

WeatherTrack Pro Backend

This is the core backend of WeatherTrack Pro application.

This project is responsible for storing and exposing weather data as well as producing different data analysis.

Usage

Configuration settings can be set per environment under the `/config` directory. See [config documentation](#).

- Run the project

```
npm start
```

- Run the project in watch/inspect mode

```
npm run start:watch
```

API Description

Data management

This route is not publicly exposed and is used only by the internal robots responsible for retrieving and uploading weather data.

- [POST /weather/data](#)

body example:

```
{
  "location": "Lyon",
  "date": "2023-12-24T23:00:00.000Z",
  "temperature": 25,
  "humidity": 40
}
```

Data retrieval

- [GET /weather/data/:location](#)

query parameters:

- from: Date (optional)
- to: Date (optional)

examplple query:

```
curl localhost:3000/weather/data/Lyon\?from=2023-12-22\&to=2023-12-25
```

response example:

```
[  
  {  
    "location": "Lyon",  
    "date": "2023-12-22T23:00:00.000Z",  
    "temperature": 27,  
    "humidity": 40  
  },  
  {  
    "location": "Lyon",  
    "date": "2023-12-24T23:00:00.000Z",  
    "temperature": 25,  
    "humidity": 40  
  }  
]
```

Data analysis

- GET /weather/avg/:location

query parameters:

- from: Date (optional)
- to: Date (optional)

examplple query:

```
curl localhost:3000/weather/avg/Lyon?from=2023-12-22&to=2023-12-25
```

response example:

```
{ "avg": 24.16666666666666 }
```

- GET /weather/max/:location

query parameters:

- from: Date (optional)
- to: Date (optional)

example query:

```
curl localhost:3000/weather/max/Lyon?from=2023-12-22
```

response example:

```
{ "max": 27 }
```

- **GET /weather/min/:location**

query parameters:

- from: Date (optional)
- to: Date (optional)

example query:

```
curl localhost:3000/weather/min/Lyon\?to=2023-12-25
```

response example:

```
{ "min": 23 }
```

Locally running infrastructure dependencies

postgres:16

```
docker run --name weather-db \
-e POSTGRES_USER=WeatherTrack \
-e POSTGRES_PASSWORD=mysecretpassword \
-e POSTGRES_DB=WeatherTrack \
-p 5432:5432 \
-d \
postgres:16-alpine
```