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1 //Created by Saksham Agarwal
2 //19323666
3 const express = require('express')
4 const app = express()
5 const port = 8000
6 const path = require("path")
7 let publicPath = path.resolve(__dirname, "public")
8 app.use(express.static(publicPath))
9 app.listen(port, function(){
10     console.log(`Weather app listening on port ${port}!`)
11 })
12 const fetch = require("node-fetch")
13 const APIkey = "5e3372a4963938fde6772cf72372f17e";
14
15 app.get("/", function (req, res) {
16     res.sendFile(path.join(__dirname + "/Client.html"))})
17 app.get("/weather/:location", Weatherprediction)
18
19 async function Weatherprediction(req, res) {
20
21     var city = req.params.location
22     const url = "https://api.openweathermap.org/data/2.5/forecast?q="+ city +
23 "&units=metric" + "&appid=" + APIkey
24     var response = await fetch(url)
25     let weatherData = await response.json()
26
27     var packing_advise, date = ''
28     var temp, windSpeed, rain = 0
29     var prediction_list = {
30         Umbrella : "The weather is clear today in "+ city + " ,no umbrella is
31         required!",
32         Clothes: '',
33         forecastList :[]
34     }
35     Umbrella = 'N'
36     Clothes = ' '
37
38     if(weatherData.list[0].rain != undefined){
39         if(JSON.stringify(weatherData).substr(6,4) != ''){
40             prediction_list.Umbrella = "There is prediction for rain in "
41             +city+ ",you should bring an umbrella ";
42         }
43     }
44
45     for(var index = 0; index < (weatherData.list.length); index++){
46         date = weatherData.list[index].dt_txt
47         temp = weatherData.list[index].main.temp
48         rain = Rain_prediction(weatherData.list[index].rain)
49         windSpeed = weatherData.list[index].wind.speed;
50         packing_advise = Pack(weatherData.list[index].main.temp,
51         prediction_list)
52
53         prediction_list.forecastList.push(
54             {
55                 Date: date.
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51         date: date,
52         Temp: temp,
53         Rainfall: rain,
54         Windspeed: windSpeed,
55     }
56 )
57 }
58 res.json(prediction_list)
59 }
60
61 function Pack(temp, prediction_list){
62     if(temp >= -10 && temp <= 10){
63         packing_advise = "Cold"
64         prediction_list.Clothes = "It will be a Cold day, wear clothes for
cold weather"
65     }
66     else if(temp > 10 && temp <= 20){
67         packing_advise = "Warm"
68         prediction_list.Clothes = "It will be a warm day, wear clothes for
warm weather"
69     }
70     else{
71         packing_advise = "Hot"
72         prediction_list.Clothes = "It will be a Hot day, wear clothes for Hot
weather"
73     }
74     return packing_advise
75 }
76
77
78 function Rain_prediction(weatherData){
79
80     if(weatherData != undefined){
81         if(JSON.stringify(weatherData).substr(6,4) != ''){
82             rain = parseFloat((JSON.stringify(weatherData)).substr(6,4))
83         }
84     }
85     else{
86         rain = '0.0'
87     }
88     return rain
89 }
90
91
92
```