

Create a backend system using Web API with ASP.NET Core 8. For the backend system purposes design and implement a clean and RESTful API interface for 2 microservices. Use any database of your choice to store the data.

Expectations:

- Good Microservices architecture design.
- Apply Software Design Principles
- Implement base error handling.
- Request validation.

User data access service

Requirements: Create a microservice with two endpoints(user creation and access token creation)

API endpoint for user creation.

Submit:

- First Name
- Last Name
- Email
- Password
- Image (User photo)

API endpoint to create an access token.

Submit:

- Email
- Password

Return:

- Generated token

Operative service

Requirements: Create microservice with two endpoints(API endpoint for simulating rolling two dice and API endpoint for getting saved data).For all endpoints use Token Based Authentication to secure API calls.

API endpoint for simulating rolling two dice

- Save results in the database

Return:

- The result of the dice roll(for each die)

API endpoint for getting saved data

Return:

The data for the currently logged-in user.

- Filters:
 - All records
 - Data for the **Year** submitted.
 - Data for the **Mont/Year** submitted.
 - Data for the **Mont/Year/Day** submitted.
- Sorting – should have options to use two sorting directions. Can be used simultaneously (in this case let sorting in section “ii” have more weight)
 - Sorting by DateTime
 - Sorting by sum of dice.
- Pagination – The response of the data result should be paginated. Pass the appropriate count of records by page.