Compte rendu

1. Diagramme de classes :

Notre diagramme de classes comporte 4 classes :

- Image
- GpsLocation
- Object
- Bbox

La classe Image :

- ✓ Image (**Id**, file_url, width , height, date_captured, gps_location, objects)

Id : identifiant et clé primaire de la classe Image

File_url : l'url du fichier

Width : largeur de l'image

Height : longueur de l'image

Gps_location : est un objet de la classe GpsLocation dont les coordonnées là où l'image a été capturée.

Objects : est une liste d'objets qui encadrent les déformations existent dans l'objet capturé

- ✓ GpsLocation (**Id**, latitude, longitude)

Id : identifiant et clé primaire de la classe GpsLocation

Latitude: latitude de la localisation de prise de l'image

Longitude : longitude de la localisation de prise de l'image

Compte rendu

✓ Object (**Id**, annotation, bbox)

Id : identifiant et clé primaire de la classe Object

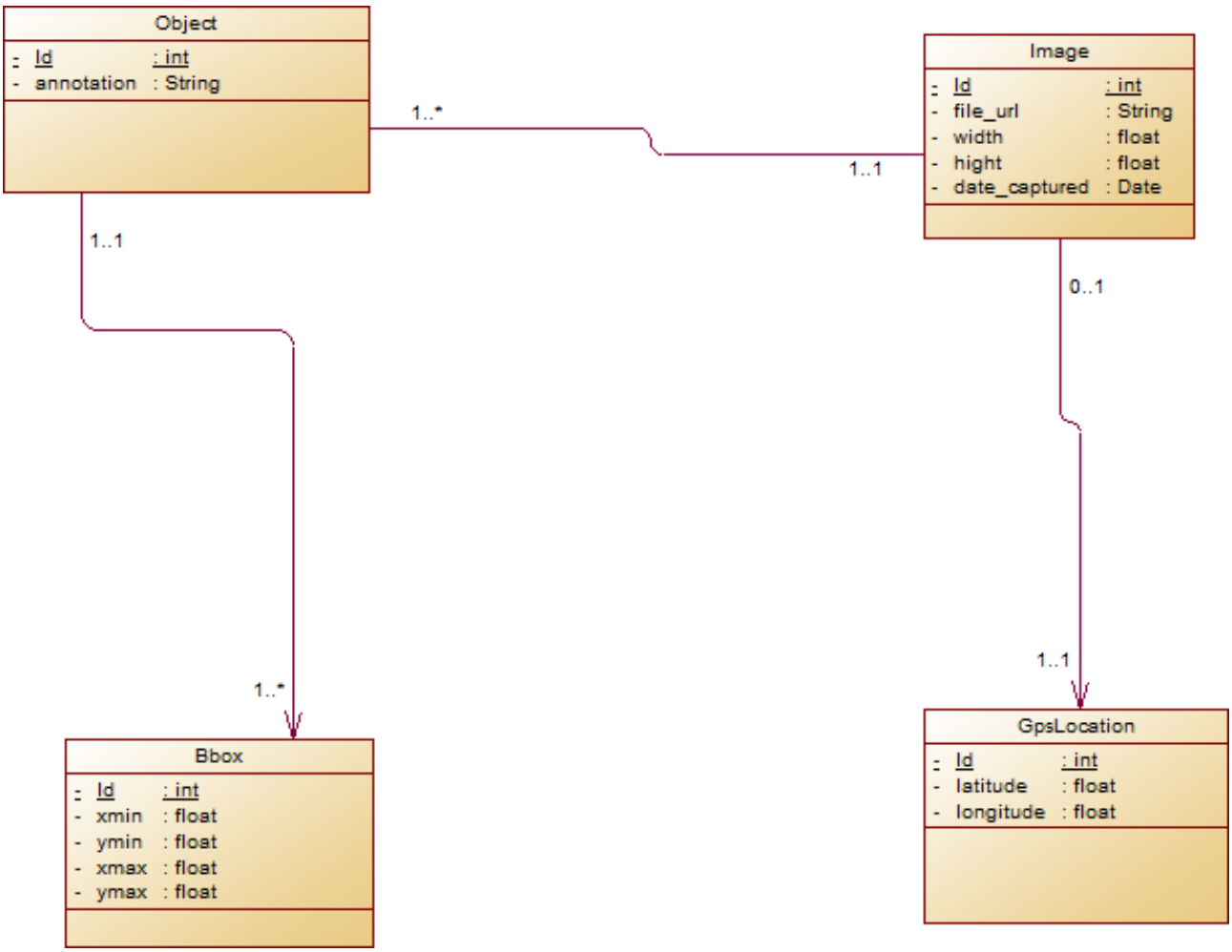
annotation: un tag associé avec l'objet capturé

bbox : est une liste d'objets de la classe Bbox concernent les coordonnées pixel de rectangle qui entoure déformation de l'objet

✓ Bbox (**Id**, xmax, ymax,xmin,ymin)

Id : identifiant et clé primaire de la classe Bbox

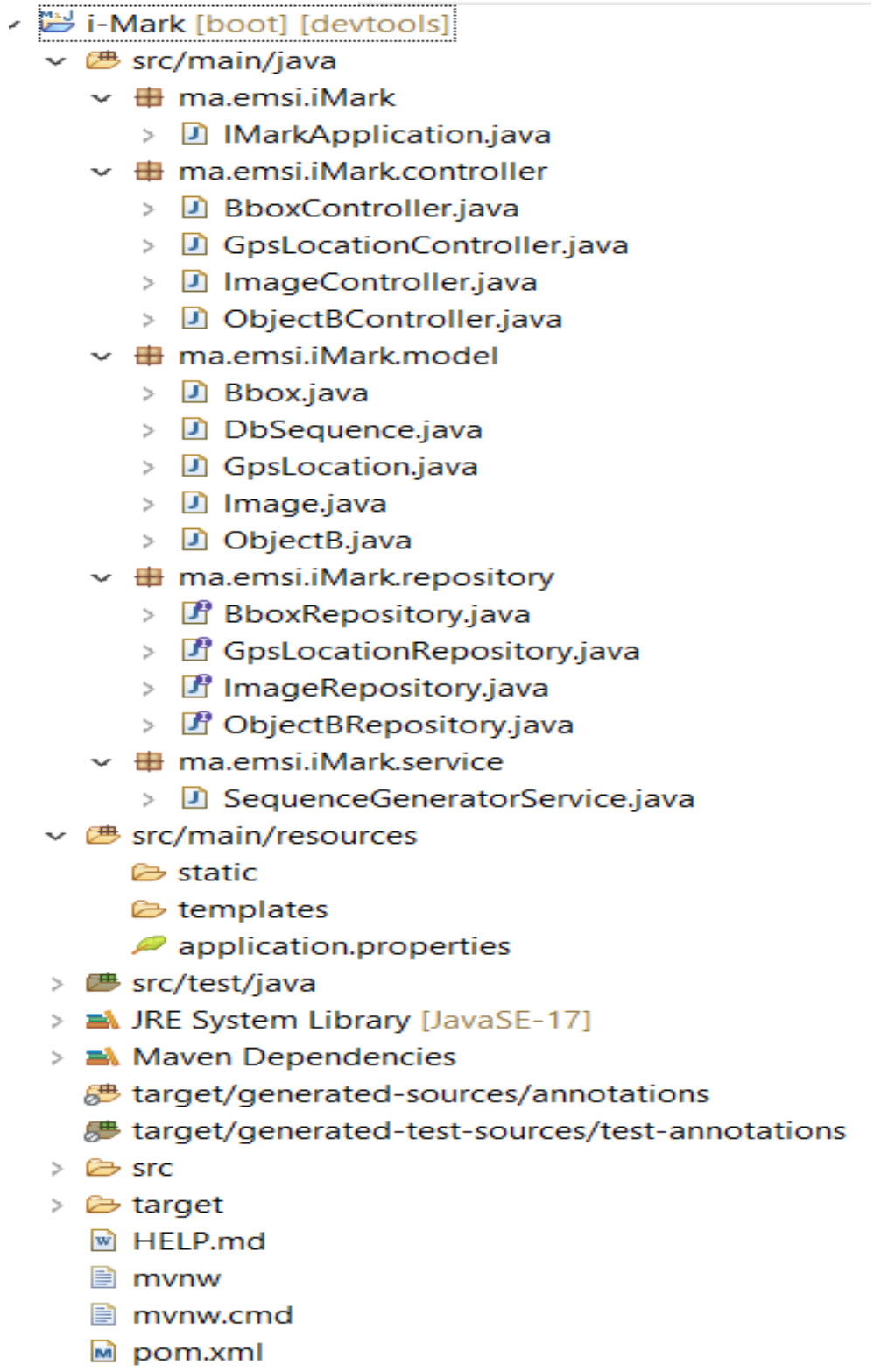
Xmax,ymax,xmin,ymin: les coordonnées pixel



Compte rendu

2. BackEnd :

✓ **Structure de l'application :**

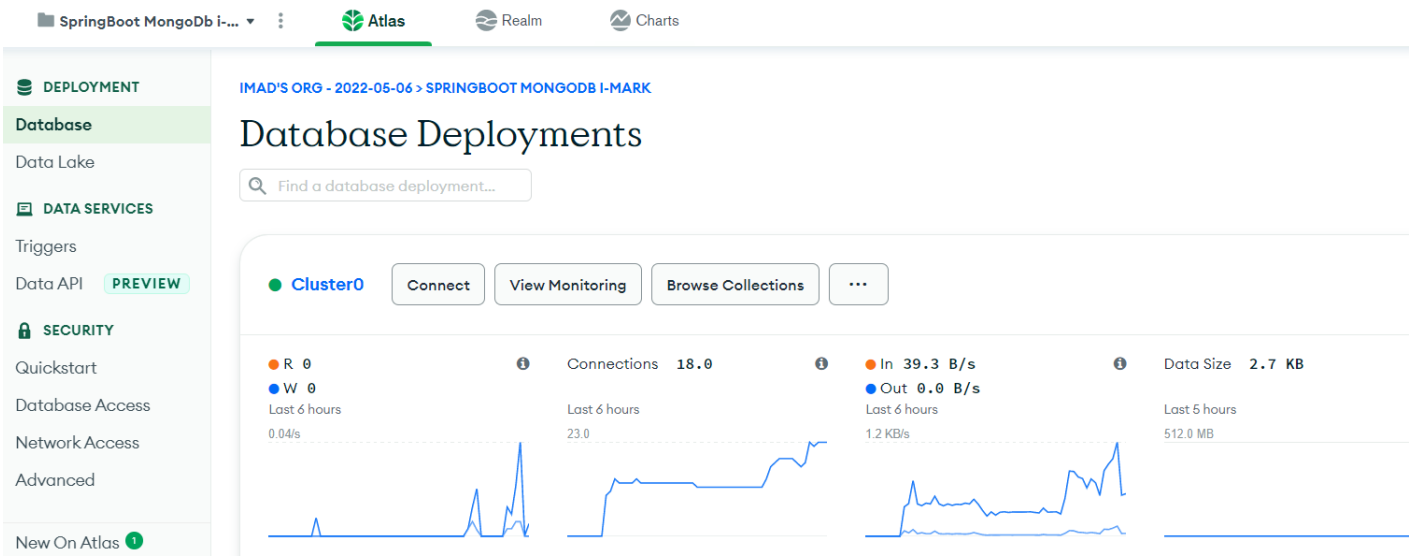


✓ **Propriètés de l'application :**

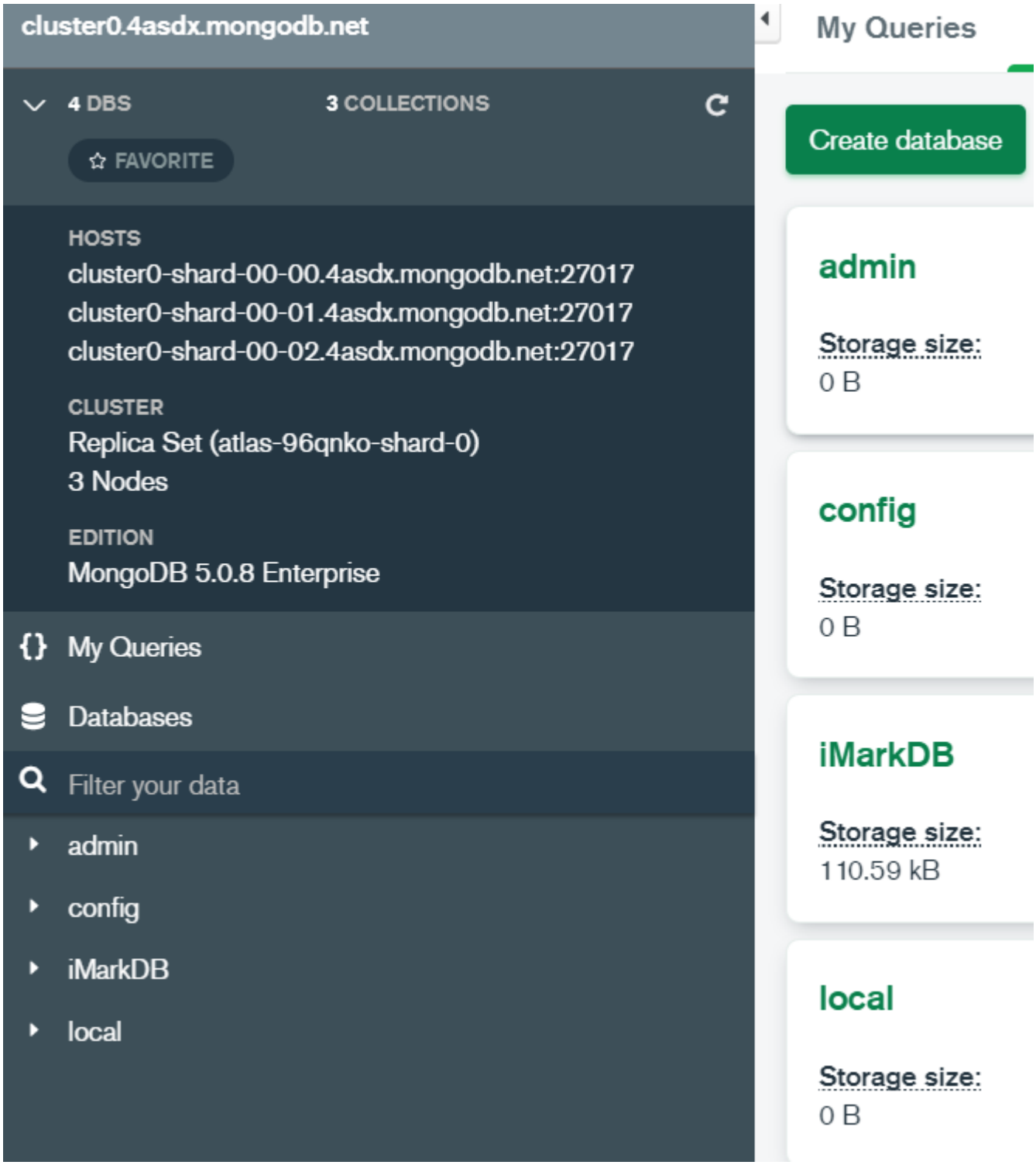
Compte rendu

```
server.port=8081

#spring.data.mongodb.host=localhost
#spring.data.mongodb.port=27017
#spring.data.mongodb.database=iMarkDB

spring.data.mongodb.uri=mongodb+srv://admin:admin@cluster0.4asdx.mongodb.net/iMarkDB
```

✓ **Configuration base de données distante (MongoDB atlas) :**



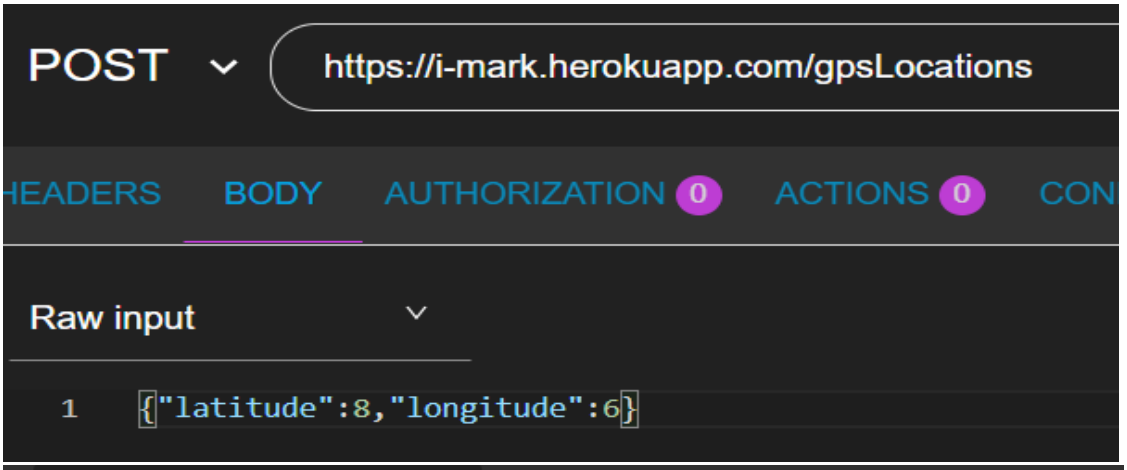
Compte rendu

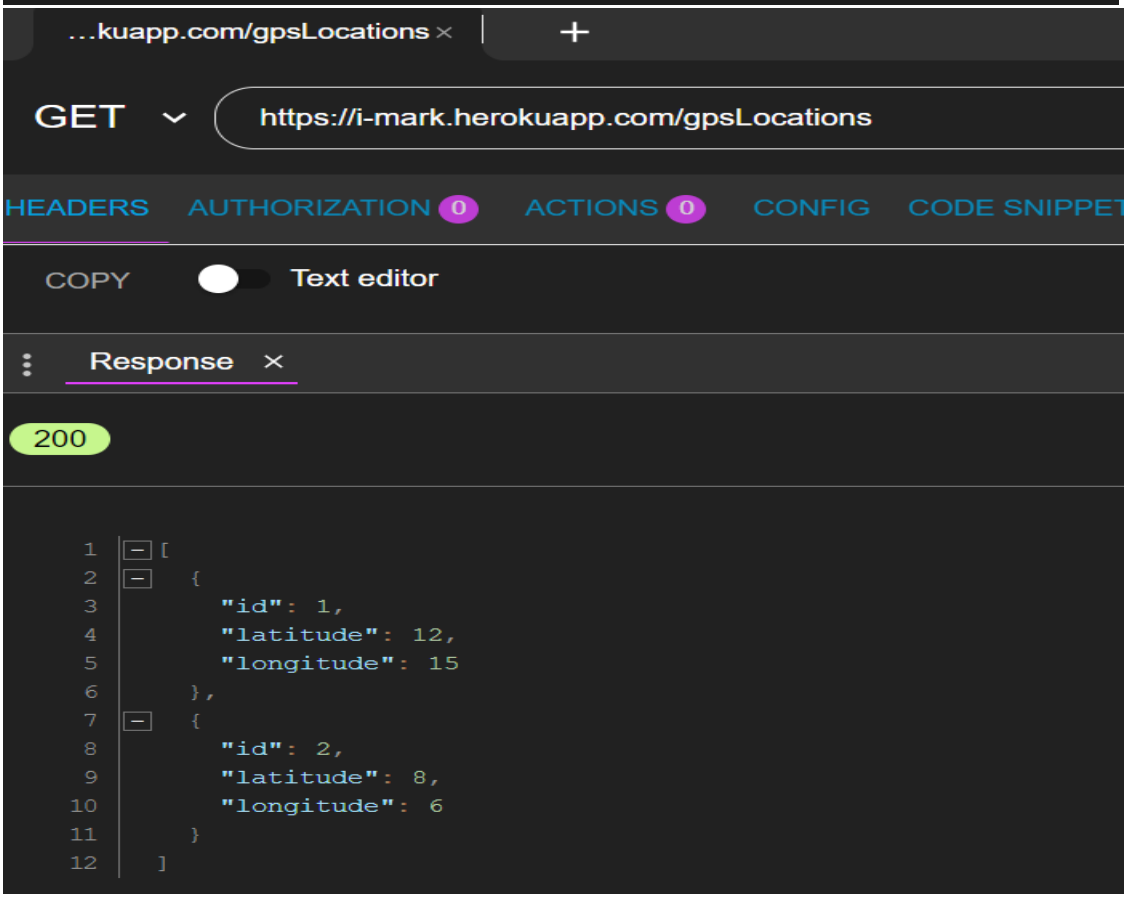


- ✓ Lien GitHub : https://github.com/chraibibadr/i-Mark/tree/main/WEB/BACKEND/i-Mark
- ✓ Lien d'hébergement de l'application : https://i-mark.herokuapp.com/
- ✓ Test Advanced Rest Client :

Compte rendu

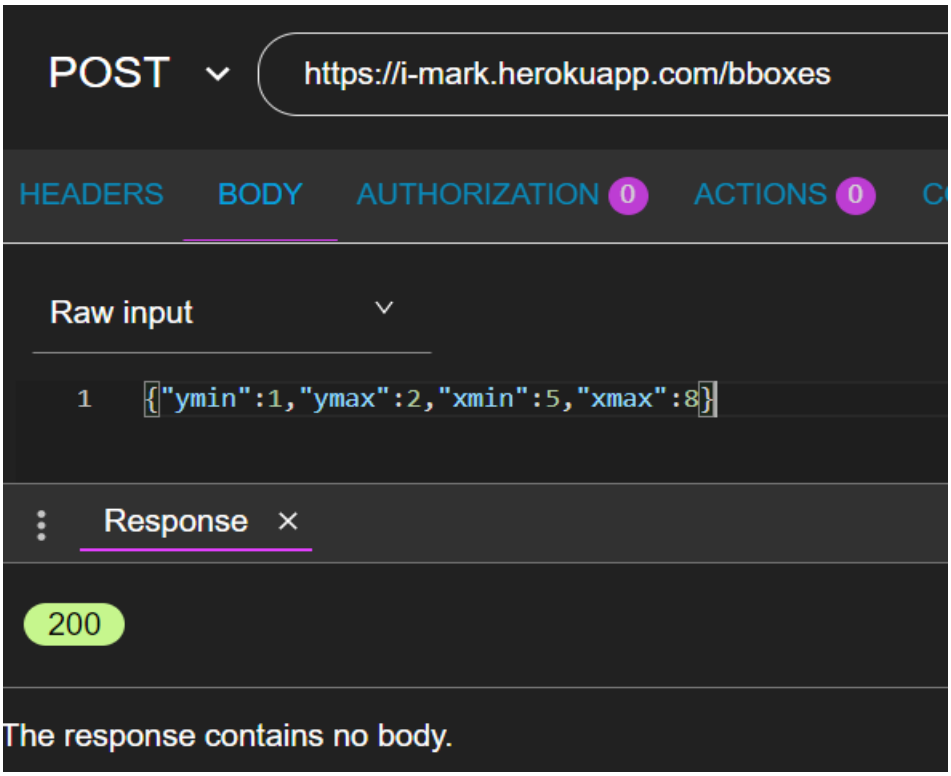
- Ajout location GPS :

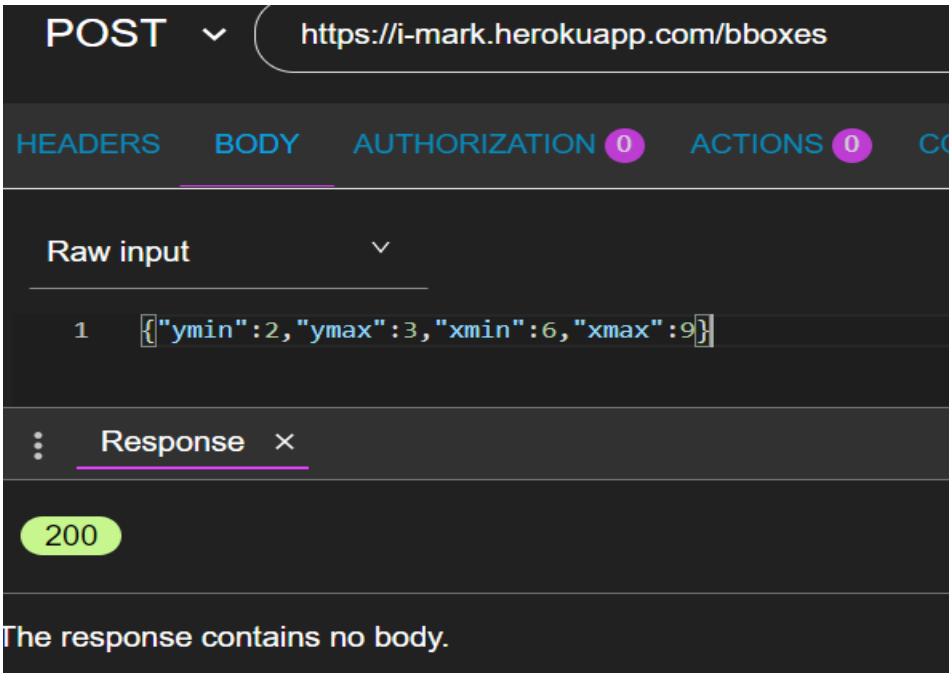




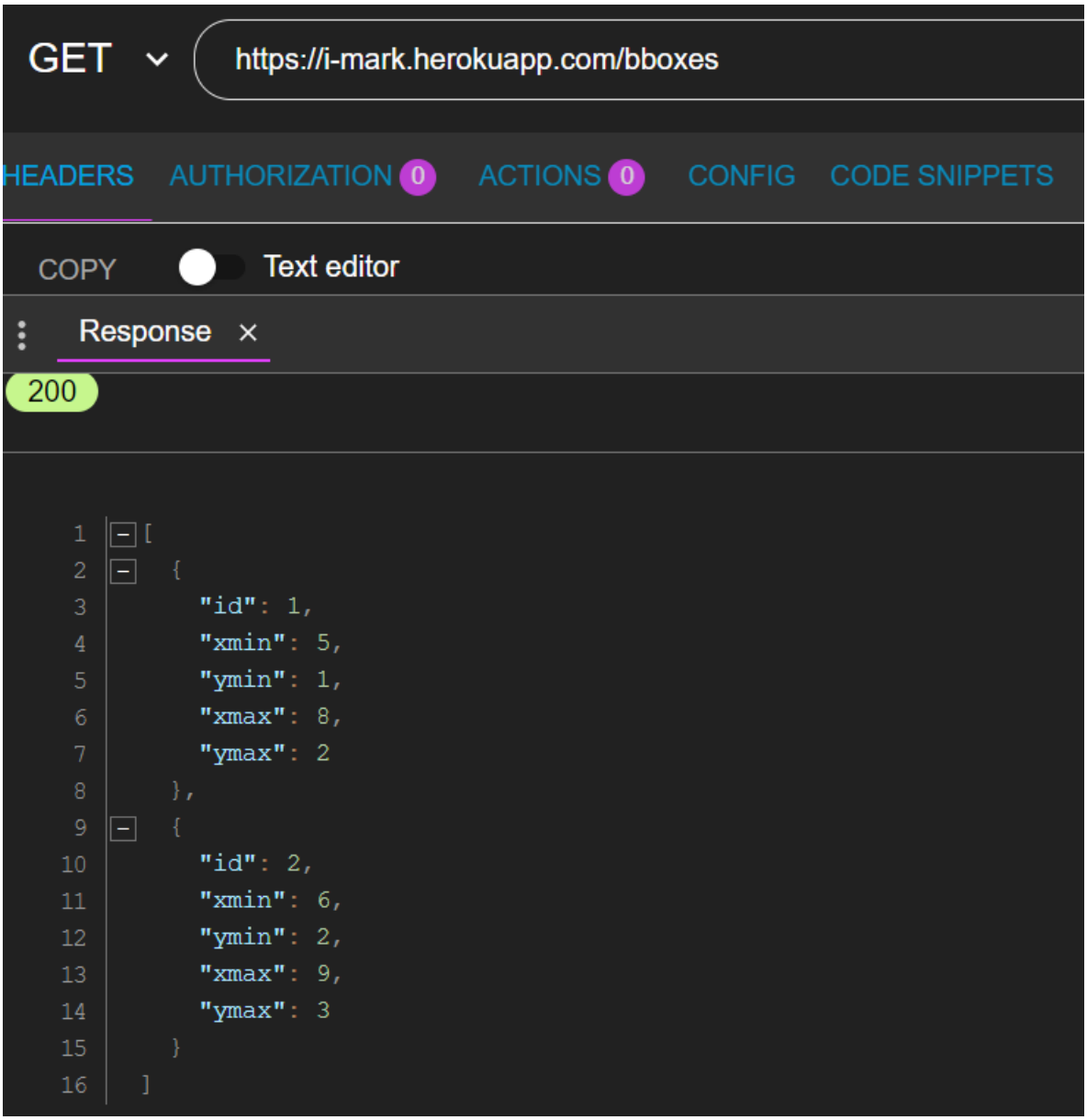
Compte rendu

- Ajout bboxes :



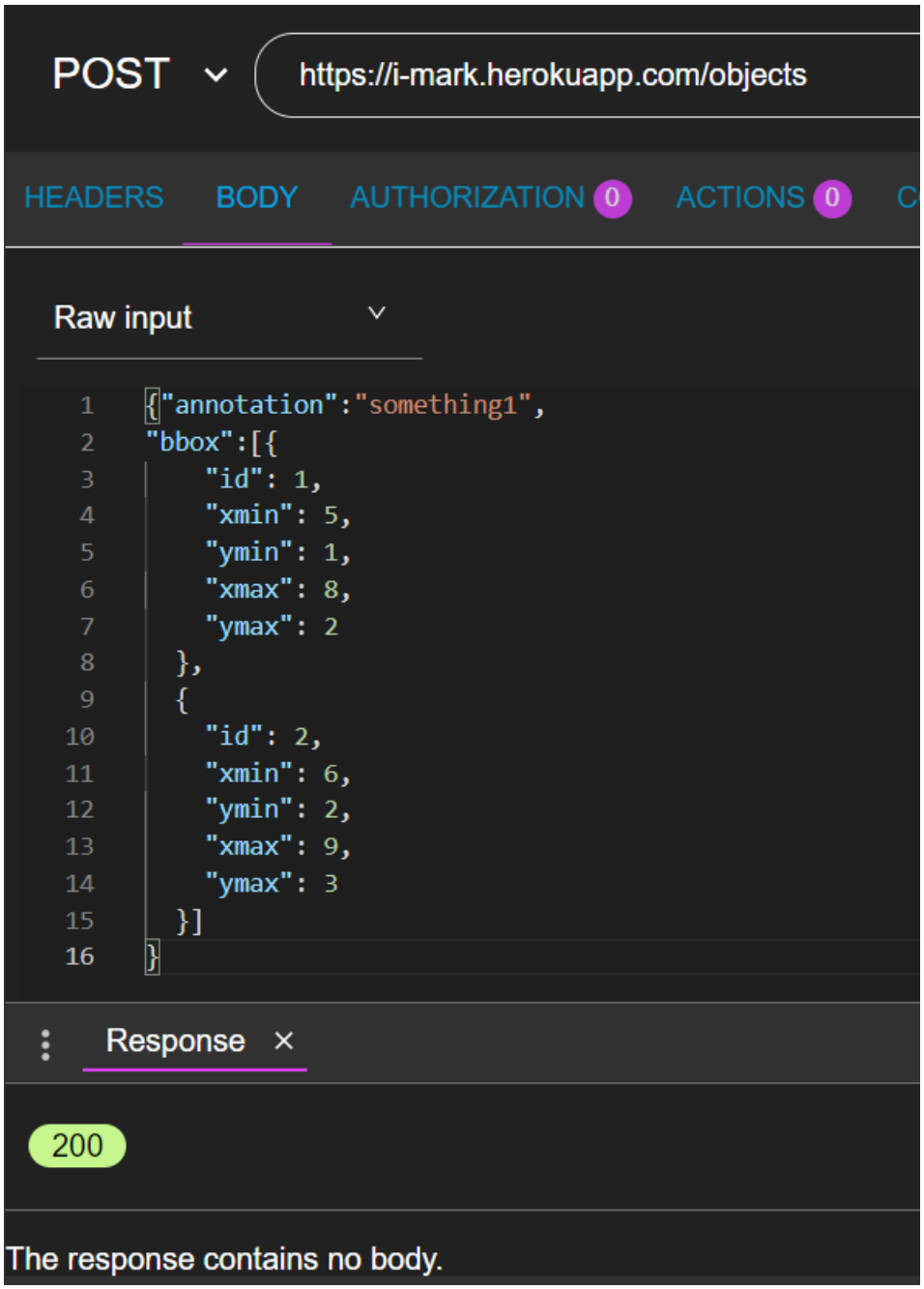


Compte rendu



- Ajout objets :

Compte rendu



Compte rendu

- Ajout images :

Compte rendu

POST https://i-mark.herokuapp.com/images

HEADERS BODY AUTHORIZATION 0 ACTIONS 0 CONFIG CODE SNIPPETS

Raw input


```
{"file_url":"C:/file1.png","width":15,"height":16,"date_captured":"2021-05-12",
"gps_location":{"latitude":12,"longitude":15},
"objects":[
  {
    "id": 1,
    "annotation": "something1",
    "bbox": [
      {
        "id": 1,
        "xmin": 5,
        "ymin": 1,
        "xmax": 8,
        "ymax": 2
      },
      {
        "id": 2,
        "xmin": 6,
        "ymin": 2,
        "xmax": 9,
        "ymax": 3
      }
    ]
  }
]
}
```


Response

200

The response contains no body.

Compte rendu

GET https://i-mark.herokuapp.com/images

HEADERS AUTHORIZATION 0 ACTIONS 0 CONFIG CODE SNIPPETS

Response


```
[
  {
    "id": 1,
    "file_url": "C:/file1.png",
    "width": 15,
    "height": 16,
    "date_captured": "2021-05-12T00:00:00.000+00:00",
    "gps_location": {
      "id": 0,
      "latitude": 12,
      "longitude": 15
    },
    "objects": [
      {
        "id": 1,
        "annotation": "something1",
        "bbox": [
          {
            "id": 1,
            "xmin": 5,
            "ymin": 1,
            "xmax": 8,
            "ymax": 2
          },
          {
            "id": 2,
            "xmin": 6,
            "ymin": 2,
            "xmax": 9,
            "ymax": 3
          }
        ]
      }
    ]
  }
]
```

Compte rendu

✓ Base de données (iMarkDB) :

Collections :

Collections

Create collection | View | Sort by: Collection Name

bbox

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	2	107.00 B	1	24.58 kB

db_sequences

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	4	39.00 B	1	36.86 kB

gpsLocations

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	2	95.00 B	1	36.86 kB

image

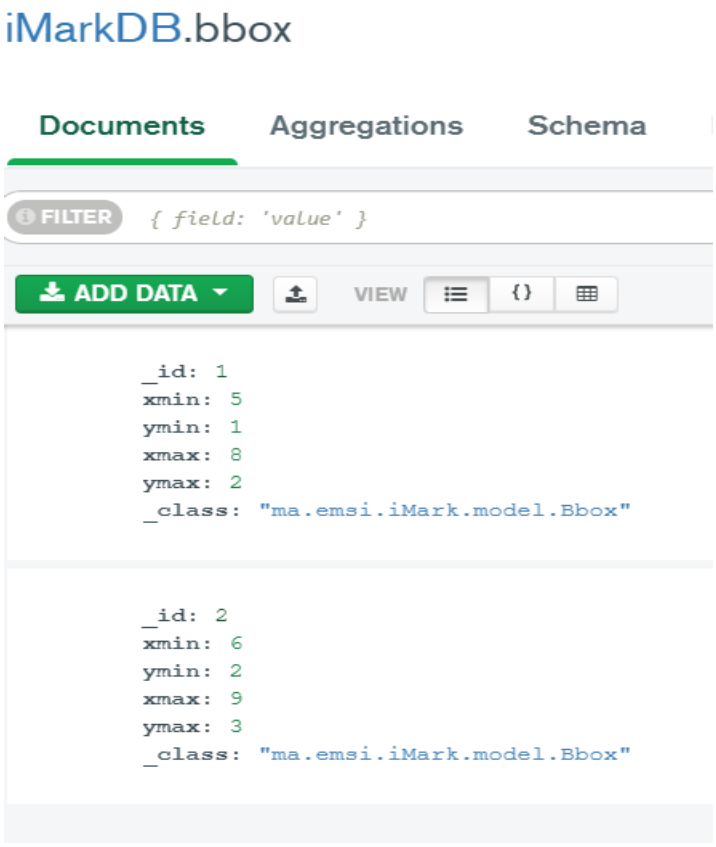
Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	1	413.00 B	1	20.48 kB

objectbs

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	1	238.00 B	1	20.48 kB

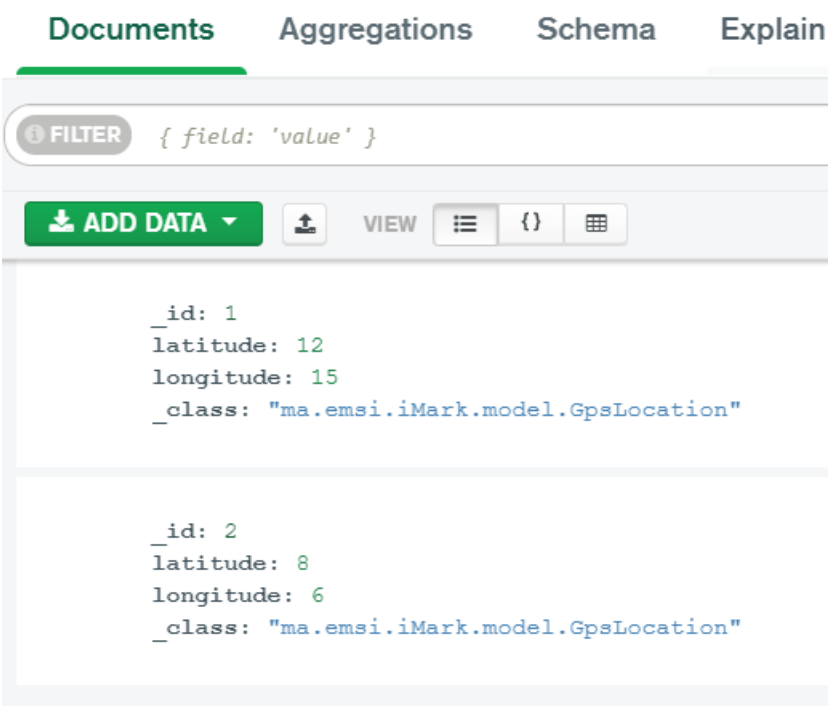
Compte rendu

Documents :

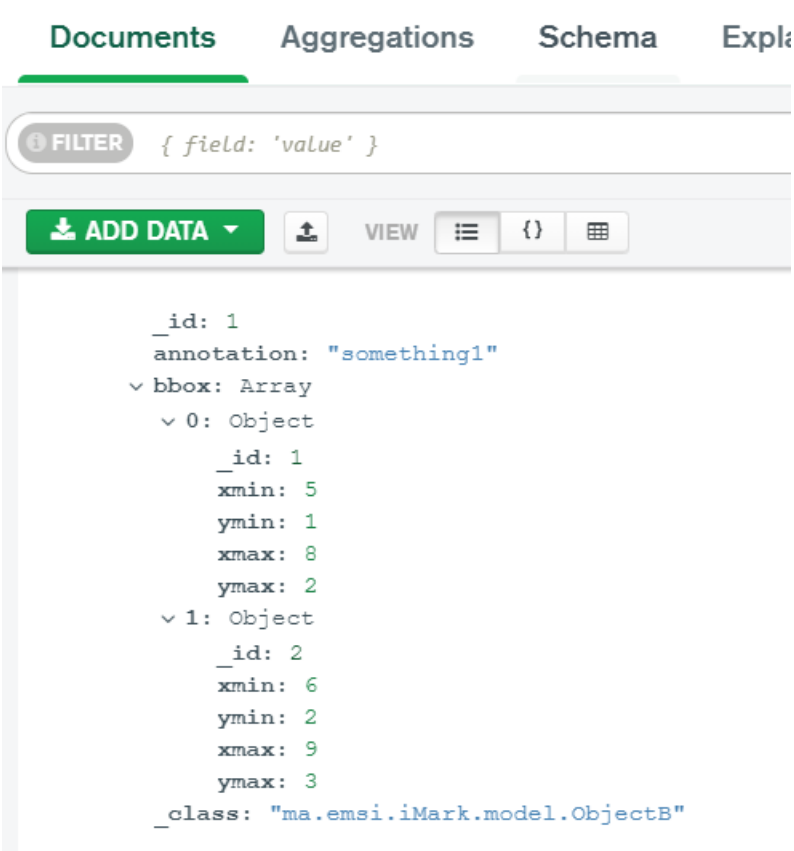


Compte rendu

iMarkDB.gpsLocations



iMarkDB.objectbs



Compte rendu

iMarkDB.image

Documents | Aggregations | Schema | Explain Plan | Indexes

FILTER { field: 'value' }

ADD DATA | VIEW


```
_id: 1
file_url: "C:/file1.png"
width: 15
height: 16
date_captured: 2021-05-12T00:00:00.000+00:00
gps_location: Object
  _id: 0
  latitude: 12
  longitude: 15
objects: Array
  0: Object
    _id: 1
    annotation: "something1"
    bbox: Array
      0: Object
        _id: 1
        xmin: 5
        ymin: 1
        xmax: 8
        ymax: 2
      1: Object
        _id: 2
        xmin: 6
        ymin: 2
        xmax: 9
        ymax: 3
_class: "ma.emsi.iMark.model.Image"
```