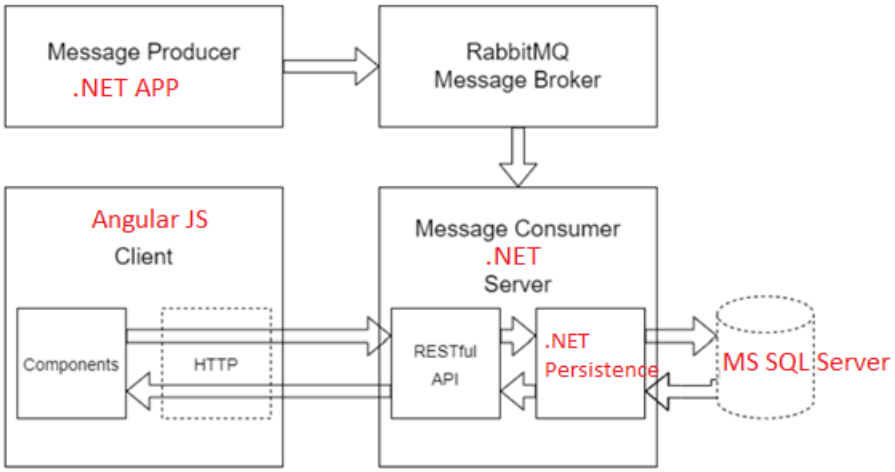
DISTRIBUTED SYSTEMS

Assignment 2

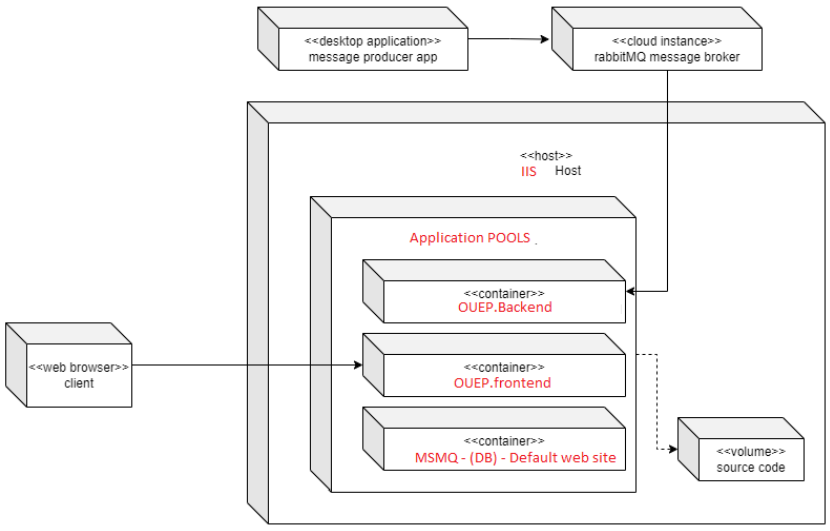
Sensor Monitoring System. Real-Time Notification

a) Conceptual architecture of the distributed system.



Figură 1 Diagrama conceptuală a arhitecturii aplicației dezvoltate

b) UML Deployment diagram.



Figură 5 Diagrama de deployment a aplicației

c) Readme file containing build and execution considerations.

Calculate the energy consumption against any user's device according to the respective Date.

Architecture:

Roles: Two Role is this App

1) Admin
2) Client

Responsibilty:

Admin:

- To Create,Read,Delete,Update the User
- To Create,Read,Delete,Update the Devices
- Assign the Devices to Particullar User
- Add Daily Energy Consumptions against every user devices
- Assign the Role to particular user

Client:

- Can we their devices which admin assigned
- check daily consumption in Barchart by selecting device and Date

How to Run the Project:

Our Application Consist of two parts

1) Frontend [Developed in Angular]
2) Backend [Developed in .NET Core Web APIs]

Frontend:

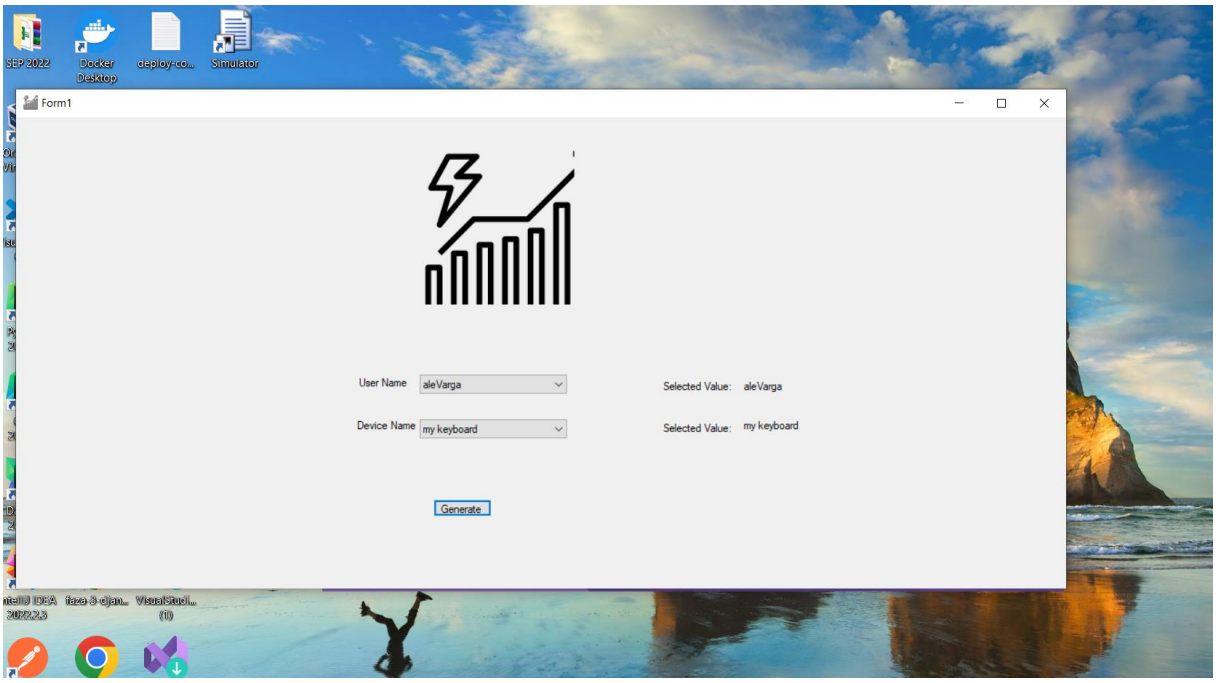
1) Clone the Application By Coping the Url
2) Go to 'Frontend' Directory and open it in VS CODE
3) Write Command 'npm i --force' in command prompt (it will install all require packages)
4) Run 'ng s' in command prompt

Backend:

1) Open the 'Backend' Project in Visual studio
2) Goto 'Appsettings.json' and change the Data Source and Database name as you created in your Local SQL Server
3) Go Sql Server and open the datavase then go to ASPNETROLE Table and Edit it after that add new Role Admin ,Client
4) Then Run the App and put admin username and admin password then you will redirect to your Account of admin
5) After that you can create users and device and perform every task as define in portal

RabbitMQ: http://localhost:15672/#/queues

For could check the Sensor Monitoring System, sent signal from desktop app which have following .exe named Simulator.


SEP 2022
Docker Desktop
deploy-co...
Simulator
Form1
User Name
aleVarga
Selected Value:
aleVarga
Device Name
my keyboard
Selected Value:
my keyboard
Generate