Angular JS Forms

Exp No.5   **Date:10-03-21**

Objective:

- To Write an Angular program to create form with real type updations
- To implement Book ticket form for my tourism website.
- Based on number of adults and children given as input by the user and the monument chosen total cost is updated.
- As user selects and deselects a checkbox accordingly date of visit will be displayed(Date of visit to a particular monument is available only for 31days from March1 to April1)
- User has to enter his/her Name and Emailid which is validated using angular JS.

Requirements:

- **Front End Requirements:**
  1. Web Browser HTML support
  2. HTML
  3. CSS
  4. Angular
  5. JavaScript

- **Text Editor/IDE**

Theory:
  ➢ **AngularJS Forms**
  ▪ AngularJS facilitates you to create a form enriches with data binding and validation of input controls.
  ▪ Input controls are ways for a user to enter data. A form is a collection of controls for the purpose of grouping related controls together.
  ▪ Following are the input controls used in AngularJS forms:
      • input elements
      • select elements
      • button elements
      • textarea elements
  ▪ AngularJS provides multiple events that can be associated with the HTML controls. These events are associated with the different HTML input elements.
  ▪ Following is a list of events supported in AngularJS:
      • ng-click

- ng-dbl-click
- ng-mousedown
- ng-mouseup
- ng-mouseenter
- ng-mouseleave
- ng-mousemove
- ng-mouseover
- ng-keydown
- ng-keyup
- ng-keypress
- ng-change

- Data Binding
    ng-model directive is used to provide data binding.
- AngularJS Form Validation
    - AngularJS provides client-side form validation. It checks the state of the form and input fields (input, textarea, select), and lets you notify the user about the current state.
    - It also holds the information about whether the input fields have been touched, or modified, or not.
    - Following directives are generally used to track errors in an AngularJS form:
        - $dirty - states that value has been changed.
        - $invalid - states that value entered is invalid.
        - $error - states the exact error.

Procedure

1. Create a front end UI for ticket.html.
2. Load Angular JS framework using using <script src = "https://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
3. Define angular JS application using ng-app directive.
4. Define a model name using ng-model directive.
5. Bind the value of the above model using ng-bind directive.
6. Write the angular code for validating the text fields entered by the user.
7. Open ticket.html in the browser and give input to the fields for validation and updation.

Implementation:

ticket.html

```html
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
* {
box-sizing: border-box;
}
.column3{
padding-left:25px;
float: left;
width: 30%;
padding-right: 10px;
margin-left:30px;
margin-right:15px;
margin-top: 15px;
height: 300px;
}
.column1{
float: left;
width: 30%;
padding-right: 10px;
margin:15px;
height: 300px;

padding-left:25px;
}
.column2{
float: left;
width: 30%;
padding-right: 10px;
margin:15px;
height: 300px;
padding-left:25px;
overflow:auto;
}
.row{
background:black;
background: rgba(0, 0,0,0.3)
}
.row:after {
content: "";
display: table;
```

```css
clear: both;
}
#heading{
padding-bottom:40px;
color:white;
}
#visitor,#monum,#date3{ padding-left:2px;
font-size:25px;
color:white;
font-weight:bold;
}
#ad,#ch{
padding-left:5px;
padding-bottom:5px;
color:white;
font-size:15px;
}
#cost{
padding-left:5px;
font-size:15px;
font-weight:bold;
color:white;
}
#d1{
margin-bottom:5px;
}
body{
background-image:url("tent1.jpg");
background-repeat: no-repeat;
background-size:cover;
}
#name,#email{
color:white;
margin-left:40%;
font-weight:bold;
}

btn{
margin-left:43%;
}
#nameerror,#emailerror{
font-weight:bold;
}
#pl1{
padding-left:5px;
padding-bottom:5px;
font-size:16px;
color:white;
}
```

```
#s,#s1,#s2,#s3,#s4,#s5,#s6,#s7,#s8{
color:white;
font-size:18px;
}
#id1,#id2,#idd3,#id4,#id5,#id6,#id7,#id8,#id9{
color:white;
padding-right:5px;
}
#dov1,#dov2,#dov3,#dov4,#dov5,#dov6,#dov7,#dov8,#dov9{
margin-bottom:8px;
}
#note1{
color:#da9ff9;
font-size:20px;
font-weight:bold; }
</style>
</head>
<body>
<h2 id="heading"><center>Entry Ticket(s) Booking</center></h2>
<div class="row">
<div class="column3" style="background: rgba(0, 0,0,0.1);">
<p id="visitor">Visitor Details</p>
<p id="ad">Number Of Adults: <input type="number" id="adult" min="1" max="10"
required></p>
<p id="ch">Number Of Children: <input type="number" id="child" min="0" max="10"
id="child" required></p><br>
<p id="cost">Total Cost:<span id="totalsum"></span></p>
</div>
<div class="column1" style="background:rgba(0, 0,0.1,0.2);">
<p id="monum">Monuments</p>
<input type="checkbox" id="place1" name="place1" onclick="myfunc()"><span
id="pl1">Asokan Rock Edict, Junagadh (INR25/-)</span></input><br>
<input type="checkbox" id="place2" name="place2" onclick="myfunc()"><span
id="pl1">Archaeological Site Museum, Dholavira (INR5/-)</span></input><br>
<input type="checkbox" id="place3" name="place3" onclick="myfunc()"><span
id="pl1">Archaeological Site Museum, Lothal (INR2/-)</span></input><br>
<input type="checkbox" id="place4" name="place4" onclick="myfunc()"><span id="pl1">Baba
Pyare, Khaprakodia Caves (INR20/-)</span></input><br>
<input type="checkbox" id="place5" name="place5" onclick="myfunc()"><span
id="pl1">Buddhish Caves, Junagadh (INR25/-)</span></input><br>
<input type="checkbox" id="place6" name="place6" onclick="myfunc()"><span
id="pl1">Champaner Monuments (INR5/-)</span></input><br>
<input type="checkbox" id="place7" name="place7" onclick="myfunc()"><span id="pl1">Rani
Ki-Vav (INR5/-)</span></input><br> <input type="checkbox" id="place8" name="place8"
onclick="myfunc()"><span id="pl1">Rudabai Step Well, Adalaj (INR25/-)</span></input><br>
<input type="checkbox" id="place9" name="place9" onclick="myfunc()"><span
id="pl1">Modhera Sun Temple (INR20/-)</span></input><br>
<p id="note1">(Note:Per person charges given)</p>
</div>
```

```
<div class="column2" style="background:rgba(0, 0,0,0.1);">
<p id="date3">Select Monuments to Proceed</p>
<p id="s" style="display:none"></p><br>
<span id="id1" style="display:none">Date Of Visit:</span>
<input type="date" id="dov1" name="dov1" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s1" style="display:none"></p><br>
<span id="id2" style="display:none">Date Of Visit:</span>
<input type="date" id="dov2" name="dov2" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s2" style="display:none"></p><br>
<span id="idd3" style="display:none">Date Of Visit:</span>
<input type="date" id="dov3" name="dov3" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s3" style="display:none"></p><br>
<span id="id4" style="display:none">Date Of Visit:</span>
<input type="date" id="dov4" name="dov4" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s4" style="display:none"></p><br>
<span id="id5" style="display:none">Date Of Visit:</span>
<input type="date" id="dov5" name="dov5" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s5" style="display:none"></p><br>
<span id="id6" style="display:none">Date Of Visit:</span>
<input type="date" id="dov6" name="dov6" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s6" style="display:none"></p><br>
<span id="id7" style="display:none">Date Of Visit:</span>
<input type="date" id="dov7" name="dov7" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
<p id="s7" style="display:none"></p><br>
<span id="id8" style="display:none">Date Of Visit:</span>
<input type="date" id="dov8" name="dov8" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br> <p id="s8" style="display:none"></p><br>
<span id="id9" style="display:none">Date Of Visit:</span>
<input type="date" id="dov9" name="dov9" min="2021-03-01" max="2021-04-01"
style="display:none"></input><br>
</div>
</div>
<script>
function myfunc()
{
var sum=0;
var check1 = document.getElementById("place1");
var check2 = document.getElementById("place2");
var check3 = document.getElementById("place3");
var check4 = document.getElementById("place4");
var check5 = document.getElementById("place5");
var check6 = document.getElementById("place6");
var check7 = document.getElementById("place7");
```

```javascript
var check8 = document.getElementById("place8");
var check9 = document.getElementById("place9");
var x=document.getElementById("adult").value;
if (check1.checked == true){
sum+=25;
document.getElementById("s").innerHTML ="Asokan Rock Edict";
document.getElementById("s").style.display ="inline";
document.getElementById("id1").style.display ="inline";
document.getElementById("dov1").style.display ="inline"; }
else {
document.getElementById("s").style.display = "none";
document.getElementById("dov1").style.display ="none";
document.getElementById("id1").style.display ="none";
}
if (check2.checked == true){
sum+=5;
document.getElementById("s1").innerHTML ="Archaeological Site Museum,Dholavira";
document.getElementById("s1").style.display ="inline";
document.getElementById("id2").style.display ="inline";
document.getElementById("dov2").style.display ="inline";
}
else {
document.getElementById("s1").style.display = "none";
document.getElementById("dov2").style.display ="none";
document.getElementById("id2").style.display ="none";
}
if (check3.checked == true){
sum+=2;
document.getElementById("s2").innerHTML ="Archaeological Site Museum,Lothal";
document.getElementById("s2").style.display ="inline";
document.getElementById("idd3").style.display ="inline";
document.getElementById("dov3").style.display ="inline";
}
else {
document.getElementById("s2").style.display = "none";
document.getElementById("dov3").style.display ="none";
document.getElementById("idd3").style.display ="none";
}
if (check4.checked == true){ sum+=20;
document.getElementById("s3").innerHTML ="Baba Pyare, Khaprakodia Caves";
document.getElementById("s3").style.display ="inline";
document.getElementById("id4").style.display ="inline";
document.getElementById("dov4").style.display ="inline";
}
else {
document.getElementById("s3").style.display = "none";
document.getElementById("dov4").style.display ="none";
document.getElementById("id4").style.display ="none";
}
if (check5.checked == true){
sum+=25;
```
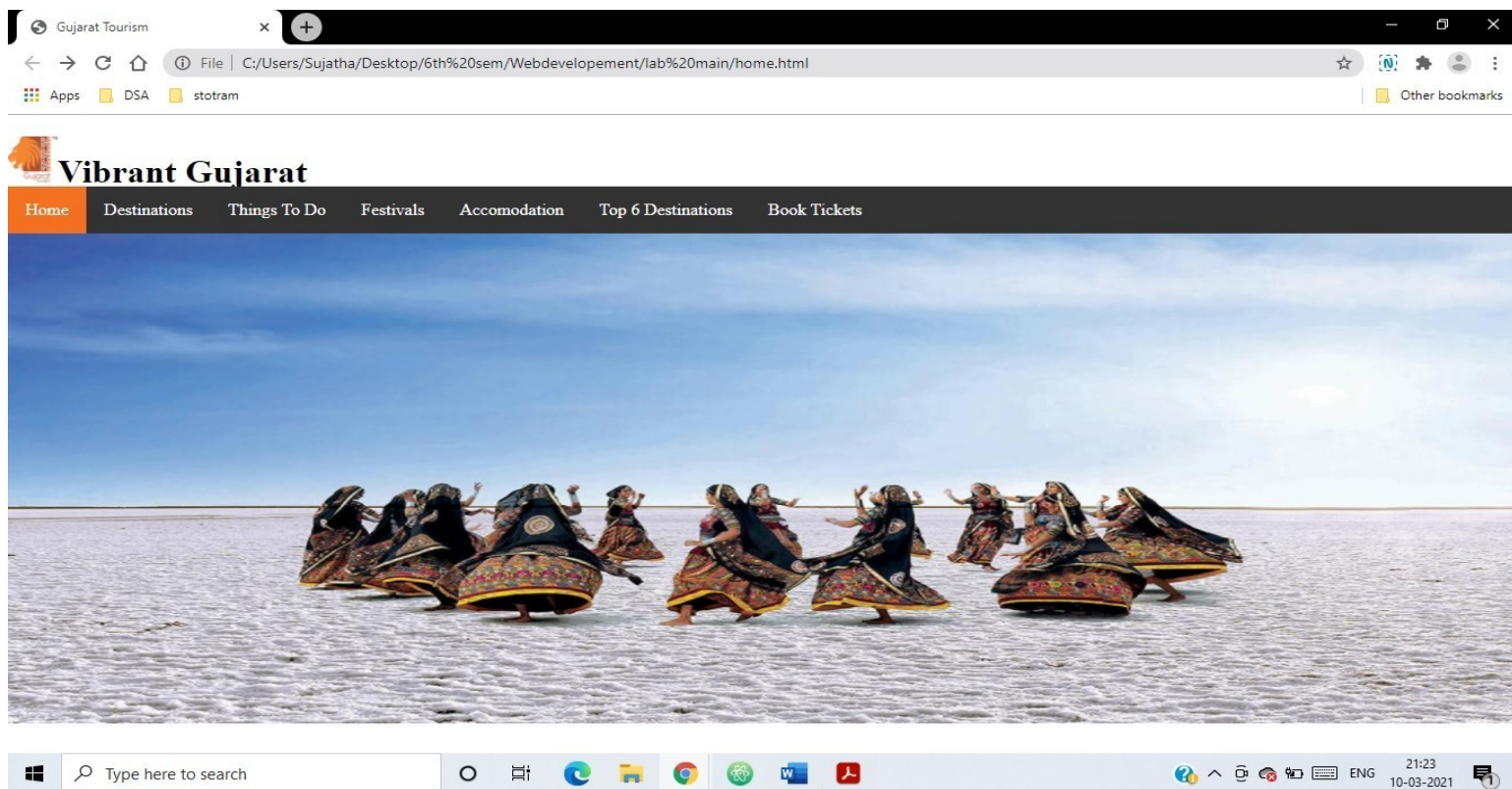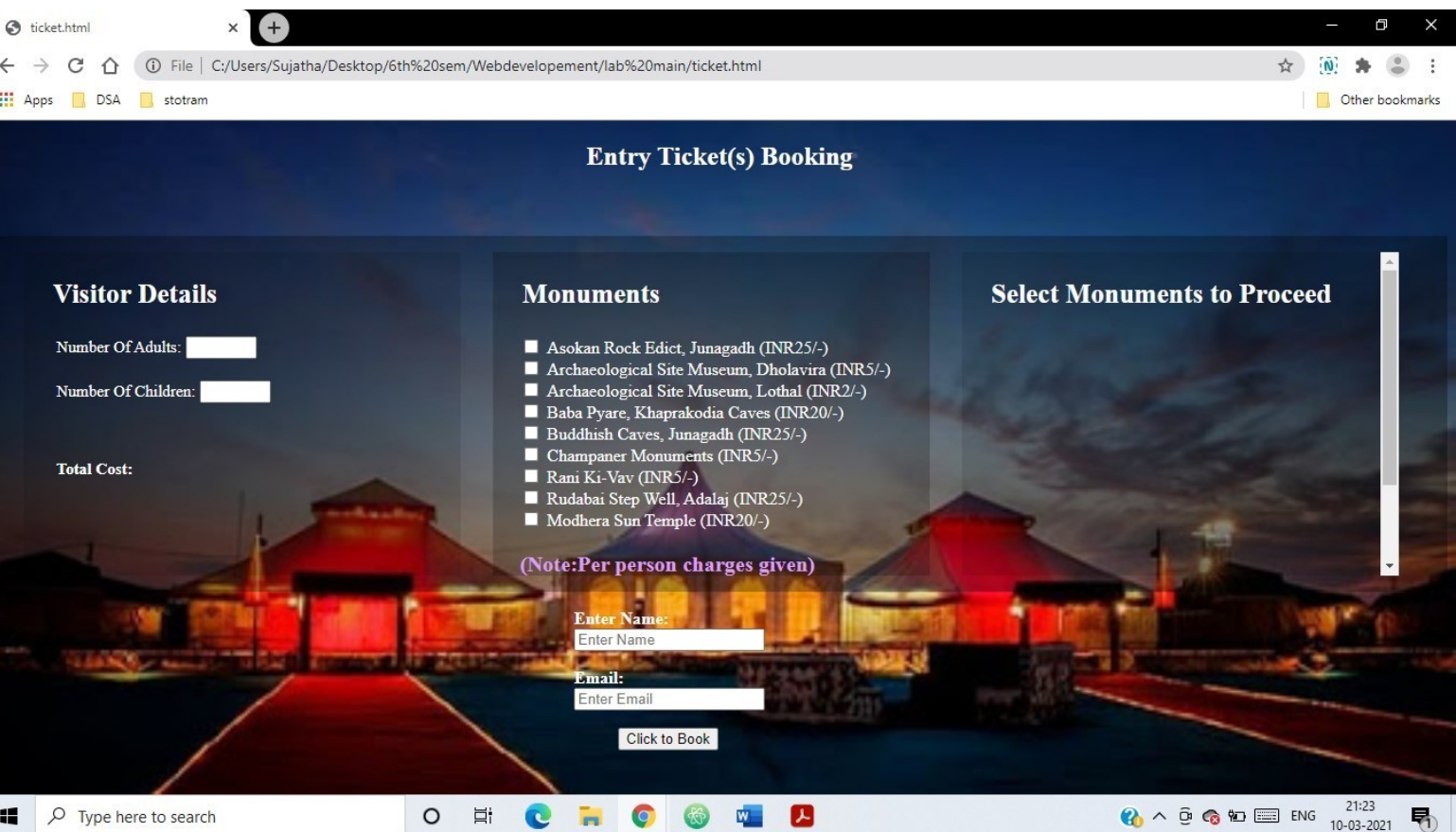
```javascript
document.getElementById("s4").innerHTML ="Buddhish Caves, Junagadh";
document.getElementById("s4").style.display ="inline";
document.getElementById("id5").style.display ="inline";
document.getElementById("dov5").style.display ="inline";
}
else {
document.getElementById("s4").style.display = "none";
document.getElementById("dov5").style.display ="none";
document.getElementById("id5").style.display ="none";
}
if (check6.checked == true){
sum+=5;
document.getElementById("s5").innerHTML ="Champaner Monumnets";
document.getElementById("s5").style.display ="inline";
document.getElementById("id6").style.display ="inline";
document.getElementById("dov6").style.display ="inline";
}
else {
document.getElementById("s5").style.display = "none";
document.getElementById("dov6").style.display ="none";
document.getElementById("id6").style.display ="none";
}
if (check7.checked == true){
sum+=5;
document.getElementById("s6").innerHTML ="Rani Ka-Vav";
document.getElementById("s6").style.display ="inline";
document.getElementById("id7").style.display ="inline";
document.getElementById("dov7").style.display ="inline";
}
else {
document.getElementById("s6").style.display = "none";
document.getElementById("dov7").style.display ="none";
document.getElementById("id7").style.display ="none";
}
if (check8.checked == true){
sum+=25;
document.getElementById("s7").innerHTML ="Rudabai Step Well";
document.getElementById("s7").style.display ="inline";
document.getElementById("id8").style.display ="inline";
document.getElementById("dov8").style.display ="inline";
}
else {
document.getElementById("s7").style.display = "none";
document.getElementById("dov8").style.display ="none";
document.getElementById("id8").style.display ="none";
}
if (check9.checked == true){
sum+=20;
document.getElementById("s8").innerHTML ="Modhera Sun Temple";
document.getElementById("s8").style.display ="inline";
```

```
document.getElementById("id9").style.display ="inline";
document.getElementById("dov9").style.display ="inline";
}
else {
document.getElementById("s8").style.display = "none";
document.getElementById("dov9").style.display ="none";
document.getElementById("id9").style.display ="none";
}
sum=sum*x;
document.getElementById("totalsum").innerHTML =sum;
}
</script>
<form ng-app="myApp" ng-controller="validateCtrl" name="myForm" novalidate>
<p id="name">Enter Name:<br>
<input type="text" name="user" placeholder="Enter Name" ng-model="user" required>
<span id="nameerror" style="color:#54e346" ng-show="myForm.user.$dirty &&
myForm.user.$invalid">
<span ng-show="myForm.user.$error.required">Username is required.</span>
</span>
</p>
<p id="email">Email:<br>
<input type="email" name="email" placeholder="Enter Email" ng-model="email" required>
<span style="color:#54e346" ng-show="myForm.email.$dirty && myForm.email.$invalid">
<span id="emailerror" ng-show="myForm.email.$error.required">Email is required.</span>
<span id="emailerror" ng-show="myForm.email.$error.email">Invalid email address.</span>
</span>
</p>
<p>
<input type="button" id="btn" value="Click to Book" onclick="confirm()"ng-
disabled="myForm.user.$dirty && myForm.user.$invalid ||
myForm.email.$dirty && myForm.email.$invalid">
</p>
</form>
<script>
var app = angular.module('myApp', []);
app.controller('validateCtrl', function($scope) {
$scope.user = '';
$scope.email = '';
});
function confirm()
{
alert("Your Bookings are Confirmed.Thank You for Visiting Gujarat!!");
}
</script>
</body>
</html>
```

Output:

home.html

ticket.html

After entering the number of adults and selecting a checkbox <u>data of visit is visible and total cost is updated.</u>

Booking ticket for a monument is only available for 30days from March1 to April1 2021.

After de-selecting the third check box(Archaelogical site Museum,Lothal) total cost gets updated, date of visit for the monument disappears.

Username validation. Username is required to carry out further bookings. Button gets disabled.

Email validation. Proper Email should be entered. Button gets disabled.

Acknowledgement to user after successful bookings made.

<u>Result:</u>

In this experiment, the code to create a angularJS, to implement forms and real time updations has been written and the output was verified successfully.