Weather.js

// Declaring normal function and function name is ‘countryFunction

function countryFunction(e){

// setting css property for id ‘'tableDiv'’ name is display : none

document.getElementById('tableDiv').style.display = "none";

// setting css property for id ‘'tableDiv'’ name is display : none

document.getElementById('cityDiv').style.display = "none";

// setting html element value empty for id ‘'tableDiv'’

$('#myTable').html('');

// getting value from the JavaScript events from where we are calling in html and passing value to variable

var val = e.value;

// checking the value is empty or not

if(val!=''){

$.ajax({ // this is ajax function

<url:val>, // file name

datatype : 'JSON', // datatype which we receive in response

success : function(data){ // function use to get data

// adding value to html id which we are receiving from response

$('#cityName').html(data);

},

// if our ajax call does not work successfully then this function will execute

statusCode : {

404 : function() { // function will work 404

// this is use to show error message on browser screen

alert('There was a problem with the server. Try again soon!');

}

}

});

// setting css property for id ‘'cityDiv'name is display : Block

document.getElementById('cityDiv').style.display = "Block";

}else{

// setting css property for id ‘'cityDiv'name is display : none

document.getElementById('cityDiv').style.display = "none";

// setting html element value empty for id ‘cityName'

$('#cityName').html('');

}

}

// Declaring normal function and function name is ‘CityFunction

function CityFunction(e){

// passing value to variable

var e = document.getElementById(e.id);

// getting the selected value from the select of html

var cityName = e.options[e.selectedIndex].text;

// checking value is empty or not

if(cityName!='Select a City'){

$.ajax({ // making ajax call function

// getting data from the url address by making ajax call <url:'http://api.openweathermap.org/data/2.5/weather?q='+cityName+'&units=metric&appid=36de6328cffc2e631bb64b265304041c>',

datatype : 'JSON', // datatype which we receive in response

success : function(data){ // function use to get data

// Temperature must be displayed in Celsius and fahrenheit. If the temperature is above 35°C or below -5°C, a severe weather warning must be issued.

if(data.main.temp>35 || data.main.temp<(-5))

{

var tempCondition = 'style="color:#fff;background-color:red"';

}

else{

var tempCondition = '';

}

//Wind speed must be displayed in miles-per-hour and kilometres per hour. If the wind speed is greater than 50mph (80.47kph), a severe weather warning must be issued.

if(data.wind.speed>50){

var windConditon = 'kph';

}

else{

var windConditon = 'mph';

}

// Wind direction must be displayed as a degree (e.g. 90°) and as a textual description (e.g. Southerly, South Westerly, Westerly, etc.).

var degreeTexture = degToCard(data.wind.deg) ; // calling function

// adding data to id ‘mytable’ in html which we receiving from response

$('#myTable').html('<tr><td>'+data.name+'</td><td>'+convertStampDate(data.dt)+'</td><td>'+data.weather[0].description+'</td><td '+tempCondition+' >'+data.main.temp+' C</td><td>'+data.wind.speed+' '+windConditon+'</td><td>'+data.wind.deg+' '+degreeTexture+'</td><td id="image\_div"></td></tr>');

// making ajax call for image which will be in base64 decode and then we convert this image to raw base64and then this raw into image and add into html page using ‘Image\_id’ id

$.ajax({

type: "GET", // using get method

// url address

url:'http://openweathermap.org/img/wn/'+data.weather[0].icon+'@2x.png',

beforeSend: function (xhr) {

xhr.overrideMimeType('text/plain; charset=x-user-defined');

},

success: function (result, textStatus, jqXHR) {

if(result.length < 1){

alert("The thumbnail doesn't exist");

$("#image\_div").attr("src", "data:image/png;base64,");

return

}

var binary = "";

var responseText = jqXHR.responseText;

var responseTextLen = responseText.length;

for ( i = 0; i < responseTextLen; i++ ) {

binary += String.fromCharCode(responseText.charCodeAt(i) & 255)

}

$('#image\_div').html('<img id="image\_id" src="data:image/png;base64,'+btoa(binary)+'"/>');

// $("#image\_div").attr("src", "data:image/png;base64,"+btoa(binary));

},

error: function(xhr, textStatus, errorThrown){

alert("Error in getting document "+textStatus);

}

});

},

statusCode : { // if our ajax call does not work successfully then this function will execute

404 : function() { // function will work 404

// this is use to show error message on browser screen

alert('There was a problem with the server. Try again soon!');

}

}

});

// setting css property for id ‘'tableDiv'’ name is display : Block

document.getElementById('tableDiv').style.display = "Block";

}else{

// setting css property for id ‘'tableDiv'’ name is display : none

document.getElementById('tableDiv').style.display = "none";

// setting html element value empty for id ‘myTable'

$('#myTable').html('');

}

}

// declaring function with name degToCard , this function is use to convert degrees into text directions

function degToCard(num) {

var val = Math.floor((num / 22.5) + 0.5);

var arr = ["N", "NNE", "NE", "ENE", "E", "ESE", "SE", "SSE", "S", "SSW", "SW", "WSW", "W", "WNW", "NW", "NNW"];

return arr[(val % 16)];

}

// declaring function function with name convertStampDate. The date must be displayed in standard date format (e.g. DD-MM-YYYY).

function convertStampDate(unixtimestamp){

// Unixtimestamp

// Months array

// var months\_arr = ['January','February','March','April','May','June','July','August','September','October','November','December'];

var months\_arr = [01,02,03,04,05,06,07,08,09,10,11,12];

// Convert timestamp to milliseconds

var date = new Date(unixtimestamp\*1000);

// Year

var year = date.getFullYear();

// Month

var month = months\_arr[date.getMonth()];

// Day

var day = date.getDate();

// Hours

var hours = date.getHours();

// Minutes

var minutes = "0" + date.getMinutes();

// Seconds

var seconds = "0" + date.getSeconds();

// Display date time in MM-dd-yyyy h:m:s format

var fulldate = month+' '+day+'-'+year+' '+hours + ':' + minutes.substr(-2) + ':' + seconds.substr(-2);

// filtered fate

var convdataTime = day+'-'+month+'-'+year;

return convdataTime;

}