

Employee Service - Coding Challenge

Goal

Your goal is to implement an application that handles the employees of a company. The application must expose a REST API. Plus, consuming and publishing events so that other services can integrate with the Employee service as well as external actors can interact via API that is built.

Requirements

The application must be able to:

1. Create an employee with the following properties
 - Uuid (generated automatically)
 - E-mail
 - Full name (first and last name)
 - Birthday (format YYYY-MM-DD)
 - List of hobbies (for example, "soccer", "music", etc)
2. Get a list of all employees
3. Get a specific employee by uuid
4. Update an employee
5. Delete an employee
6. Whenever an employee is created, updated or deleted, an event related to this action must be pushed in some message broker (i.e, Kafka, RabbitMq, etc)

Other services rely on Employee service, therefore the relevant changes are expected to be communicated through events.

Restriction

The email field must be unique, i.e. 2 employees cannot have the same email

Bonus

- (+) Documentation is an important aspect of software development, please provide some sort of API documentation
- (+) Add authorization to access create, update and delete employee endpoints
- (+) Run the database you've chosen to store the employee's data in a Docker container (instead of in-memory database)
- (+) A service publishes an event that affects the Employee service. Such an event is published in a queue/topic named **employee-events** with payload as example provided below. Please implement the code that consumes that event removing the affected employee record

EmploymentEnded

```
{  
  "eventId": "d7980e2c-b3f5-4b67-aec3-5135693c8210",  
  "employeeId": "e924887b-63a7-4738-a318-2206bc6b5272",  
  "terminationRequestedAt": "2022-07-16T10:38:44.856Z",  
  "lastDayAtWork": "2022-09-14T21:59:59.999Z",  
  "reason": "Employee has presented a resignation letter"  
}
```

Notes

- Include some unit and integration tests
- Commit all your development using Git and share your project on GitHub
- Include a README file explaining how to build/run your application and any comments you think it is important