1.1 Asynchronous NodeJS



This section will guide you to:

* Create a JavaScript project in your IDE
* Write a program in NodeJS to get the weather details of a city

This lab has three subsections, namely:

* + 1. Writing a program in NodeJS to get the weather details of a city
    2. Executing the program
    3. Pushing the code to your GitHub repositories

*NodeJS and Visual Studio Code are already installed in your lab. (Refer MEAN: Lab Guide - Phase 3)*

**Step 1.1.1:** Writing a program in NodeJS to get the weather details of a city

* Go to <https://openweathermap.org/api> and create an account
* Click on *API Keys*
* Enter a name and generate a key
* Save the key to use it in your program
* Open a terminal
* Install npm using the following command:

*sudo npm install npm@latest -g*

* Create an empty directory named *weather* and run the following command:

*npm init*

* Install an npm module named *request*, using the following command:

npm install request --save

* Open Visual Studio code
* Open the weather folder
* Create a file in the **weather** folder named event\_loop.js
* Execute the code shown below by resolving the warnings and errors due to compatibility-related issues

let request = require('request');

let apiKey = '3d99c4a247cde93b9708fe2700904ae2';

const CITIES = [

'Kolkata',

'Bangalore',

'Lucknow',

'Allahabad',

'Delhi'

];

const city = CITIES[Math.floor(Math.random() \* CITIES.length)];

let url = `http://api.openweathermap.org/data/2.5/weather?q=${city}&units=imperial&appid=${apiKey}`;

request(url, function (err, response, body) {

console.log('Fetching the weather!');

if(err){

console.log('There was an error getting the weather');

}

else {

let weather = JSON.parse(body);

let message = `It's ${weather.main.temp} degrees in ${weather.name}!`;

console.log(message);

}

greet();

});

function greet(){

console.log('Weather fetched!!!');

}

**Step 1.1.2:** Executing the program

* Before you execute the program, check for syntactical corrections. If no errors are found, follow the steps mentioned below:
* *Open the terminal*
* *Run the following command:*

*node event\_loop.js*

**Output:**

*Fetching the weather!*

*It's 86.18 degrees in Delhi!*

*Weather fetched!!!*

**Step 1.1.3:** Pushing the code to your GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

Initialize your repository using the following command:

git init

Add all the files to your git repository using the following command:

git add . 

Commit the changes using the following command:

git commit . -m “Changes have been committed.”

Push the files to the folder you initially created using the following command:

git push -u origin master