SchoolSOA Blog Application

Documentation

Overview

The application simulates a simple blog, where users can Login/Register and add blogs and posts to these blogs. When users reach a numbers of blogs posted they are awarded a badge(beginner/expert). The more blogs they post the bigger the badge reward is. The client application is made in Ionic and can be found in Mobile folder.

Architecture

The application follows a micro services architecture:
- Identity Microservice (responsible for authorization, login and register, issuing JWT Tokens and also managing user profile fields)
- Blog Microservice (responsible for inserting new blogs and posts and also for reading related tasks)
- Badge Microservice (responsible for the logic and storage of badges per user)
- Gateway Microservice (responsible for acting as a microservice gateway abstracting the user for knowing the addresses of all the behind microservices and for forwarding the requests to these microservices)

SOA Patterns

- The application is containerized in Docker by using a docker-compose.yaml file where each microservice is defined along with its required dependencies(RabbitMQ/Database). Futhermore the relationship between them is defined so they can access each other just by the name
- Each MicroService has its own database instance and is responsible for maintaining its own data
- We use RabbitMQ for Microservices integration and event publishing
- CQRS is also used alongside MediatR pattern on the backend microservices(Blog/Badge)