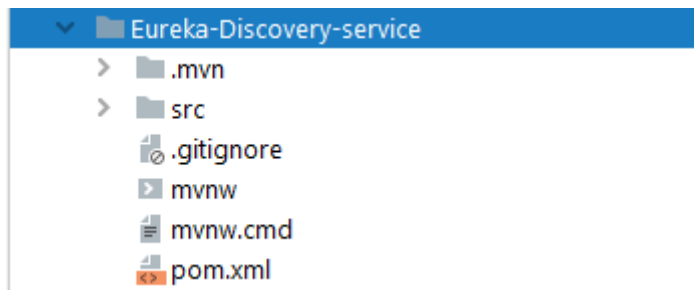


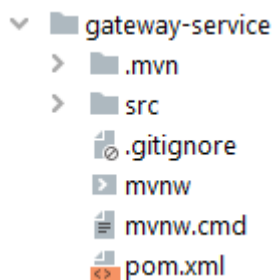
# Examen blanche Systèmes Distribués

On souhaite créer un système distribué basé sur les micro-services en utilisant une architecture pilotée par les événements respectant les deux patterns Event Sourcing et CQRS. Cette application devrait permettre de gérer les infractions concernant des véhicules suites à des dépassement de vitesses détectés par des radars automatiques.

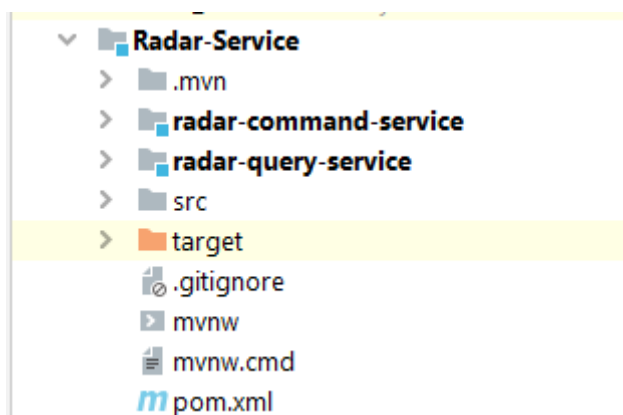
#### Eureka discovery service :



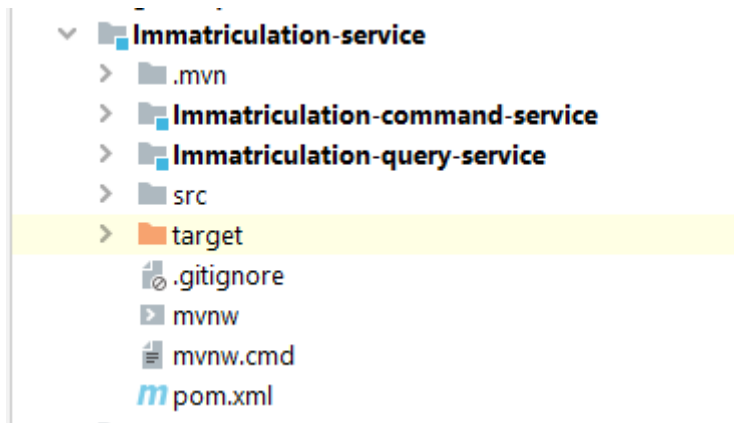
#### gateway service :



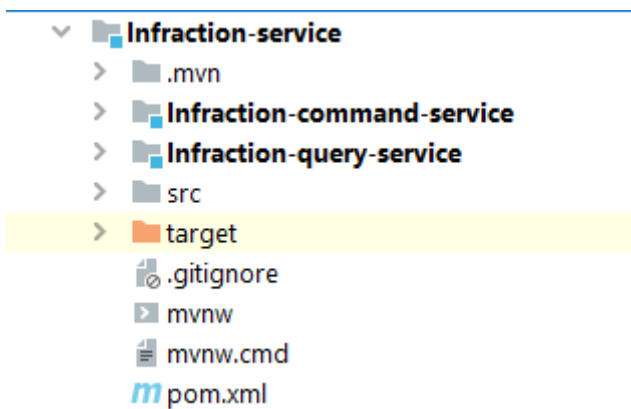
#### radar service :



#### immatricualtion service :

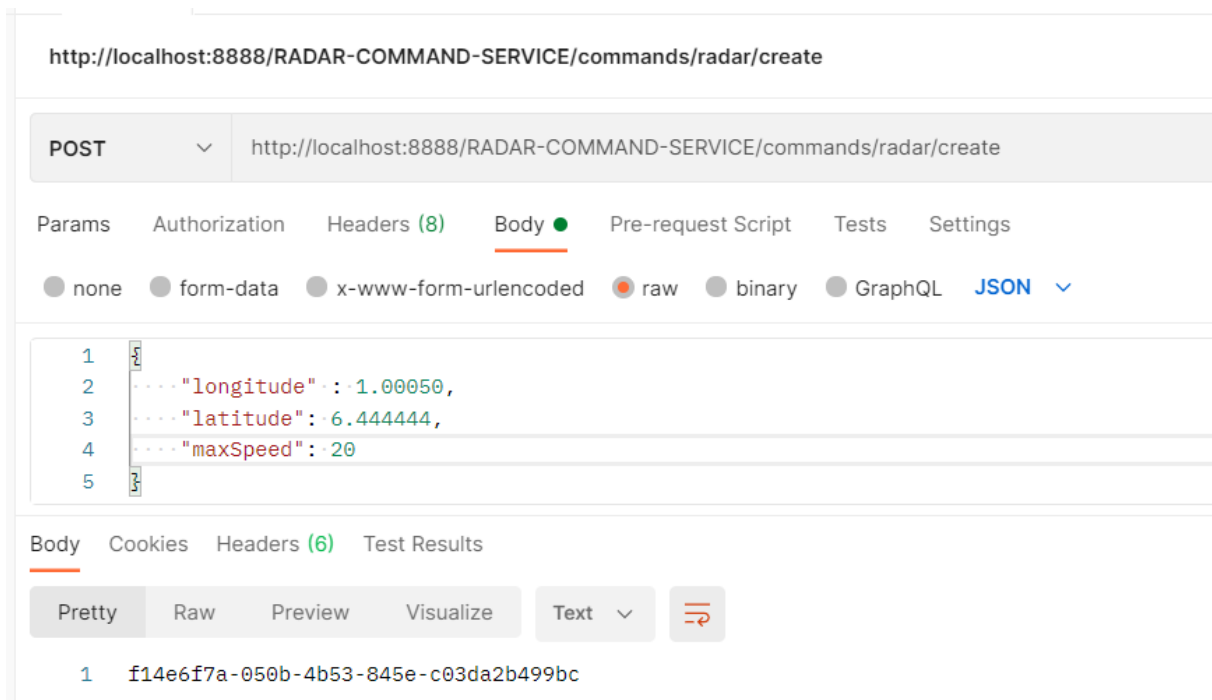


infraction service :



Testing Apis :

ajouter radar :



**get all radars :**

http://localhost:8083/query/radars/all

GET ⌵ http://localhost:8083/query/radars/all

Params Authorization Headers (6) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
Key	Value

Body Cookies Headers (8) Test Results

Pretty Raw Preview Visualize JSON ⌵ ↻

```
1  [
2    {
3      "radarId": "e154be5e-fe75-4d2c-adeb-b3142affb2f8",
4      "longitude": 11.0005,
5      "latitude": 60.444444,
6      "maxSpeed": 40
7    },
8    {
9      "radarId": "f14e6f7a-050b-4b53-845e-c03da2b499bc",
10     "longitude": 1.0005,
11     "latitude": 6.444444,
12     "maxSpeed": 20
13   }
14 ]
```

**over speed violation :**

http://localhost:8888/RADAR-COMMAND-SERVICE/commands/radar/overSpeed

POST http://localhost:8888/RADAR-COMMAND-SERVICE/commands/radar/overSpeed

Params Authorization Headers (8) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   ... "radarId" : "e154be5e-fe75-4d2c-adeb-b3142affb2f8",
3   ... "vehicleRegistrationNumber" : "S400",
4   ... "vehicleSpeed" : 110,
5   ... "radarMaxSpeed" : 40,
6   ... "radarLongitude" : 11.0005,
7   ... "radarLatitude" : 60.444444
8 }
```

Body Cookies Headers (5) Test Results

Pretty Raw Preview Visualize Text

1

violation list :

http://localhost:8888/RADAR-QUERY-SERVICE/query/overSpeeds/all

GET http://localhost:8888/RADAR-QUERY-SERVICE/query/overSpeeds/all

Params Authorization Headers (6) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
Key	Value

Body Cookies Headers (6) Test Results

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "overSpeedId": "1a23c2e8-2f5e-45c1-b746-366d981dd307",
4     "timeStamp": "2022-12-24T17:08:21.554Z",
5     "radarId": "",
6     "vehicleRegistrationNumber": "S400",
7     "vehicleSpeed": 110
8   },
9   {
10    "overSpeedId": "512a3494-916e-477d-84dd-1d160815c275",
11    "timeStamp": "2022-12-24T20:32:58.678Z",
12    "radarId": "",
13    "vehicleRegistrationNumber": "S400",
14    "vehicleSpeed": 110
```

## Front With Angular Test :

### radars list :

Navbar Radars Vehicles Infractions		
longitude	latitude	maxSpeed
11.0005	60.444444	40
1.0005	6.444444	20
22.0005	17.444444	60
72.0005	7.444444	50

### vehicles list :

Navbar Radars Vehicles Infractions				
registrationNumber	brand	model	fiscalPower	actions
S200	Ford	GTX5	120	<button>show owner</button>
S400	Ford	GTX5	120	<button>show owner</button>
S900	Ford	GTX5	120	<button>show owner</button>
K100	BMW	N785	120	<button>show owner</button>

## search infractions

Navbar Radars Vehicles Infractions	
National Card Number	<input type="text" value="National Card Number"/>
	<button>Search</button>

## infractions wrong National Card Number :

Navbar Radars Vehicles Infractions	
National Card Number is incorrect	
National Card Number	<input type="text" value="National Card Number"/>
	<button>Search</button>

## infractions list :

Navbar Radars Vehicles Infractions	
National Card Number	<input type="text" value="TS7098"/>
	<button>Search</button>

instant	vehicle Registration Number	vehicle Speed	vehicle Owner	amount	status
Dec 24, 2022, 6:08:20 PM	S400	110 KM/H	Yasin Kabboura	3000	VALIDATED
Dec 24, 2022, 9:32:55 PM	S400	110 KM/H	Yasin Kabboura	3000	VALIDATED

0

## Security with keycloak Test :

## creating exam-blanc -realm

## Create realm

A realm manages a set of users, credentials, roles, and groups. A user belongs to and logs into a realm. Realms are isolated from one another and can only manage and authenticate the users that they control.

**Resource file**

Drag a file here or browse to upload

Browse... Clear

1

Upload a JSON file

**Realm name \***

exam-blanc-realm

**Enabled**

☒ On

Create Cancel

## creating exam client :

Client created successfully

Clients > Client details

exam OpenID Connect

Enabled ⓘ Action ▾

Clients are applications and services that can request authentication of a user.

Settings Roles Client scopes Sessions Advanced

**General Settings**

Client ID \* ⓘ exam

Name ⓘ exam

Description ⓘ exam blanc

Always display in console ⓘ ☐ Off

**Access settings**

Root URL ⓘ

Jump to section

General Settings

Access settings

Capability config

Login settings

Logout settings

## creating users :



## Create user

Enabled Action

Username \*

maarouf

Email

maaroufouassime@gmail.com

Email verified ⓘ

Off

First name

Maarouf

Last name

Ouassime

Required user actions ⓘ

Select action

Groups ⓘ

Join Groups

### creating roles ADMIN USER :

KEYCLOAK

exam-blanc-realm

Manage

Clients

Client scopes

Realm roles

Users

Groups

Sessions

Events

Configure

Role created

### Realm roles

Realm roles are the roles that you define for use in the current realm. [Learn more](#)

Search role by name

Create role

1-5

Role name	Composite	Description
ADMIN	False	–
default-roles-exam-blanc-realm ⓘ	True	`\${role_default-roles}`
offline_access	False	`\${role_offline-access}`
uma_authorization	False	`\${role_uma_authorization}`
USER	False	–

1-5

### giving the user roles :

KEYCLOAK

exam-blanc-realm

Manage

Clients

Client scopes

Realm roles

Users

Groups

Sessions

Events

Configure

User role mapping successfully updated

Users > User details

yasin

Enabled Action

Details

Attributes

Credentials

Role mapping

Groups

Consents

Identity provider links

Sessions

Search by name

Hide inherited roles

Assign role

Unassign

1-3

Name	Inherited	Description
<input type="checkbox"/> USER	False	–
<input type="checkbox"/> default-roles-exam-blanc-realm	False	`\${role_default-roles}`
<input type="checkbox"/> ADMIN	False	–

1-3

test

### generating jwt :

### Retesting :

http://localhost:8888/INFRACTION-QUERY-SERVICE/query/allInfactions?ncid=T57098

Save

GET

http://localhost:8888/INFRACTION-QUERY-SERVICE/query/allInfactions?ncid=T57098

Send

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

Cookies

☒

User-Agent

PostmanRuntime/7.28.0

☒

Accept

\*/\*

☒

Accept-Encoding

gzip, deflate, br

☒

Connection

keep-alive

☒

Content-Type

application/json

☒

Authorization

Bearer eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUliwia2kiIiA...

Key

Value

Description

Body

Cookies (1)

Headers (11)

Test Results

Status: 200 OK

Time: 2.29 s

Size: 1.57 KB

Save Response

Pretty

Raw

Preview

Visualize

JSON

```
1  "content": [  
2    {  
3      "contraventionId": "ee8a0733-84f2-4b0e-b102-006dc8a50e7f",  
4      "instant": "2022-12-24T17:08:20.411217Z",  
5      "radarId": "e154be5e-fe75-4d2c-adeb-b3142affb2f8",  
6      "radarLong": 0.0,  
7      "radarLat": 0.0,  
8      "vehicleRegistrationNumber": "S400",  
9      "vehicleSpeed": 110,  
10     "radarMaxSpeed": 0
```