted successfully!", $scope.user);
        }
    };
```
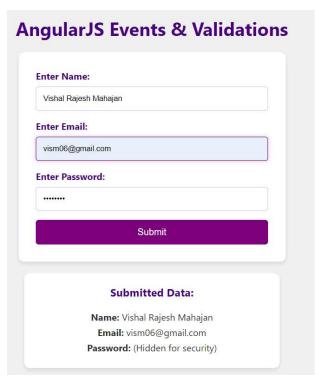
```
    $scope.nameChanged = function() {
        $scope.submitted = false; // Reset submission when user changes name
    };
});
```

Output: