FMA WD Task 1 Code Explanation

**A page can't be manipulated safely until the document is "ready." jQuery detects this state of readiness for you. Code included inside function displayWeather() will only run once the page Document Object Model (DOM) is ready for JavaScript code to execute.**

$(document).ready(function displayWeather() {

**The setTimeout() method calls a function or evaluates an expression after a specified number of milliseconds.**

setTimeout(function() {

**Retrieve data from weather.json using the $.ajax( ) function , if successfully retrieve we execute the function with the parameter response that start processing the data**

$.ajax( {

url:'weather.json',

type: 'GET',

dataType: 'json',

success: function(response){

**Saves our DOM structure inside the variable weatherTxt, constructing the table head.**

var weatherTxt = '<thead><tr><th>City</th><th>Conditions</th><th>Temperature</th><th>Wind Speed</th><th>Wind Direction</th><th>Wind Chill Factor</th></thead>';

**Iterates over each JSON object and from weather.json using an anonymous function to access the current data index.**

$.each(response.weather, function(index) {

**Constructs the structure of the table in the variable weatherTxt. Populates each row of the table with the data inside the weather.json.**

weatherTxt += '<tr><td>' + response.weather[index].cityName + '</td><td id = conditions>' + response.weather[index].currentConditions +

displayWeatherIcon(response.weather[index].currentConditions) + '</td><td>' +

response.weather[index].temperature + '&deg;c</td><td>' + response.weather[index].windSpeed + ' km/h</td><td>' + response.weather[index].windDirection + '</td><td>' + response.weather[index].windChillFactor + '</td></tr>';

});

**Attaches the table constructed in weatherTxt to the <div class = cittiesTable > of the DOM**

$('.citiesTable').append(weatherTxt);

**If the data is valid the <div class = error> content remains empty .**

$('.error').innerHTML = '';

},

**If there’s a problem recovering the data or the data isn’t valid the <div class = error> element will be populated with a error paragraph <p></p> and the <div class = cittiesTable > will remain empty.**

error: function() {

$('.error').html('<p>Error fetching the data !</p>');

$('.citiesTable').innerHTML = '';

}

});

**Number of millisecond that at what interval SetTimeout() will execute;**

}, 200);

});

**Function displayWeatherIcon() takes a String as a parameter. If the parameter is equal with the string value of any of the cases inside the switch block it will return an “icon” variable that contains in form of a string the address of the image corresponding with the value of the parameter.**

function displayWeatherIcon(icon) {

switch (icon) {

case "Clouds":

icon = '<img src="./weather\_icons/cloud.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Hail":

icon = '<img src="./weather\_icons/hail.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Heavy Cloud":

icon = '<img src="./weather\_icons/heavy cloud.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Heavy Rain":

icon = '<img src="./weather\_icons/heavy rain.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Rain":

icon = '<img src="./weather\_icons/rain.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Sleet":

icon = '<img src="./weather\_icons/sleet.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Snow":

icon = '<img src="./weather\_icons/snow.png" style =" width: 7%; margin-left: 1em;">';

break;

case "Sun and Clouds":

icon = '<img src="./weather\_icons/sun and cloud.png" style =" width: 7%; margin-left: 1em;">';

break

case "Sun":

icon = '<img src="./weather\_icons/sun.png" alt="sun" style =" width: 7%; margin-left: 1em;">';

break;

case "Thunderstorm":

icon = '<img src="./weather\_icons/thunderstorm.png" style =" width: 7%; margin-left: 1em;">';

break;

default:

icon = '';

break;

}

return icon;

}