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//Declare a variable to store the searched city
var city="";
// variable declaration
var searchCity = $("#search-city");
var searchButton = $("#search-button");
var clearButton = $("#clear-history");
var currentCity = $("#current-city");
var currentTemperature = $("#temperature");
var currentHumidity = $("#humidity");
var currentWSpeed = $("#wind-speed");
var currentUVindex = $("#uv-index");
var sCity=[];
// searches the city to see if it exists in the entries from the storage
function find(c){
    for (var i=0; i<sCity.length; i++){
        if(c.toUpperCase()===sCity[i]){
            return -1;
        }
    }
    return 1;
}
//Set up the API key
var APIKey="d83e3b8a5dc6685667be7bd182e85c0c";
// Display the current and future weather to the user after grabbing the city from the input text box.
function displayWeather(event){
    event.preventDefault();
    if(searchCity.val().trim()!=""){
        city=searchCity.val().trim();
        currentWeather(city);
    }
}
// Here we create the AJAX call
function currentWeather(city){
    // Here we build the URL so we can get a data from server side.
    var queryURL= "https://api.openweathermap.org/data/2.5/weather?q="+ city +
"&units=metric&APPID="+ APIKey;
    $.ajax({
        url:queryURL,
        method:"GET",
    }).then(function(response){

        // parse the response to display the current weather including the City name. the Date and the
        // weather icon.
        console.log(response);
        //Dta object from server side Api for icon property.
        var weathericon= response.weather[0].icon;
        var iconurl="https://openweathermap.org/img/wn/"+weathericon +"@2x.png";
        // The date format method is taken from the https://developer.mozilla.org/en-US/docs/Web/
        // JavaScript/Reference/Global_Objects/Date
        var date=new Date(response.dt*1000);
        //parse the response for name of city and concatenating the date and icon.
        $(currentCity).html(response.name + "<br><h4><b>" + date.toLocaleString("en-IN") + "</h4></
b>");
        $('#cuwea').attr('src',iconurl);
        // parse the response to display the current temperature.
        // Convert the temp to fahrenheit

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var tempC = (response.main.temp).toFixed(1);
$(currentTemperature).html(tempC+"&#8451");
// Display the Humidity
$(currentHumidity).html(response.main.humidity+"%");
//Display Wind speed and convert to MPH
var ws=response.wind.speed;
var windskeh=(ws * 3.6).toFixed(1);
$(currentWSpeed).html(windskeh+"KMPH");
// Display UVIndex.
//By Geographic coordinates method and using appid and coordinates as a parameter we are
going build our uv query url inside the function below.
UVIndex(response.coord.lon,response.coord.lat);
forecast(response.id,response.coord.lon,response.coord.lat);
if(response.cod==200){
    sCity=JSON.parse(localStorage.getItem("cityname"));
    console.log(sCity);
    if (sCity==null){
        sCity=[];
        sCity.push(city.toUpperCase()
    );
        localStorage.setItem("cityname",JSON.stringify(sCity));
        addToList(city);
    }
    else {
        if(find(city)>0){
            sCity.push(city.toUpperCase());
            localStorage.setItem("cityname",JSON.stringify(sCity));
            addToList(city);
        }
    }
}

});
}
// This function returns the UVIndex response.
function UVIndex(ln,lt){
    //lets build the url for uvindex.
    var uvqURL="https://api.openweathermap.org/data/2.5/uv?appid="+ APIKey+"&lat="+lt
    +"&lon="+ln;
    $.ajax({
        url:uvqURL,
        method:"GET"
    }).then(function(response){
        $(currentUvindex).html(response.value);
    });
}

// Here we display the 7 days forecast for the current city.
function forecast(cityid,ln,lt){
    var dayover= false;
    var queryforecastURL="https://api.openweathermap.org/data/2.5/onecall?lat="+lt+"&lon="+ln
    +"&exclude=hourly,minutely&units=metric&appid="+APIKey;
    $.ajax({
        url:queryforecastURL,
        method:"GET"

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}).then(function(response){
    console.log(response)

    for (i=0;i<7;i++){
        var date= new Date((response.daily[i].dt)*1000).toLocaleDateString("en-IN");
        var iconcode= response.daily[i].weather[0].icon;
        var iconurl="https://openweathermap.org/img/wn/"+iconcode+".png";
        var temp= response.daily[i].temp.day;
        var tempC=(temp).toFixed(1);
        var humidity= response.daily[i].humidity;

        $("#fDate"+i).html(date);
        $("#fImg"+i).html("");
        $("#fTemp"+i).html(tempC+"&#8451");
        $("#fHumidity"+i).html(humidity+"%");
    }

});
}

//Daynamicly add the passed city on the search history
function addToList(c){
    var listEl= $("<li>"+c.toUpperCase()+"</li>");
    $(listEl).attr("class","list-group-item");
    $(listEl).attr("data-value",c.toUpperCase());
    $(".list-group").append(listEl);
}

// display the past search again when the list group item is clicked in search history
function invokePastSearch(event){
    var liEl=event.target;
    if (event.target.matches("li")){
        city=liEl.textContent.trim();
        currentWeather(city);
    }
}

}

// render function
function loadlastCity(){
    $(".ul").empty();
    var sCity = JSON.parse(localStorage.getItem("cityname"));
    if(sCity!=null){
        sCity=JSON.parse(localStorage.getItem("cityname"));
        for(i=0; i<sCity.length;i++){
            addToList(sCity[i]);
        }
        city=sCity[i-1];
        currentWeather(city);
    }
}

}

//Clear the search history from the page
function clearHistory(event){
    event.preventDefault();
    sCity=[];
    localStorage.removeItem("cityname");

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document.location.reload();
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}
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//Click Handlers
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$("#search-button").on("click",displayWeather);
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$(document).on("click",invokePastSearch);
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$(window).on("load",loadlastCity);
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$("#clear-history").on("click",clearHistory);
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