Smart metering device simulator

Technical documentation

1. Conceptual architecture of the online platform

Diagram

Description automatically generated with low confidence

1. DB design
2. UML Deployment diagram

Diagram

Description automatically generated

1. Build and execution instructions

**Prerequisites**:

* Npm 8.19.2 and Node 16.18.0
* Visual Studio 2022
* Microsoft SQL Server Management Studio
* Docker desktop

Steps to run the ReactApp:

1. Git clone the DS2022\_G30241\_Ardeleanu\_Andrada\_1\_Frontend repository from <https://github.com/DS202230241ArdeleanuAndrada/DS2022_G30241_Ardeleanu_Andrada_1_Frontend>
2. Open terminal in repo folder
3. Run npm start

Steps to run the .Net app:

1. Git clone the DS2022\_G30241\_Ardeleanu\_Andrada\_1\_Backend from <https://github.com/DS202230241ArdeleanuAndrada/DS2022_G30241_Ardeleanu_Andrada_1_Backend>
2. Open the .sln file with Visual Studio 2022
3. Run the AppDatabase project to create database and insert initial data
4. Run the App project to lauch swaggerF

Steps to run the Smart Metering Device Simulator:

1. Git clone the DS2022\_G30241\_Ardeleanu\_Andrada\_2 from <https://github.com/DS202230241ArdeleanuAndrada/DS2022_G30241_Ardeleanu_Andrada_2>
2. Open the .sln file with VS 2022
3. Download the sensor.csv file from <https://dsrl.eu/courses/sd/materials/sensor.csv>
4. Run the following command in terminal for RabbitMq: docker run -d --hostname my-rabbit --name some-rabbit rabbitmq:3
5. Run the app and upload the csv file then Read it
6. Check the messages read in rabbitMq

Steps to deploy project on docker desktop:

For server app:

1. docker build -f App/Dockerfile . -t app:image
2. docker images
3. docker run -d -p 49155:80 app:image
4. docker ps

For client app:

1. docker build -t app/firstreact-app .
2. docker images
3. docker run -d -p 49156:80 app/firstreact-app
4. docker ps