Angular JS Filters

Exp No.4   **Date:25-02-21**

Objective:
- To Write an Angular program to implement search to filter items
- To create Angular JS Program to implement search based on input given by the user and filter the contents accordingly.

Requirements:

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

- **Text Editor/IDE**

Theory:

- **Html** stands for hypertext markup language is a standard markup language for creating web pages. It Describes the structure of web page.
- **CSS** (cascading style sheets) is used to format the layout of a webpage.
- **AngularJS** is JavaScript framework (structural framework) for dynamic web applications.
- It is a Single Page Application (SPA) projects.
- It is Open source.
- It supports the Model View Controller (MVC).
- A Model View Controller pattern is made up of the following three parts:
  - Model - It is the lowest level of the pattern responsible for maintaining data.
  - View - It is responsible for displaying all or a portion of the data to the user.
  - Controller - It is a software Code that controls the interactions between the Model and View.
- AngularJS has built-in directives such as ngBind, ngModel, etc.
  - ng-app - This directive defines and links an AngularJS application to HTML.
  - ng-model - This directive binds the values of AngularJS application data to HTML input controls.
  - ng-bind - This directive binds the AngularJS application data to HTML tags.

Procedure

1. Create a front end UI for the destinationsearch.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. Execute the angular JS application and write the code for filters.
7. Open the destsearch.html in the browser and in the search bar start typing the characters and
the destination will be sorted according to the users search.

Implementation:

home.html

```
<!DOCTYPE html>
 <html>
  <title>Gujarat Tourism</title>
  <link rel="stylesheet" href="home.css">
  <body>
  <h1><img src="logo.png">Vibrant Gujarat</h1>
  <ul>
  <li><a class="active" href="#home">Home</a></li>
  <li><a href="destsearch.html">Destinations</a></li>
  <li><a href="#contact">Things To Do</a></li>
  <li><a href="#about">Festivals</a></li>
  <li><a href="#about">Accomodation</a></li>
  <li><a href="destination.html">Top 6 Destinations</a></li>
 </ul>
 <center>
 <div class="slideshow">
  <img class="mySlides" src="ranutsav.jpg">
  <img class="mySlides" src="Rann.jpg">
  <img class="mySlides" src="Sabarmati.jpg">
   <img class="mySlides" src="statue.jpg">
 </div>
 </center>
 <script>
  var myIndex = 0;
  show();

  function show() {
    var i;
    var x = document.getElementsByClassName("mySlides");
    for (i = 0; i < x.length; i++) {
      x[i].style.display = "none";
    }
```

```
      myIndex++;
      if (myIndex > x.length) {myIndex = 1}
      x[myIndex-1].style.display = "block";
      setTimeout(show, 3000);
    }
</script>
 </body>
 </html>
```

home.css

```css
body {margin:0;}
h1{
  top:1.5%;
}
img{
  height:45px;
  width:45px;
}
ul {
  position:fixed;
  list-style-type: none;
  margin: 0;
  padding:0;
  overflow: hidden;
  background-color: #333;

  top:70px;
  width: 100%;
}

li {
  float: left;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}

li a:hover:not(.active) {
  background-color: #111;
}
```

```css
.active {
  background-color: #f37121;
}
figure {
  display: block;
  position: relative;
  overflow: hidden;
}

figcaption {
  position: absolute;
  background: rgba(0,0,0,0.75);
  color: black;
  padding: 10px 20px;
}
.mySlides {
 width: 100%;
 height:500px;
 background-size: 100% 100%;
}
```

destsearch.html

```html
<html >
<head>
   <title>Destinations in Gujarat</title>
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
   <link rel="stylesheet" href="destsearch.css">
   <style type="text/css">
     .bar
    {
       box-shadow: 0 1px 1px #ccc;
       border-radius: 2px;
       width: 100%;
       padding: 5px;
       margin: 45px auto 25px;
       position: relative;
       text-align: right;
       line-height: 1;
     }
     .bar a
    {
       background: #4987a1 center center no-repeat;
       width: 32px;
       height: 32px;
       display: inline-block;
```

```css
        text-decoration: none !important;
        margin-right: 20px;
        border-radius: 2px;
        cursor: pointer;
    }
    .bar a.list-icon{
     background-
```
```
image:url(data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAABAAAAAQCAYAA
AAf8/9hAAAAGXRFWHRTb2Z0d2FyZQBBZG9iZSBJbWFnZVJlYWR5ccllPAAAAyBpVF
h0WE1MOmNvbS5hZG9iZS54bXAAAAAAADw/eHBhY2tldCBiZWdpbj0i77u/IiBpZD0iVz
VNME1wQ2VoaUh6cmVTek5UY3prYzlkIj8+IDx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYm
U6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb2JlIFhNUCBDb3JlIDUuMC1jMDYwIDYxLjEzND
c3NywgMjAxMC8wMi8xMi0xNzozMjowMCAgICAgICAgIj4gPHJkZjpSREYgeG1sbnM6cm
RmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj4gPHJkZj
pEZXNjcmlwdGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvY
mUuY29tL3hhcC8xLjAvIiB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2JlLmNvbS94YXA
vMS4wL21tLyIgeG1sbnM6c3RSZWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC9z
VHlwZS9SZXNvdXJjZVJlZiMiIHhtcDpDcmVhdG9yVG9vbD0iQWRvYmUgUGhvdG9zaG9
wIENTNSBXaW5kb3dzIiB4bXNTpJbnN0YW5jZUlEPSJ4bXAuaWlkOkYzNkFCQ0ZBM
TBCQRTExRTM5NDk4RDFEM0E5RkQ1NEZCIiB4bXNTpEb2N1bWVudElEPSJ4bXAuZ
GlkOkYzNkFDQ0ZCMTBCQRTExRTM5NDk4RDFDM0E5RkQ1NEZCIj4gPHhtcE1NOkRlcm
l2ZWRGcm9tIHN0UmVmOmluc3RhbmNlSUQ9InhtcC5paWQ6RjM2QUJDRjgxMEJFMTF
Mzk0OThEMUQzQTlGRDU0RkIiIHN0UmVmOmRvY3VtZW50SUQ9InhtcC5kaWQ6RjM2
QUJDRjkxMEJFMTFFMzk0OThEMUQzQTlGRDU0RkIiLz4gPC9yZGY6RGVzY3JpcHRpb
24+IDwvcmRmOlJERj4gPC94OnhtcG1ldGE+IDw/eHBhY2tldCBlbmQ9InIiPz7h1bLqAAAA
WUlEQVR42mL8////BwYGBn4GCACxBRlIAIxAA/4jaXoPEkMyjJ+A/g9MDJQBRhYg8RFq
Mwg8RJIUINYLFDmBUi+ADQAF1n8ofk9yIAy6WPg4GgtDMRYAAgwAdLYwLAoIwPgA
AAAASUVORK5CYII=);
    }
```
```css
    .bar a.grid-icon{
         background-
```
```
image:url(data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAABAAAAAQCAYAA
AAf8/9hAAAAGXRFWHRTb2Z0d2FyZQBBZG9iZSBJbWFnZVJlYWR5ccllPAAAAyBpVF
h0WE1MOmNvbS5hZG9iZS54bXAAAAAAADw/eHBhY2tldCBiZWdpbj0i77u/IiBpZD0iVz
VNME1wQ2VoaUh6cmVTek5UY3prYzlkIj8+IDx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYm
U6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb2JlIFhNUCBDb3JlIDUuMC1jMDYwIDYxLjEzND
c3NywgMjAxMC8wMi8xMi0xNzozMjowMCAgICAgICAgIj4gPHJkZjpSREYgeG1sbnM6cm
RmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj4gPHJkZj
pEZXNjcmlwdGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvY
mUuY29tL3hhcC8xLjAvIiB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2JlLmNvbS94YXA
vMS4wL21tLyIgeG1sbnM6c3RSZWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC9z
VHlwZS9SZXNvdXJjZVJlZiMiIHhtcDpDcmVhdG9yVG9vbD0iQWRvYmUgUGhvdG9zaG9
wIENTNSBXaW5kb3dzIiB4bXNTpJbnN0YW5jZUlEOjBEQkMyQzE0M
TBCRjExRTNBMDlGRTYyOTlBNDddCN0I4IiB4bXNTpEb2N1bWVudElEPSJ4bXAuZ
GlkOjBEQkMyQzE1MTBCRjExRTNBMDlGRTYyOTlBNDddCN0I4Ij4gPHhtcE1NOkRlcml2Z
WRGcm9tIHN0UmVmOmluc3RhbmNlSUQ9InhtcC5paWQ6MERCQzJDMTIxMEJGMTFF
M0EwOUZFNjI5OUE0N0I3QjgiIHN0UmVmOmRvY3VtZW50SUQ9InhtcC5kaWQ6MERC
QzJDMTMxMEJGMTFFM0EwOUZFNjI5OUE0N0I3QjgiLz4gPC9yZGY6RGVzY3JpcHRpb
```

24+IDwvcmRmOlJERj4gPC94OnhtcG1ldGE+IDw/eHBhY2tldCBlbmQ9InIiPz4MjPshAAAA
XklEQVR42mL4////h/8I8B6IGaCYKHFGEMnAwCDIAAHvgZgRyiZKnImBQsACxB+hNoD
AQyQ5osQZIT4gH1DsBZABH6AB8x/JaQzEig++WPiII7Rxio/GwmCIBYAAwAwVIzMp1
R0aQAAAABJRU5ErkJggg==);
}

```css
    .bar a.active
    {
        background-color: #c14694;
    }

    /*------List layout------*/
    ul.list
    {
        list-style: none;
        width: 600px;
        margin: 0 auto;
        text-align: left;
    }
    ul.list li
    {
        border-bottom: 1px solid #ddd;
        padding: 10px;
        overflow: hidden;
    }
    ul.list li img
    {
        float: left;
        border: none;
        padding-right:10px;


    }
    ul.list li p
    {
        margin-left: 135px;
        font-weight: bold;
        color: #6e7a7f;
    }
    #dataname1{
        font-size:25px;
        color:black;
        padding-left:10px;


    }
    #dataname2,#dataname3{

        padding-left:20px;
```

```
      }
    #tbx{
      text-align:right;
      font-size:22px;


    }
    .boxed {
        border: 1.5px solid orange ;
        width:75%;
        height:600px;


    }
    .n{
      font-size:60px;
      color:orange;
      font-weight: bold;
      padding-left:10px;
    }
    .na{
      font-size:30px;
      font-weight:bold;
      padding-left:5px;
    }
    #listimg{
      padding-left:25px;
    }
    #unity{
      width:85em;
      height:25em;
    }
```

```
  </style>
  <script type="text/javascript"
src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.7.8/angular.min.js"></script>
  <script type="text/javascript">
    var app = angular.module("MyApp", []);
      angular.module('MyApp', []).controller("MyController", function($scope) {
       $scope.message="Top 5 Destinations to Visit"
       $scope.layout = 'grid';
       $scope.Data = [
           {num:"01", Name:"Ahmedabad",path:"ahm.jpg",desc:"Ahmedabad, also known as
the 'Manchester of India' is an apt weekend destination amongst tourists who want to unwind
themselves amidst nature and capture the beautiful essence of Gujarat. Ahmedabad is the
western India's most vibrant city known for its cotton industries mushrooming into the cities
and its cotton products burgeoning across India."},
           {num:"02", Name: "Surat",path:"surat.jpg",desc:"Surat, often called the Diamond
```

City, for it has been the trade centre for diamonds for centuries! The city sparkles with its natural beauty, the hot springs, temples, tree-lined roads and access to some of the most beautiful beaches."},

    {num:"03", Name: "Silvassa",path:"sil.jpg",desc:"Silvassa is extremely renowned for its exotic resorts, lush greenery, manufacturing industries and tax-free alcohol. It is also a haven for those looking for handmade and originally crafted products like Warli painting and paper bag."},

    {num:"04", Name: "Vadodra",path:"vad.jpg",desc:"Known all over the world for its magnificent palaces, glorious past, and rich culture, the beautiful city of Vadodara happens to be one of the top places to visit in Gujarat for a peaceful and tranquilizing holiday."},

    {num:"05", Name: "Kutch",path:"kutch.jpg",desc:"If you are looking for places to visit in Gujarat, then Kutch is the crème de la crème of the places you would want to explore. The architectural grandeur, cultural marvel, and sumptuous cuisine are bound to make it difficult for you to leave."},

    {num:"06", Name: "Rajkot",path:"raj.jpg",desc:"The entire city of Rajkot reverberates colonial vibes. Most of the architecture reflects Anglo Indian styles of construction. The elaborate parks, lush green gardens, towering buildings, and museums beautify Rajkot further.."},

    {num:"07", Name: "Gandhinagar",path:"gandh.jpg",desc:"Situated on the west coast of Sabarmati River, this city was named after the great freedom fighter and Father of The Nation of India, Mohandas Karamchand Gandhi. Located 32km to the north of Ahmedabad, Gandhinagar is the epitome of rich cultural heritage."},

    {num:"08", Name: "Gir Somnath",path:"som.jpg",desc:"Gir and Somnath have a distinctly unique beauty. While Somnath's location next to the Arabian Sea adds richness to its landscape, Gir's tropical forest cover lends a luxuriant and verdant charm looking like a sea of green extending across endless miles."},

    {num:"09", Name: "Saputara",path:"sap.jpg",desc:"Saputara is a tourist destination situated in the Dang district of Gujarat. It offers a spectacular view of the Western Ghats residing amid the undulating mountains at a distance of 250 km from Mumbai, and 4 km from the Mumbai border. Being the only hill station in Gujarat, it is located at a height of 1,000 meters and attracts tourists, especially during the summers. ."},

    {num:"10", Name: "Jamnagar",path:"jam.jpg",desc:"Located in the Saurashtra region of Gujarat, Jamnagar is one of the most stunning places to visit in Gujarat. This commercially developed city offers several tourist attractions and entertainment options. The town is known primarily for the oil generation here by the Reliance industries. Moreover, its location to the south of the Gulf of Kutch also makes it a favorable tourist, commercial, and industrial destination."},
       ];
    });
   </script>

</head>
<body bgcolor=white>
 <div class="container">
 <img id="unity" src="12.jpg" alt="Staue Of Unity">
 <div class="text-block">
   <h1 id="head">Places To Visit in Gujarat</h1>
 </div>
 </div>

```html
<div ng-app="MyApp" ng-controller="MyController">
<p id="tbx">Search:<input type="text" ng-model="test"></p>
<ul style="list-style-type: none;">
<li>



        <li ng-repeat="data in Data| filter : test">
            <div class="boxed">
            <p><span class="n">{{data.num}}</span><span
class="na">{{data.Name}}</span></p>
            <img id="listimg" ng-src="{{data.path}}" height="400px" width=80% />

            <p id="dataname2">{{data.desc}}</p>

        </div>
        <br>
      </li>
    </ul>
  </div>
</body>
</html>
```
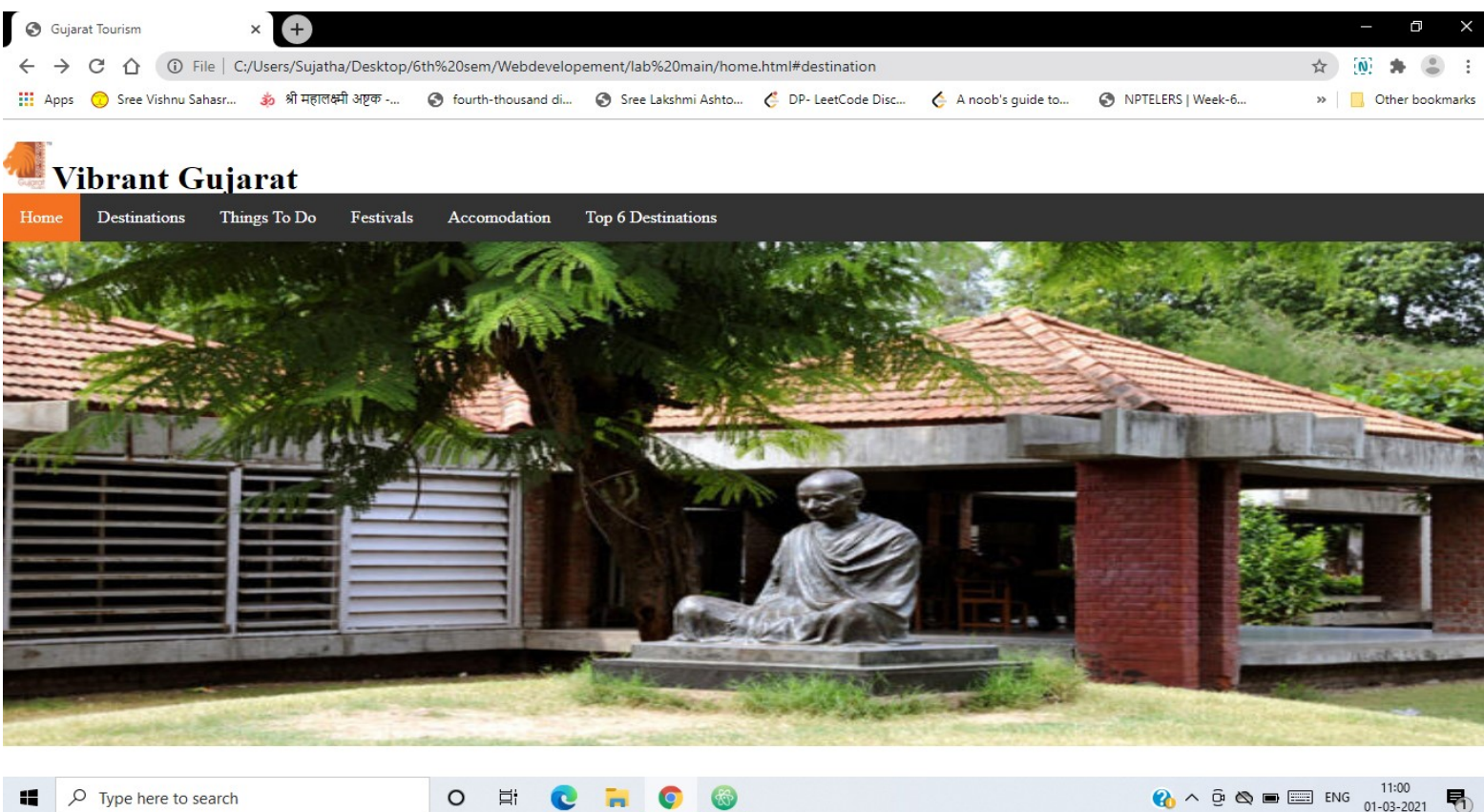
destsearch.css

```css
.container {
 position: relative;
}
#unity{
 height:500px;
 width:100%;
}

/* Bottom right text */
.text-block {
 position:absolute;
 bottom:43%;
 right:36%;
 color:white;
 font-size:35px;
}
```

Output:

home.html
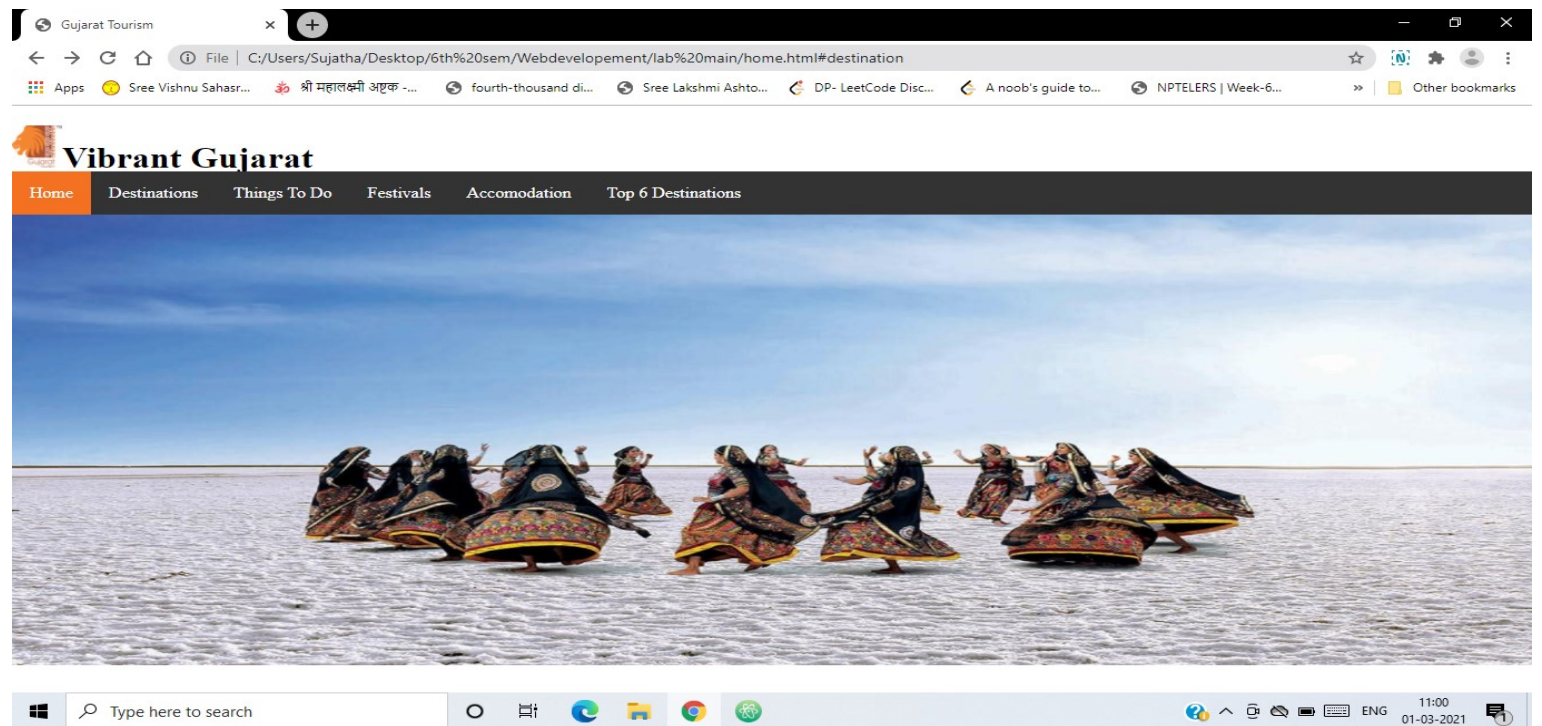
destsearch.html(Angular Filters)
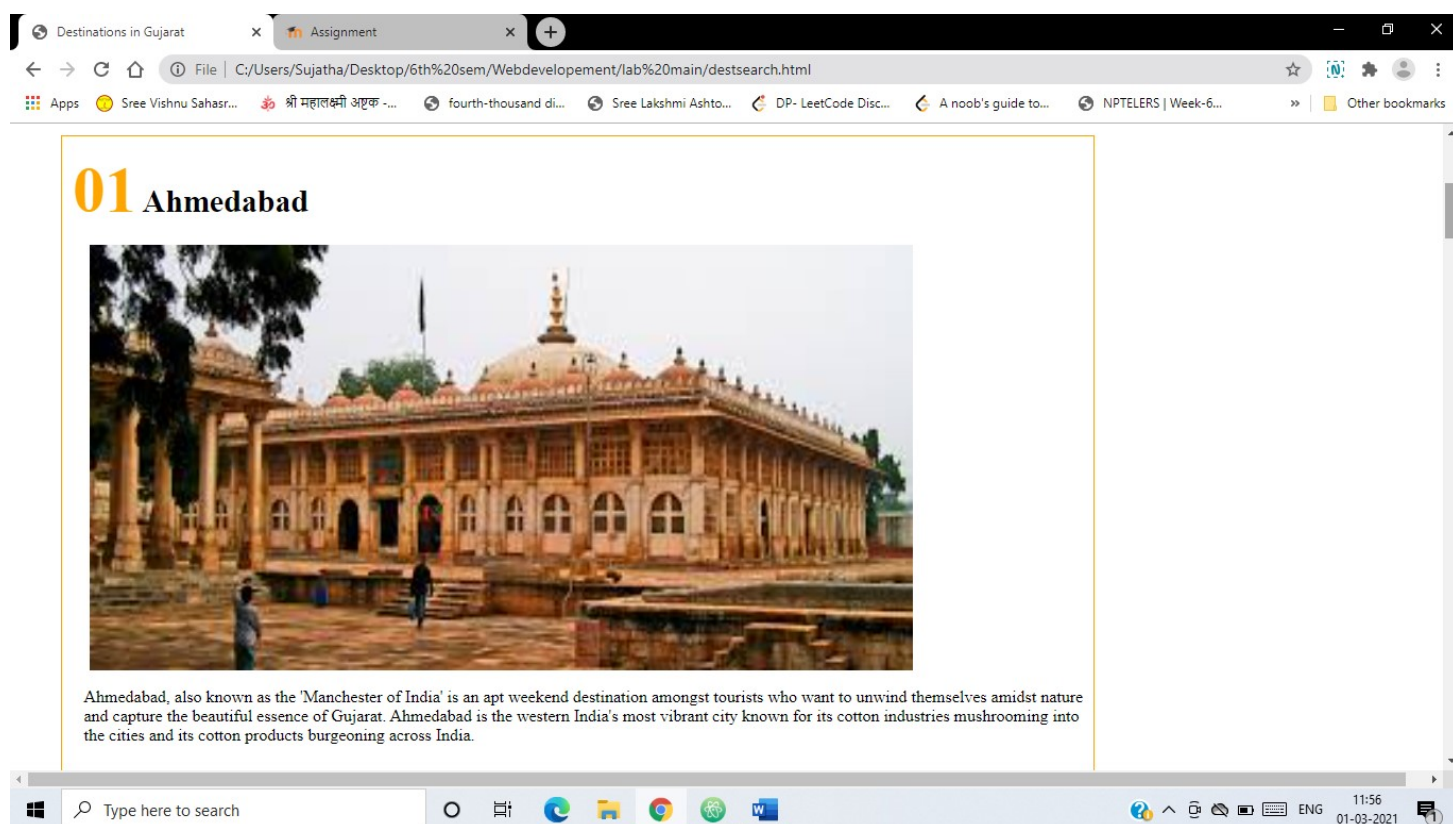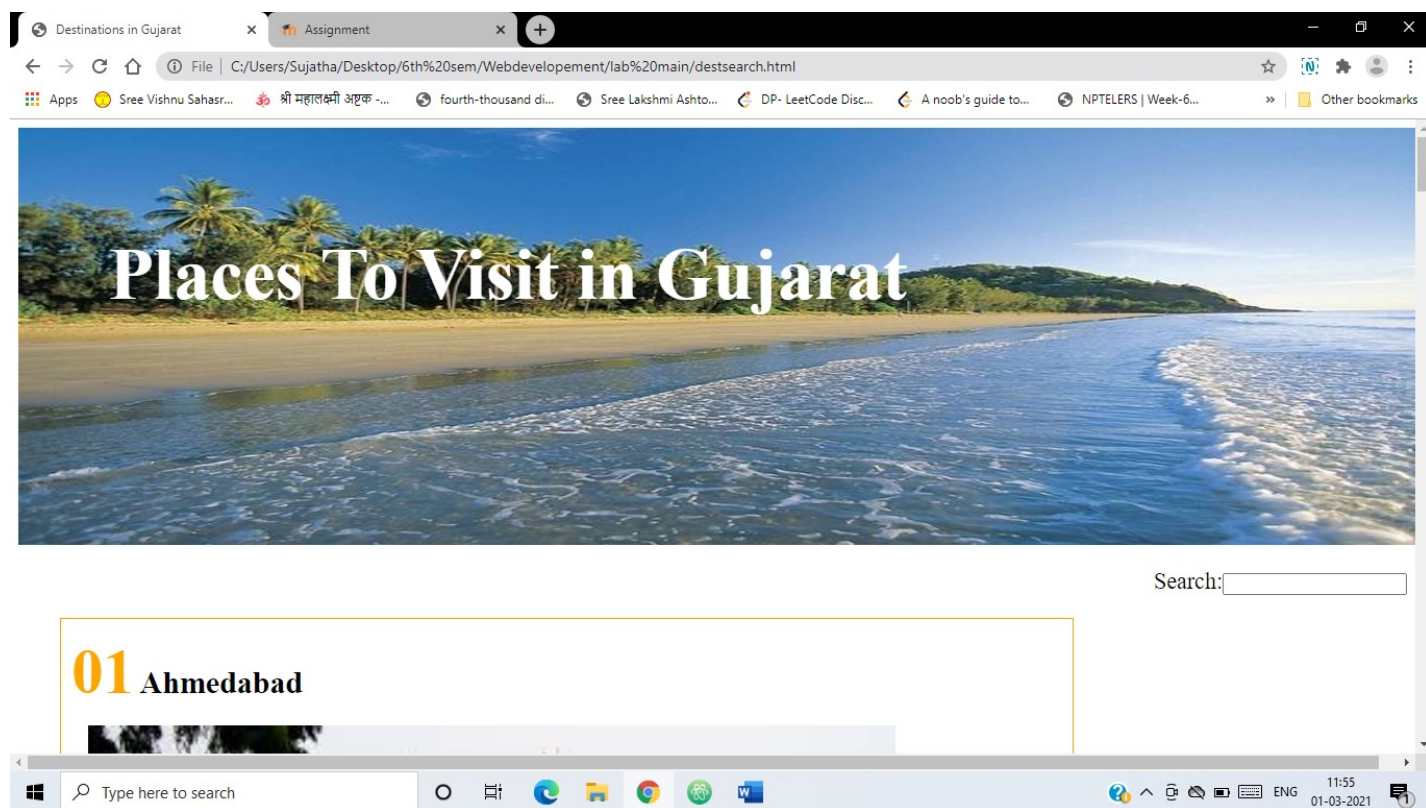
02 Surat

Surat, often called the Diamond City, for it has been the trade centre for diamonds for centuries! The city sparkles with its natural beauty, the hot springs, temples, tree-lined roads and access to some of the most beautiful beaches.

03 Silvassa

Silvassa is extremely renowned for its exotic resorts, lush greenery, manufacturing industries and tax-free alcohol. It is also a haven for those looking for handmade and originally crafted products like Warli painting and paper bag.

04 Vadodra

Known all over the world for its magnificent palaces, glorious past, and rich culture, the beautiful city of Vadodara happens to be one of the top places to visit in Gujarat for a peaceful and tranquilizing holiday.

05 Kutch

If you are looking for places to visit in Gujarat, then Kutch is the crème de la crème of the places you would want to explore. The architectural grandeur, cultural marvel, and sumptuous cuisine are bound to make it difficult for you to leave.

06 Rajkot

The entire city of Rajkot reverberates colonial vibes. Most of the architecture reflects Anglo Indian styles of construction. The elaborate parks, lush green gardens, towering buildings, and museums beautify Rajkot further..

07 Gandhinagar

Situated on the west coast of Sabarmati River, this city was named after the great freedom fighter and Father of The Nation of India, Mohandas Karamchand Gandhi. Located 32km to the north of Ahmedabad, Gandhinagar is the epitome of rich cultural heritage.

08 Gir Somnath

Gir and Somnath have a distinctly unique beauty. While Somnath's location next to the Arabian Sea adds richness to its landscape, Gir's tropical forest cover lends a luxuriant and verdant charm looking like a sea of green extending across endless miles.

09 Saputara

Saputara is a tourist destination situated in the Dang district of Gujarat. It offers a spectacular view of the Western Ghats residing amid the undulating mountains at a distance of 250 km from Mumbai, and 4 km from the Mumbai border. Being the only hill station in Gujarat, it is located at a height of 1,000 meters and attracts tourists, especially during the summers. .

10 Jamnagar

Located in the Saurashtra region of Gujarat, Jamnagar is one of the most stunning places to visit in Gujarat. This commercially developed city offers several tourist attractions and entertainment options. The town is known primarily for the oil generation here by the Reliance industries. Moreover, its location to the south of the Gulf of Kutch also makes it a favorable tourist, commercial, and industrial destination.

User searches with keywords "Sap" the contents of the webpage are ordered accordingly.

Search: Sap

09 Saputara

Saputara is a tourist destination situated in the Dang district of Gujarat. It offers a spectacular view of the Western Ghats residing amid the undulating mountains at a distance of 250 km from Mumbai, and 4 km from the Mumbai border. Being the only hill station in Gujarat, it is located

Result:

In this experiment, the code to create a angularJS, to implement search to filter items and the output was verified successfully.