

Ex. No. 8	Web Application Development using Angular JS Framework
Date of Exercise	04-11-2022
Web Host Link	https://ysriganesh.github.io/webapp/web%20tech/first.html https://ysriganesh.github.io/webapp/web%20tech/secound.html
Youtube Link	https://youtu.be/M-y9yw9v5CM

Aim

To develop website using HTML, CSS and Angular JS client side Model View Controller Framework.

Description

To develop website using HTML, CSS and Angular JS client side Model View Controller Framework. AngularJS is an open source JavaScript framework developed and maintained by Google.

It implements the MVC (Model View Controller) pattern to separate data, presentation and logical components.

Description

AngularJS Architecture

AngularJS is a Single Page Application (SPA) meta-framework. Angular JS follows the MVC architecture. MVC stands for Model-View-Controller evolved as a way to separate data, logical units

and presentation in web application development.

- ☐ The model is the driving force of the application. This is generally the data behind the application, usually fetched from the server.
- ☐ The view is the UI that the user sees and interacts with. It is dynamic, and generated based on

the current model of the application.

□ The controller is the business logic and presentation layer, which performs actions such as fetching data and makes decisions such as how to present the model, which parts of it to display, etc.

AngularJS Extends HTML

□ AngularJS extends HTML with ng-directives.

□ The ng-app

o directive defines an AngularJS application

□ The ng-init

o directive used to create initial value(model) for the angular JS application.

□ The ng-model

o directive binds the value of HTML controls (input, select, textarea) to application data.

□ The ng-bind

o directive binds application data to the HTML view

Program

First question :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></scri
pt>
  <style>
    *{
      margin: 0px;
      padding: 0px;
    }
  </style>
</script>
```

```

var app=angular.module("myApp",[])
app.controller('control',function($scope)
{
    $scope.process = function()
    {
        var w=parseInt($scope.data1)
        var h=parseInt($scope.data2)*0.01
        $scope.result= Math.round((w/(h**2)))
        if($scope.result<18)
        {
            $scope.catagory='Underweight'+ ' BMI'
        }
        else if ($scope.result>18 && $scope.result<25)
        {
            $scope.catagory='Normal weight'+ ' BMI'
        }
        else if ($scope.result>25 && $scope<30)
        {
            $scope.catagory='Overweight'+ ' BMI'
        }
        else if ($scope.result>30)
        {
            $scope.catagory='Obese'
        }
        else
        {
            $scope.catagory=' '
        }
    }
})
</script>

</head>
<body ng-app="myApp" ng-controller="control">

    <div style="background-color: rgb(23, 203, 223); width: 100%; height: 79.5px;">
        <h1 style="color: white;padding-left: 10px;">Body Mass Index</h1>
        <p style="color: white; padding-left: 11px;font-size: 18px;" >A
measure of body fat in adults</p>
    </div>
    <div style="padding-left: 10px; padding-top: 7px;">
        <p >Weight :</p><input type="text" ng-model="data1" ng-keyup="process()"
style="height:28px;border: 1.6px solid black; width: 200px;"> kg<br>

```

```

    <p >Height :</p><input type="text" ng-model="data2" ng-keyup="process()"
style="height:28px;border: 1.6px solid black;width: 200px; "> cm<br><br></div>
    <div ng-bind="result" style="position: absolute; color: rgb(3, 92,
98);text-align: center ;width: 100px;font-size: 50px; height: 90px; left: 500px;
top: 120px; "></div>
    <div ng-bind="catagory" style="position: absolute; width: 200px;text-
align: center; height: 20px; left: 460px; top:170px; "></div>

</body>
</html>

```

Secound Question:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></scri
pt>
    <link
href="https://cdn.jsdelivrivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" />
    <script
src="https://cdn.jsdelivrivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js
"></script>
    <title>Array Operation</title>
</head>
<body ng-app="myApp" ng-controller="myCtrl">
    <script>
        var app = angular.module("myApp", []);
        app.controller("myCtrl", function ($scope) {
            $scope.items = [];
            $scope.addItem = function(){
                $scope.items.push({productName: $scope.name, price:
$scope.price});
            }
            $scope.removeItem = function($index){
                $scope.items.splice($index,1);
            }
        });
    </script>

```

```

    }
  });
</script>
<form class="p-5">
  <center>
    <h2 class="text-primary">Product Inventory System </h2>
  </center>
  <div class="mb-3 mt-3">
    <label for="name" class="form-label text-primary ">Enter the Product
Name:</label>
    <input type="text" class="form-control border-dark text-danger"
id="name" name="name" ng-model="name"/>
  </div>
  <div class="mb-3">
    <label for="empID" class="form-label text-primary">Enter the Product
Price:</label>
    <input type="text" class="form-control border-dark text-danger"
id="empID" name="price" ng-model="price"/>
  </div>
  <center><button ng-click="addItem()" type="submit">Add
Product</button></center>
</form>
<center class="p-5">
  <table class="table table-striped" border="1" cellspacing="0" width="50%"
style="text-align:center;">
    <thead class="bg-success text-light">
      <tr >
        <th>Name</th>
        <th>Price</th>
        <th>Remove</th>
      </tr>
    </thead>
    <tbody>
      <tr ng-repeat="x in items">
        <td style="color: blue;">{{x.productName}}</td>
        <td style="color: blue;">{{"Rs."+x.price}}</td>
        <td>
          <button ng-click="removeItems($index)">Remove</button>
        </td>
      </tr>
    </tbody>
  </table></center>
</body>
</html>

```

Output

The first screenshot displays a web application titled "Body Mass Index" with the subtitle "A measure of body fat in adults". It features two input fields: "Weight : " followed by a text box and "kg", and "Height : " followed by a text box and "cm".

The second screenshot displays a web application titled "Product Inventory System". It has two input fields: "Enter the Product Name:" followed by a text box containing "soap", and "Enter the Product Price:" followed by a text box containing "100". Below these is an "Add Product" button. A table below the button shows the added product:

Name	Price	Remove
soap	Rs.100	<button>Remove</button>

Result

Here we created website using html css and angular js and got the required output