Ex. No. 8	Web Application Development using Angular JS Framework		
Date of Exercise	11/10/22		
Web Host Link			
Video Link	https://drive.google.com/file/d/1kRKtwPB4S8zIXBcQDbTiXjn96p4mjSTD/view?usp=share_link		

#### Aim:

To create a web application to develop the following Budget Calculator using AngularJS. Here, the room rent, accessories, emergency and saving get as percentage (%), then divide the given amount based on the percentage and display each value in the place provided when the "Evaluate My Money" button is clicked (use ng-click directive).

# **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 directive defines an AngularJS application.
- The ng-init directive used to create initial value(model) for the angular JS application.
- The ng-model directive binds the value of HTML controls (input, select, textarea) to application data.
- The ng-bind directive binds application data to the HTML view.

### **Question Set A – Working with Angular JS Directives**

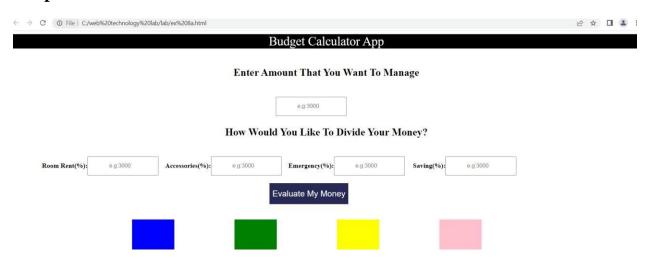
#### **Program:**

```
<!DOCTYPE html>
<html lang="en">
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></scri</pre>
pt >
            <script>
                var app=angular.module("myApp",[]);//module
                app.controller("control",function($scope){
                    $scope.evaluate = function () {
                        var tot = parseInt($scope.num);
                        var num1 = parseInt($scope.n1);
                        var num2 = parseInt($scope.n2);
                        var num3 = parseInt($scope.n3);
                        var num4 = parseInt($scope.n4);
                        var r1 = tot * num1 / 100;
                        scope.r1 = "Room Rent " + (r1);
```

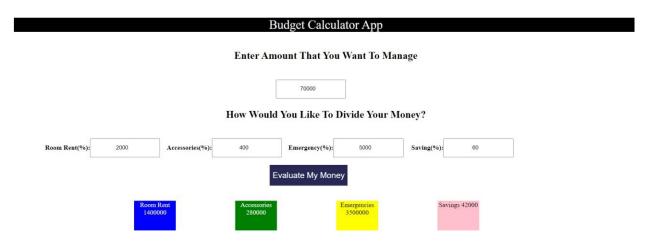
```
var r2 = tot * num2 / 100;
                      $scope.r2 = "Accessories " + (r2);
                      var r3 = tot * num3 / 100;
                      $scope.r3 = "Emergencies " + (r3)
                      var r4 = tot * num4 / 100;
                      scope.r4 = "Savings" + (r4);
              })
   </script>
</head>
<body ng-app="myApp" ng-controller="control">
   <div style="background-color:black; color:white;font-size:30px;text-</pre>
align:center;">
       Budget Calculator App</div><br>
   <b>Enter Amount That You
           Want To Manage</b><br>
   <input type="number" ng-model="num" style="margin-left:42%;text-align:</pre>
center;height:40px" placeholder="e.g:3000"><br>
   <b>How Would You Like To
           Divide Your Money?</b><br>
   <div style="margin-left:5%">
       <b>Room Rent(%):</b><input type="number" ng-model="n1" style="text-align:</pre>
center;height:40px"
           placeholder="e.g:3000">   
       <b>Accessories(%):</b><input type="number" ng-model="n2" style="text-
align: center;height:40px"
           placeholder="e.g:3000">   
       <b>Emergency(%):</b><input type="number" ng-model="n3" style="text-align:
center; height: 40px"
           placeholder="e.g:3000">    
       <b>Saving(%):</b><input type="number" ng-model="n4" style="text-align:</pre>
center; height: 40px"
           placeholder="e.g:3000">
   </div>
   <br>
   <button ng-click="evaluate()"</pre>
```

```
style="border:1px solid rgb(40, 40,86);background-color:rgb(40, 40,
86); font-size: 20px; color: white; text-align: center; height: 50px; margin-left: 41%">
        Evaluate My Money
    <div id="box" style="margin-left:5%">
        <div style="margin-left: 15%;float:</pre>
left;;width:100px;height:70px;border:1px solid blue; background-
color:blue;color:white;text-align:center">{{r1}}</div>
        <div style="margin-left: 10%;float:</pre>
left;width:100px;height:70px;border:1px solid green; background-
color:green;color:white;text-align:center">{{r2}}</div>
        <div style="margin-left: 10%;float:</pre>
left;width:100px;height:70px;border:1px solid yellow; background-
color:yellow;color:black;text-align:center">{{r3}}
        </div>
        <div style="margin-left: 10%;float:</pre>
left;width:100px;height:70px;border:1px
solid pink; background-color:pink;color:black;text-align:center">{{r4}}</div>
    </div>
</body>
</script>
 /html>
```

# Output:



If we enter the values ,then the output will be:



## **Question Set B – Working with Arrays in Angular JS**

#### Aim:

Create a HTML single page web application to develop product inventory system as per your choice using Angular JS Framework.

#### **Program:**

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></scri</pre>
   <script>
       var app = angular.module("App", []);
       app.controller("control", function ($scope) {
           $scope.items = [];
           $scope.addItem = function () {
               $scope.items.push({ "N": $scope.itemname, "P": $scope.itemprice
});
           };
           $scope.remove = function ($index) {
               $scope.items.splice($index, 1);
           };
       });
   </script>
</head>
<body ng-app="App" ng-controller="control">
   <b>Product Inventory
           System</b>
    Enter the Product Name<input type="text" ng-</p>
model="itemname"
       placeholder="enter product name"><br>
```

```
Enter the Product Price<input type="text" ng-</pre>
model="itemprice"
    placeholder="enter product price"><br><br><br>
  <button ng-click="addItem()">Add Product</button>
  <hr>>
  <br><br><br>></pr>
  <br><br><br>>
  S.No
      Name
      Price
      Remove
    bordered table-hover text-center">
      {{$index + 1}}
       {{x.N}}
       {{x.P}}
      ($index)"
style="color:red;">[delete]</button>
    </body>
</html>
```

# **Output:**

Product Inventory Syst	em			
Enter the Product Name	CIII			
enter product name				
Enter the Product Price				
enter product price				
Add Product				
S.No	Name	Price	Remove	
Product Inventory Syste	m			
Enter the Product Name				
enter product name				
Enter the Product Price				
enter product price				
Add Product				

S.No	Name	Price	Remove
1			[delete]
2			[delete]
3			[delete]
4			[delete]
5			[delete]
6			[delete]

## **Result:**

Thus, The web page has been created successfully using HTML, CSS and Angular JS.