Quiz Application

Description

This application allows to conduct quiz with question service, containing questions, and quiz service, to calculate final scores.

SpringBoot

Spring Boot is a powerful framework for building Java-based applications with ease, emphasizing convention over configuration and providing robust out-of-the-box features for rapid development and deployment.

Microservices

Microservices are a modern architectural style where applications are composed of small, independent services that communicate over well-defined APIs. This approach enhances scalability, flexibility, and ease of deployment in complex systems.

Tools & Technologies

* Java
* Spring boot & Microservices
* MVC Model
* REST API
* Maven
* Postman
* SQL
* HTML
* Javascript

Services

Service Registry

* Every services are registered as client in the Eureka server(by Netflix).
* The services are question service, quiz service and API gateway.

API Gateway

* This is the entry point for the user to access the services of the application.
* The users credential are passed along each services that is being called.
* The services communicate using HTTP responses(Eureka client).

Question Service

They are used to perform the following functions:

* Get questions
* Add question
* Generate questions for quiz
* Get scores

Quiz Service

They are used to perform the following functions:

* Create quiz with questions
* Collect responses and get scores

These functions get data from the question service and stores it in the separate and independent quiz database.

Testing

The application is tested using postman, that allows to send HTTP requests and verify responses to ensure API functionality and behavior.