

Name: Meda Varun Kumar

Email: varunkumarmeda02@gmail.com

SPECIFICATION 1: IOT PLATFORM

A major part of your assessment would be to build a IOT platform which will act as a service that can interface

with hardware sensors. For the sake of this assessment, we will assume that the sensors will only be sending

data over REST APIs.

You will have to build a platform that can:

- ☑ Register sensors on platform
- ☑ Take data coming from sensors and store them
- ☑ Give endpoints for accessing the data

Install Instructions/setup:

MongoDB compass

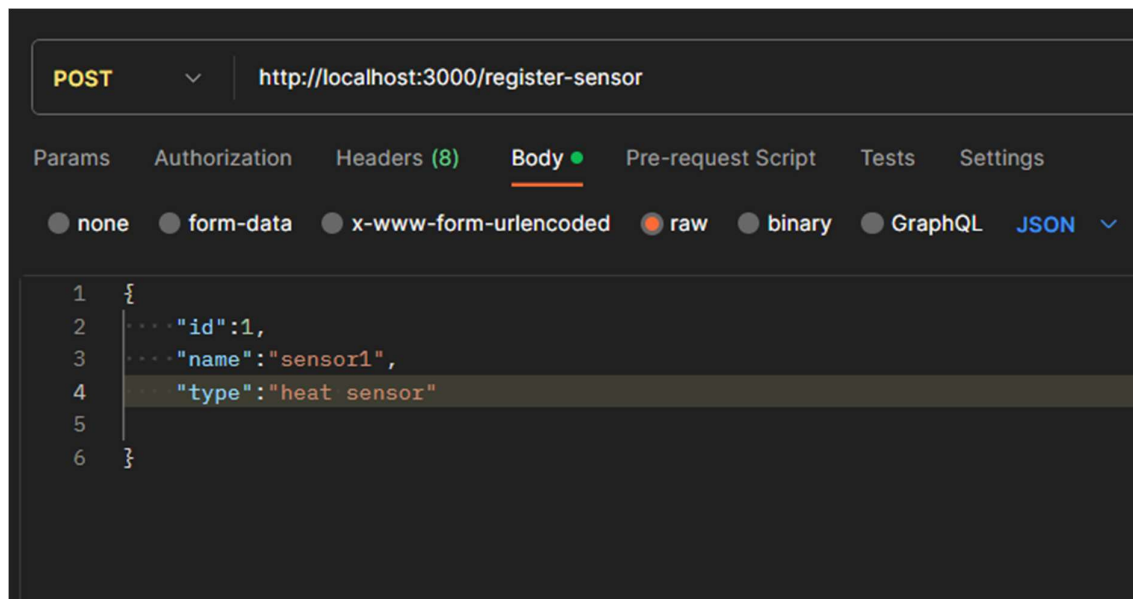
postman

node JS

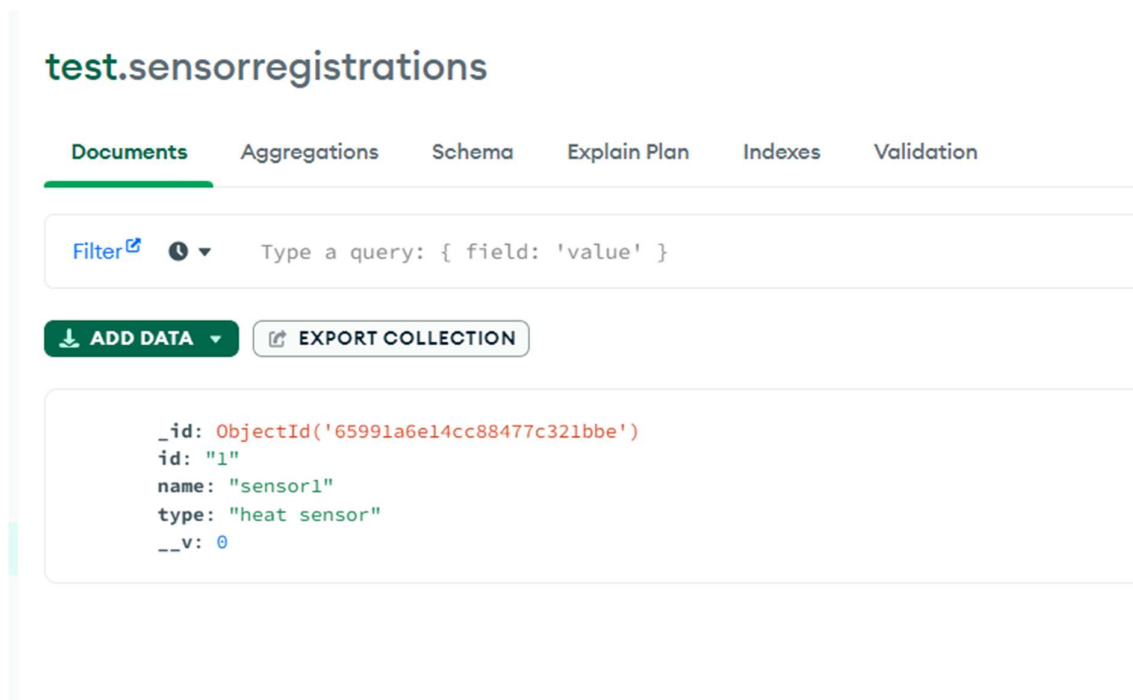
Connect your mongodb with node.js server replacing your own connection string in line 13 of index.js file and run it with node index.js command

A)

Registering the sensor:

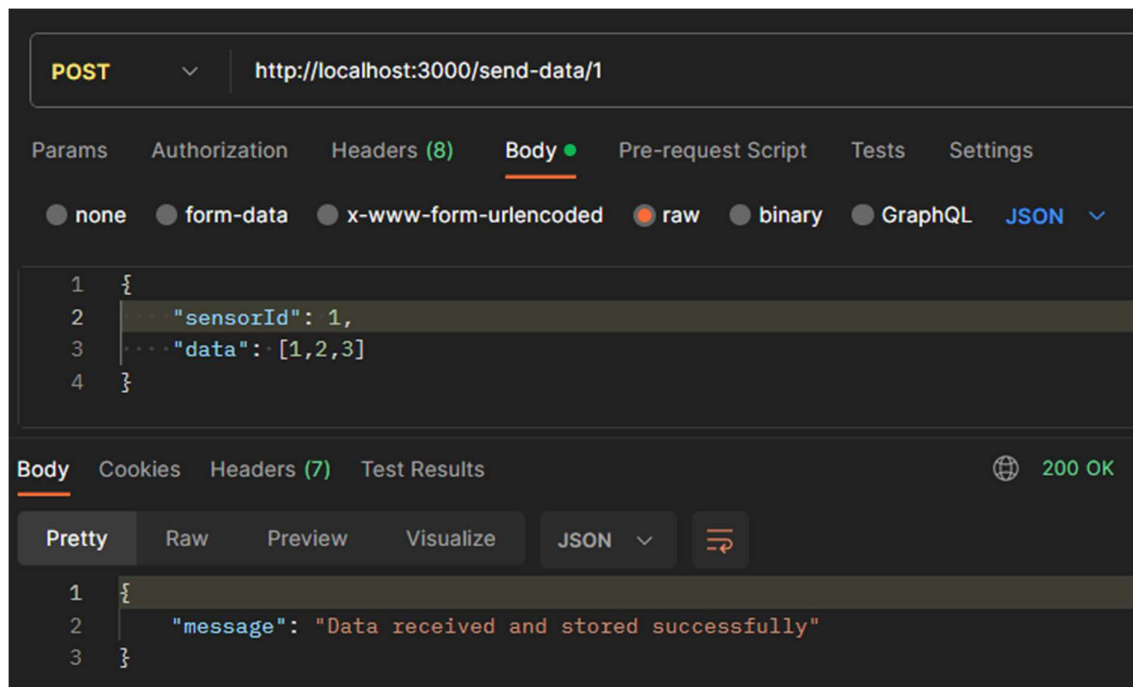


MangoDB showing the registered sensor:

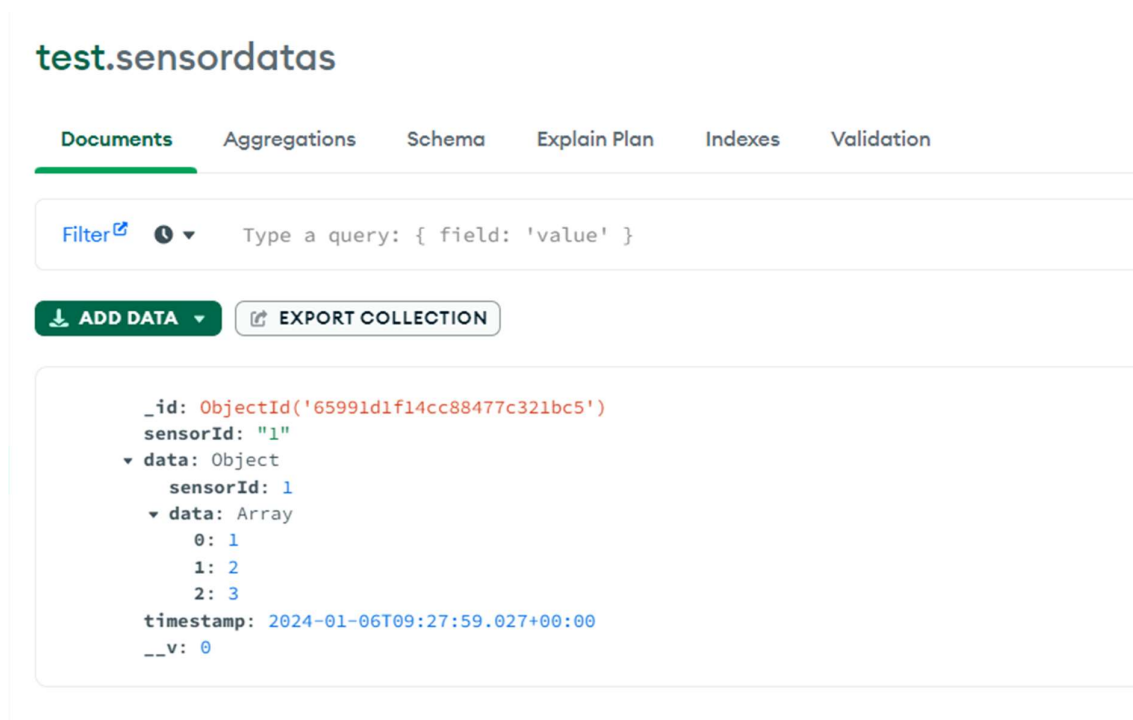


B)

sending data from the sensors:



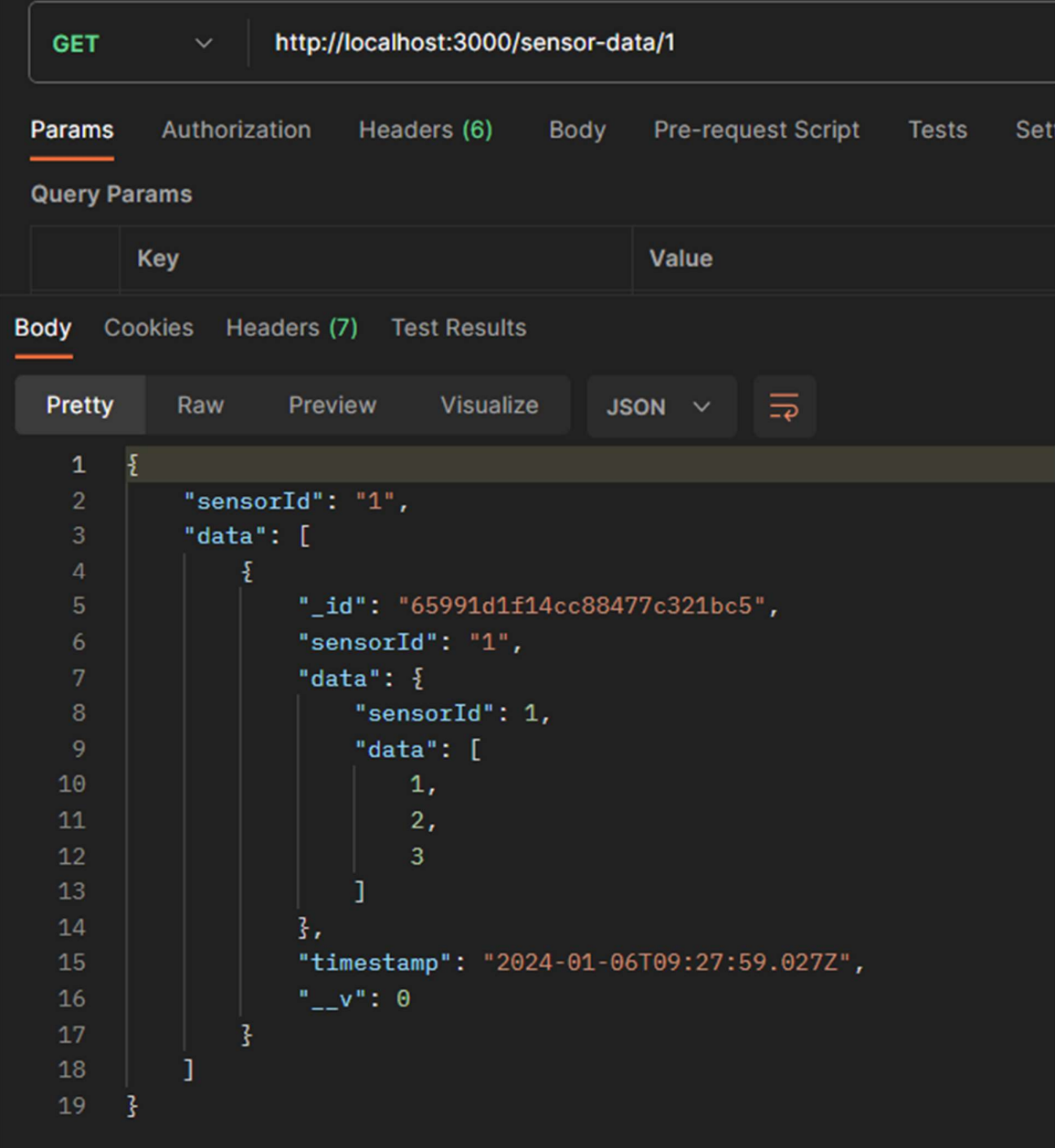
Data received from sensor & stored in MongoDB:



c)

Accessing the stored data:

The data accessed from the database can be seen in the get request



The screenshot shows a REST client interface with a GET request to `http://localhost:3000/sensor-data/1`. The response is displayed in the 'Body' tab, formatted as JSON. The JSON structure is as follows:

```
{
  "sensorId": "1",
  "data": [
    {
      "_id": "65991d1f14cc88477c321bc5",
      "sensorId": "1",
      "data": {
        "sensorId": 1,
        "data": [
          1,
          2,
          3
        ]
      }
    },
    {
      "timestamp": "2024-01-06T09:27:59.027Z",
      "__v": 0
    }
  ]
}
```