

Name: Lakshmana Kumar Mettu

Class ID:11

Introduction: Implementation and understanding of REST API's using angular JS elements.

Programming elements:

- Angular JS
- html5
- CSS.

Tools Used:

- JetBrains-Webstorm

API's used:

- Yandex Translator API for language translation
- Four Square API to display nearby Restaurants.

Objective-1: To develop a web application that has to display restaurants depending on the place that you entered.

- The code snippet for corresponding UI implementation and angular elements are shown below along with comments.
- Here I am using four square API to obtain the venue list of restaurants.
- ng-controller directive attaches a controller class to the view. This is a key aspect of how angular supports the principles behind the Model-View-Controller design pattern. The ng-Click directive allows you to specify custom behavior when an element is clicked.

```

        color: #8a97a0;
    }
    body {
        /* The image used */
        background-image: url("https://www.themerckerkitchen.com/content/slides/mercer-gallery-002.jpeg");
        /* Full height */
        /* Center and scale the image nicely */
        background-position: center;
        background-repeat: repeat-x;
    }
</style>
</head>
<body class="body">
<div ng-controller="View1Ctrl" style="top: 200px">

    <div class="menu" id="div_SearchContainer">
        <h1 align="absolute" style="text-align: center; color: #42ee4d">Near By Restaurants</h1>
        <input type="text" id="txt_placeName" placeholder="Enter the place "
            style="margin-right:250px"/>
        <input type="text" id="txt_searchFilter" placeholder="Enter the search key" style="margin-right:250px"/>
        <button id="btn_getReview" style="background-color: #6fff30" ng-click="getVenues()">Obtain the list</button>
    </div>

    <div id="div_VenueList">
        <h2 style="text-align: center; color: #0dee12"> Top Fetched List</h2>
        <table class="table" ng-if="venueList.length > 0"> <!--displays only if a result is fetched-->
            <thead>
                <tr>

```

```

            <div id="div_VenueList">
                <h2 style="text-align: center; color: #0dee12"> Top Fetched List</h2>
                <table class="table" ng-if="venueList.length > 0"> <!--displays only if a result is fetched-->
                    <thead>
                        <tr>
                            <th>Name</th>
                            <th>id</th>
                            <th>Address</th>
                            <th>city</th>
                        </tr>
                    </thead>
                    <tbody>
                        <tr ng-repeat="venue in venueList">
                            <td>{{venue.name}}</td>
                            <td>{{venue.id}}</td>
                            <td>{{venue.location.address + " " +venue.location.crossStreet}}</td>
                            <td>{{venue.location.city}}</td>
                        </tr>
                    </tbody>
                </table>
            </div>
        </div>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js"></script>
<script src="app.js"></script>

</body>
</html>

```


- the translate.js file which is a javascript file. The Document method getElementById() returns an Element object representing the element whose id property matches the specified string. The \$http service is a core AngularJS service that facilitates communication with the remote HTTP servers via the browser's XMLHttpRequest object or via JSONP.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Language Translator</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js"></script>
  <script src="language.js"></script>
  <style>
    .trans {
      padding-top: 30px;
      padding-bottom: 30px;
      margin-bottom: 30px;
    }
  </style>
</head>
<body ng-app="myapp" ng-controller="mycontroller" style="background-color: #80fffe">
<div class="container"><br>
  <div class="trans">
    <h1 style="text-align: center;"> Language Translator</h1>
    <div class="row">
      <div class="col-sm-6">
        <label for="SourceLanguage">From Language</label>
        <select name="repeatSelect" id="source" ng-model="data.model" class="form-control">
          <option ng-repeat="option in data.availableOptions" value="{{option.id}}">{{option.name}}</option>
        </select>
        <textarea rows="5" class="form-control" id="SourceLanguage" style="color:blue;font-size: 30px;">
      </textarea><br>
      <button type="button" class="btn btn-success" style="background-color: #291fa5" ng-click="translate()">Convert</button>
    </div>
    <div class="col-sm-6">
      <label for="DestLanguage">To Language</label>
      <select name="repeatSelect" id="destination" ng-model="data1.model" class="form-control">
        <option ng-repeat="option in data1.availableOptions" value="{{option.id}}">{{option.name}}</option>
      </select>
      <textarea rows="5" class="form-control" id="SourceLanguage" style="color:blue;font-size: 30px;">
    </textarea><br>
      <button type="button" class="btn btn-success" style="background-color: #291fa5" ng-click="translate()">Convert</button>
    </div>
  </div>
  <div class="col-sm-6">
    <label for="DestLanguage">To Language</label>
    <select name="repeatSelect" id="destination" ng-model="data1.model" class="form-control">
      <option ng-repeat="option in data1.availableOptions" value="{{option.id}}">{{option.name}}</option>
    </select>
    <textarea class="form-control" rows="5" id="DestLanguage" style="color:green;font-size: 30px;">{{text}}</textarea>
  </div>
</div>
</div>
</body>
</html>

```

```

angular.module('MYAPP', [])
.controller('mycontroller', function($scope, $http,$log) {
  $scope.data = {
    model: null,
    availableOptions: [
      {id: 'en', name: 'English'},
      {id: 'hi', name: 'Hindi'},
      {id: 'ar', name: 'Arabic'},
      {id: 'te', name: 'Telugu'},
      {id: 'fr', name: 'French'},
      {id: 'ta', name: 'Tamil'}
    ]
  };
  $scope.data1 = {
    model: null,
    availableOptions: [
      {id: 'en', name: 'English'},
      {id: 'hi', name: 'Hindi'},
      {id: 'ar', name: 'Arabic'},
      {id: 'te', name: 'Telugu'},
      {id: 'fr', name: 'French'},
      {id: 'ta', name: 'Tamil'}
    ]
  };
  $scope.translate = function() {
    console.log("kdifm");
    var successCallBack = function (response) {
      console.log("SUCCESS");
      console.log(response.data);
      $scope.text = response.data.text[0];
    };

```

```

    $scope.translate = function() {
      console.log("kdifm");
      var successCallBack = function (response) {
        console.log("SUCCESS");
        console.log(response.data);
        $scope.text = response.data.text[0];
      };
      var failureCallBack = function (response) {
        console.log("FAIL");
        $scope.error = response.data;
        $log.info(response);
      };
      var sourceText = document.getElementById("sourceLanguage").value;
      console.log(sourceText);
      console.log();
      console.log();
      $http({
        method: 'GET',
        url: 'https://translate.yandex.net/api/v1.5/tr.json/translate?key=trnsl.1.1.20190621T174556Z.065e00b3f0e46c7.a32b71ba053fd17651de3fb2a3e2dbbd8bbcef96&text=' + sourceText + '&lang='+$scope
      })
      .then(successCallBack, failureCallBack);
    }
  });

```

localhost:63342/icmp-5/Translator/language.html?_ijt=25f9pch9c1vtsp20om58ip4b

Language Translator

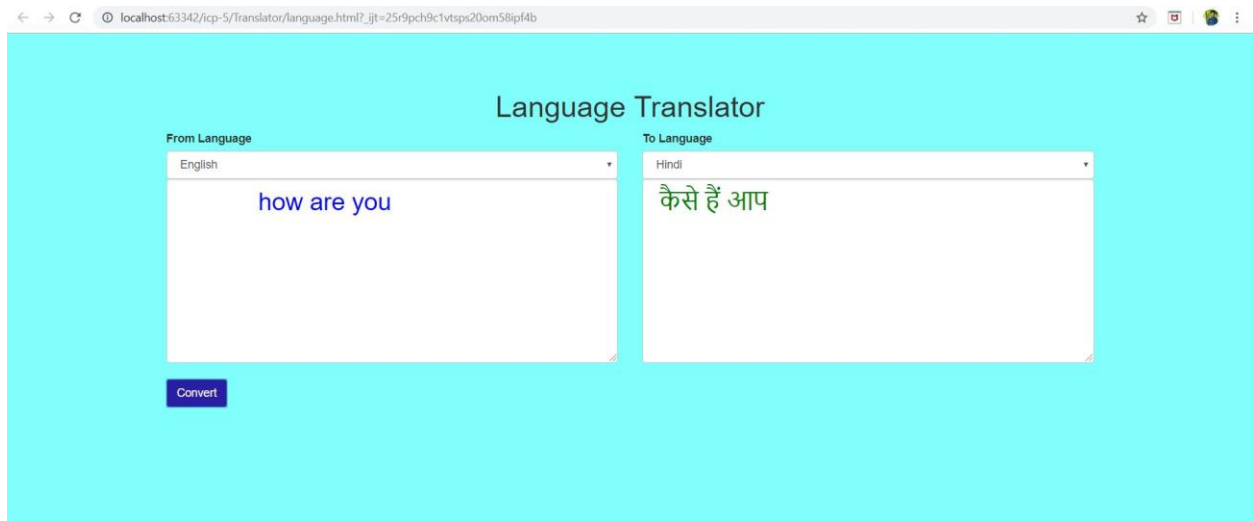
From Language

English

To Language

Hindi

Convert



Conclusion:

- Hence learnt how to use REST API's to develop web applications using angularJS elements.