Assignment

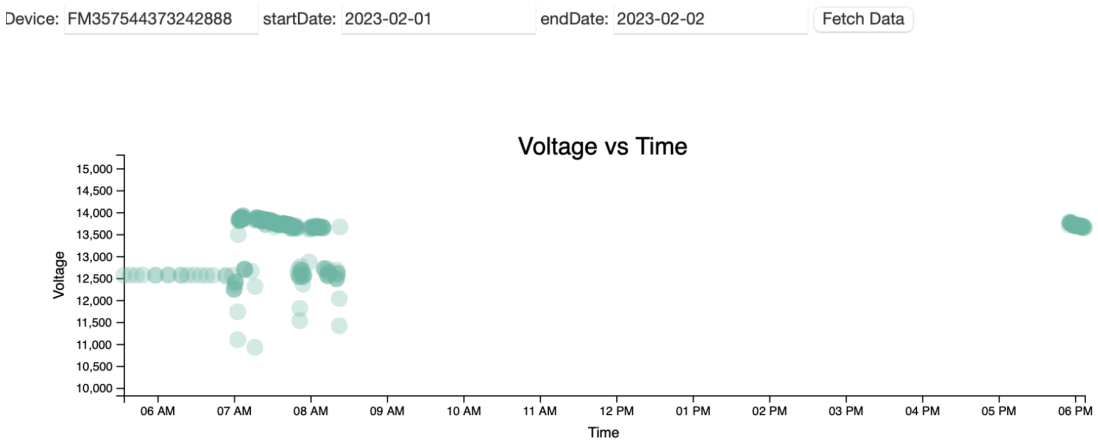
Problem Statement

Build an application that takes 3 inputs

1. DeviceId
2. Start Date
3. End Date

It should then output a graph of the voltage read by the device against time.

The sample screenshot is below



API:

https://api.yatis.io/api/getLocationInterval?deviceId=FM357544373242888&api_access_token=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiI1NjBhNzE3ZDM5OTRkNjA3N2RjZTMxMzYiLCJleHAiOjE2NzUyNDcxMTc4NjI9.SWNKiYtLhqwHdzJ2RL5Dsx-910GFIkoKGNBUIeHmMzc&startDate=2023-02-01&endDate=2023-02-02

The API has 4 inputs deviceId, startDate, endDate and api_access_token

For this assignment your access token:
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiI1NjBhNzE3ZDM5OTRkNjA3N2RjZTMxMzYiLCJleHAiOjE2NzUyNDcxMTc4NjI9.SWNKiYtLhqwHdzJ2RL5Dsx-910GFIkoKGNBUIeHmMzc

Link to API documentation:

https://yatis-api-docs.s3.ap-south-1.amazonaws.com/index.html#/Location/getLocationIntervalGET

The API return object includes locationInfo an array of objects where each object has the data of the device measured at a certain time.

Voltage of the first point will be locationInfo[0][params][66] - units (mV or millivolts)
Time of the first point will be locationInfo[0][timestamp] - epoch time

You can disregard the other items in the object for now

You have to take all the voltages and timestamp and plot it as a scatter plot

Sample API Response:
{"status":"success","message":"","numLocations":251,"locationInfo":[{"latitude":12.9574766,"longitude":77.4760183,"speed":0,"altitude":854,"direction":199,"timestamp":1675209806000,"params":{"16":17681663,"17":83,"18":23,"19":14,"21":4,"24":0,"25":300,"26":3000,"27":3000,"28":3000,"66":12563,"67":4076,"68":0,"69":1,"200":0,"239":0,"240":0,"241":40486},"satellites":13,"lts":1675209809947,"isAccOn":false,"isPlugOut":false},{"latitude":12.9574766,"longitude":77.4760183,"speed":0,"altitude":854,"direction":199,"timestamp":1675210107000,"params":{"16":17681663,"17":89,"18":26,"19":13,"21":4,"24":0,"25":300,"26":3000,"27":3000,"28":3000,"66":12570,"67":4076,"68":0,"69":1,"200":0,"239":0,"240":0,"241":40486},"satellites":13,"lts":1675210111345,"isAccOn":false,"isPlugOut":false},{"latitude":12.9574766,"longitude":77.4760183,"speed":0,"altitude":854,"direction":199,"timestamp":1675210408000,"params":{"16":17681663,"17":82,"18":31,"19":23,"21":4,"24":0,"25":300,"26":3000,"27":3000,"28":3000,"66":12563,"67":4076,"68":0,"69":1,"200":0,"239":0,"240":0,"241":40486},"satellites":13,"lts":1675210411586,"isAccOn":false,"isPlugOut":false},{"latitude":12.9574766,"longitude":77.4760183,"speed":0,"altitude":854,"direction":199,"timestamp":1675210708000,"params":{"16":17681663,"17":79,"18":35,"19":15,"21":4,"24":0,"25":300,"26":3000,"27":3000,"28":3000,"66":12567,"67":4076,"68":0,"69":1,"200":0,"239":0,"240":0,"241":40486},"satellites":14,"lts":1675210710867,"isAccOn":false,"isPlugOut":false}....