# Build a simple Weather API with Node JS and Open Weather Map

Hey folks! In this tutorial, we are going to see how we can create weather API in node js that will give us weather forecast of any city/country. Seems Amazing right? So, without any further delay, let’s get started. We are going to use [Open Weather Map API](https://openweathermap.org/api) for fetching forecasting details of about 200,000 plus cities. You can read more about Open Weather Map API at [Open Weather Map API](https://openweathermap.org/api).



## Setting up developer account at Open Weather Map API:

For fetching details about weather using open weather map API, we will have to create free account here. It’s quite simple, just follow me.

1. Go to this site [Open Weather Map API](https://openweathermap.org/api) and create an account. In case you already have an account, simply login.

Graphical user interface, text

Description automatically generated

1. After creating an account, you need to verify your email. And then simply login. You will see following dashboard under API section.

Graphical user interface, text

Description automatically generated

1. We need to head over My API Keys section in nav bar under User Avatar.

Graphical user interface, text, application, website

Description automatically generated

1. Then give API key a name and click on create Key.

Graphical user interface, text, application, chat or text message

Description automatically generated

1. Copy API key and let’s get started by creating node project.
2. Create an empty directory, name it as u want. I am going to name it as weather-app
3. Open it with vs code. You can download vs code from here. <https://code.visualstudio.com/>
4. Go to terminal by pressing ***ctrl + shift + ~*** and type ***npm init -y*** and hit enter.
5. Go to package.json file and do the following changes.

{

  "name": "weather-app",

  "version": "1.0.0",

  "description": "",

  "main": "index.js",

  "type": "module",

  "scripts": {

    "start": "nodemon server.js"

  },

  "keywords": [],

  "author": "",

  "license": "ISC"

}

1. Go to terminal and type ***npm install express cors dotenv node-fetch*** and hit enter
2. Create an empty file server.js and put the following code inside it.

import express from "express";

import cors from "cors";

import dotenv from "dotenv";

import fetch from "node-fetch";

const app = express();

const port = process.env.PORT || 5000;

//registering middlewares

dotenv.config();

app.use(express.json());

app.use(cors());

//registering routes

app.get("/", (req, res) => {

  res.status(200).send("Weather API is running");

});

//creating server

app.listen(port, () => {

  console.log(`server is up on ${port}`);

});

1. Go to terminal, type ***npm start*** and congratulations, your server is running now. Text

   Description automatically generated
2. Now, remember that API Key you have copied from open weather map. Create .env file in your root directory and paste following content

PORT = 5000

API\_KEY = your api key here

1. Now all set, we are now going to use following URL [***http://api.openweathermap.org/data/2.5/weather***](http://api.openweathermap.org/data/2.5/weather) for making weather requests. Two query parameters are also required in the URL. Query parameters are key-value pairs that let us pass information to a URL. In this case, we'll need to supply our API Key as well as the city we're looking for.
2. Let’s add route for fetching weather forecast for a particular city

//fetching weather forecast for a particular city

app.get("/city", async (req, res) => {

  if (!req.query.city) {

    res.status(404).json("City is missing");

  } else {

    let city = req.query.city;

    const response = await fetch(

      `http://api.openweathermap.org/data/2.5/weather?q=${city}&appid=${process.env.API\_KEY}`

    );

    const data = await response.json();

    res.status(200).json(data);

  }

});

1. All together now

## Server.js

import express from "express";

import cors from "cors";

import dotenv from "dotenv";

import fetch from "node-fetch";

const app = express();

const port = process.env.PORT || 5000;

//registering middlewares

dotenv.config();

app.use(express.json());

app.use(cors());

//registering routes

app.get("/", (req, res) => {

  res.status(200).send("Weather API is running");

});

//fetching weather forecast for a particular city

app.get("/weather", async (req, res) => {

  if (!req.query.city) {

    res.status(404).json("City is missing");

  } else {

    let city = req.query.city;

    const response = await fetch(

      `http://api.openweathermap.org/data/2.5/weather?q=${city}&appid=${process.env.API\_KEY}`

    );

    const data = await response.json();

    res.status(200).json(data);

  }

});

//creating server

app.listen(port, () => {

  console.log(`server is up on ${port}`);

});

Graphical user interface, text, application

Description automatically generated



Graphical user interface

Description automatically generated with low confidence

Amazing 😊♥ we have created our own weather API. I hope you enjoyed this simple yet powerful node js weather API. You can read more about weather API here. [Open Weather Map API](https://openweathermap.org/api) and stay tuned with us to get updates on more awesome tutorials.