MinIO Data Search (Backend)

Guide to run the code:

1. Clone from -> https://github.com/Shaon96/Celeron
2. Make sure you have **'docker'** and **'docker-compose'** commands installed.
3. On the main branch from the ./Celeron directory run ->

   docker-compose up -d

   This will start the MinIO, RabbitMQ and ElasticSearch servers

4. **Start the Event Receiver**
   a. Under the directory -> ./EventReceiver, create a file called .env with the following content:

   ```
   RM_QUEUE=my-queue
   RM_HOST=localhost
   RM_PORT=5672
   RM_USERNAME=guest
   RM_PASSWORD=guest
   ELASTICSEARCH_HOST=localhost:9200
   ```

   b. Follow the steps from step 2 in the readme.md under the ./EventReceiver

5. **Upload the datasets to MinIO and index them on elasticsearch.**
   a. Under the directory -> ./FileUploader, create a file called .env with the following content:

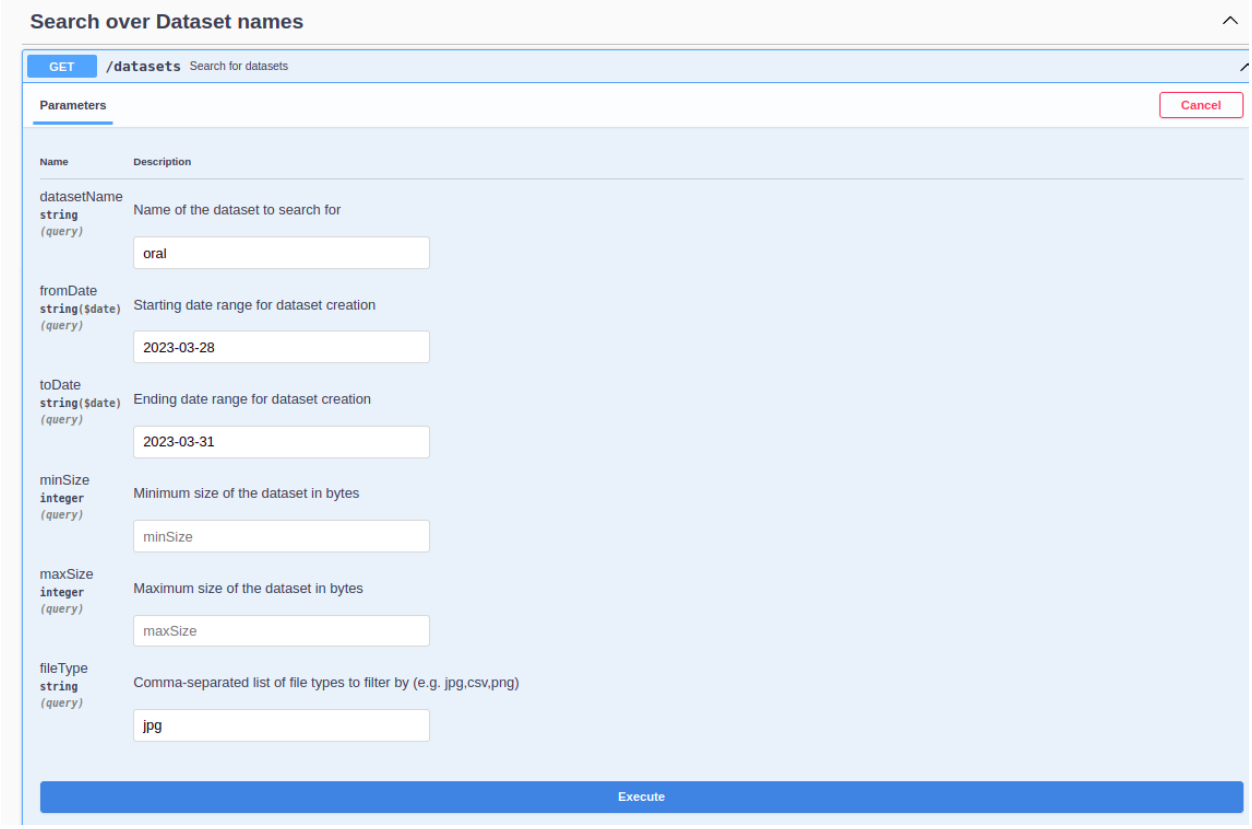
   ```
   MINIO_ENDPOINT=localhost:9000
   MINIO_ACCESS_KEY=minio
   MINIO_SECRET_KEY=miniostorage
   RM_QUEUE=my-queue
   RM_HOST=localhost
   RM_PORT=5672
   RM_USERNAME=guest
   RM_PASSWORD=guest
   ELASTICSEARCH_HOST= localhost:9200
   ```

   b. Follow the steps from step 2 in the ReadMe.md under the ./FileUploader
   c. Sample commands to upload and index the datasets:

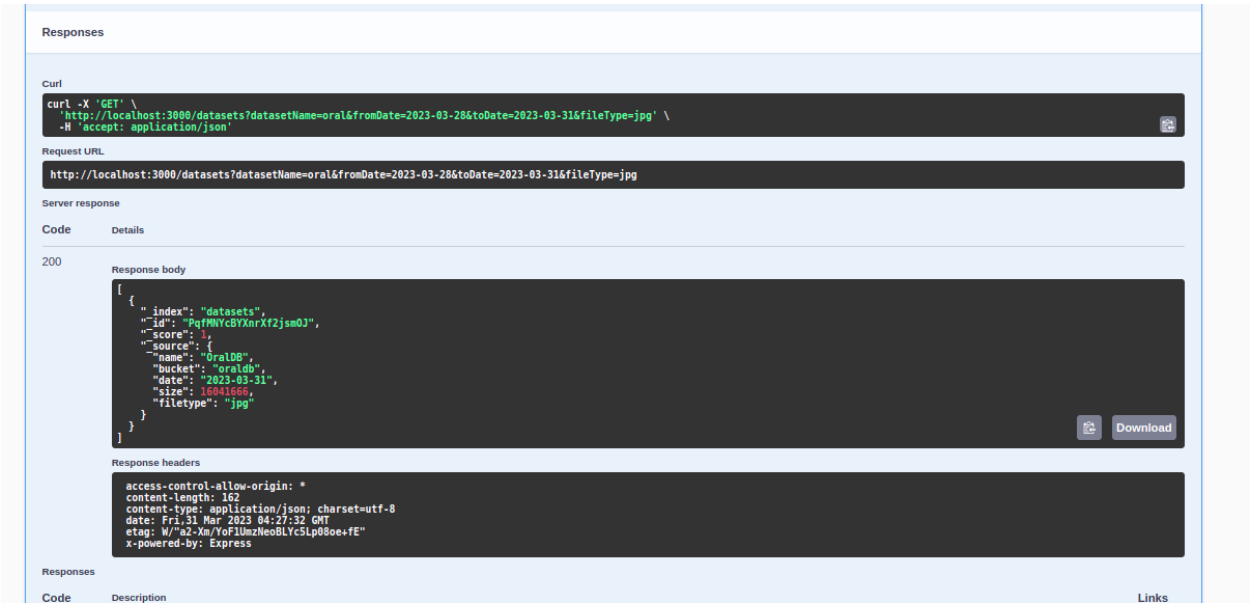
   ```
   python3 file_uploader.py --dir_path Covid19-dataset

   python3 file_uploader.py --dir_path OralDB
   ```

6. **Start the File Searcher server.**
    a. Under the directory -> ./FileSearcher, create a file called .env with the following content:
        ELASTICSEARCH_HOST = localhost:9200
        SERVER_IP=localhost
        SERVER_PORT=3000
    b. Follow the steps from step 2 in the ReadMe.md under the ./FileSearcher
    c. Sample commands to

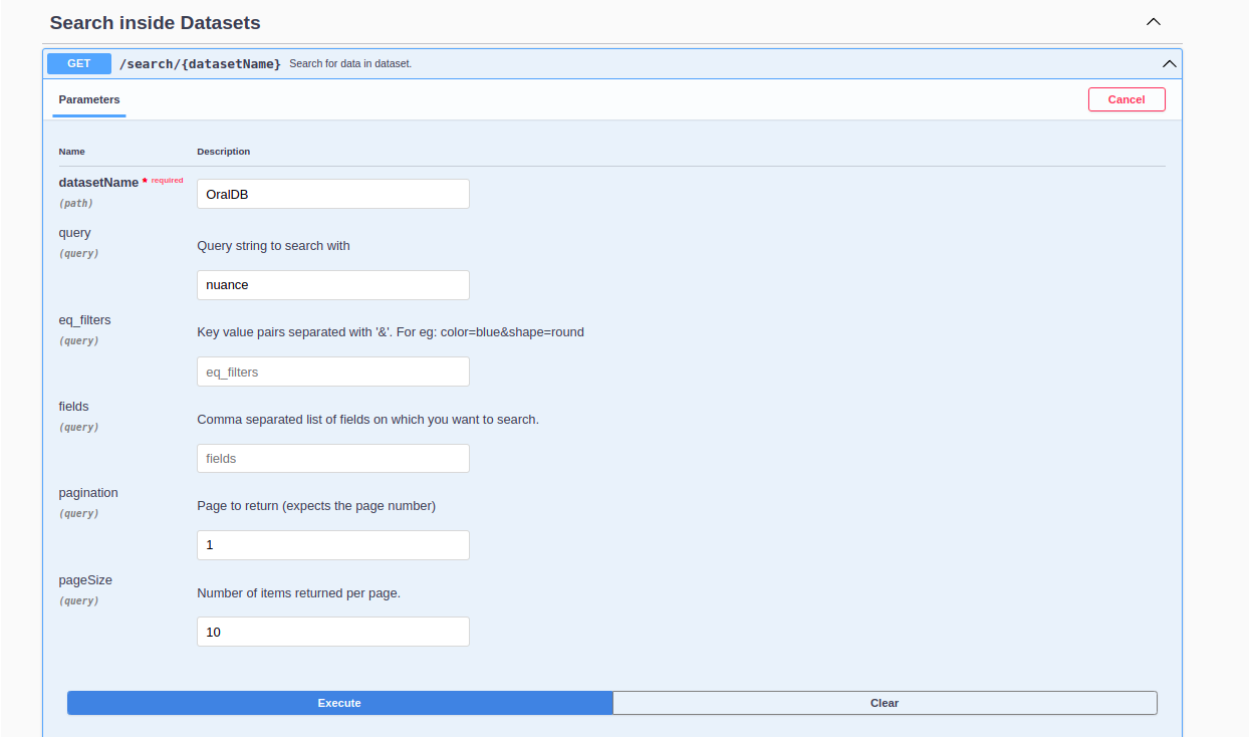
7. Go to localhost:3000/api-docs to access the swagger page of the api.
8. Sample requests on the Swagger page:
    Sample request 1:



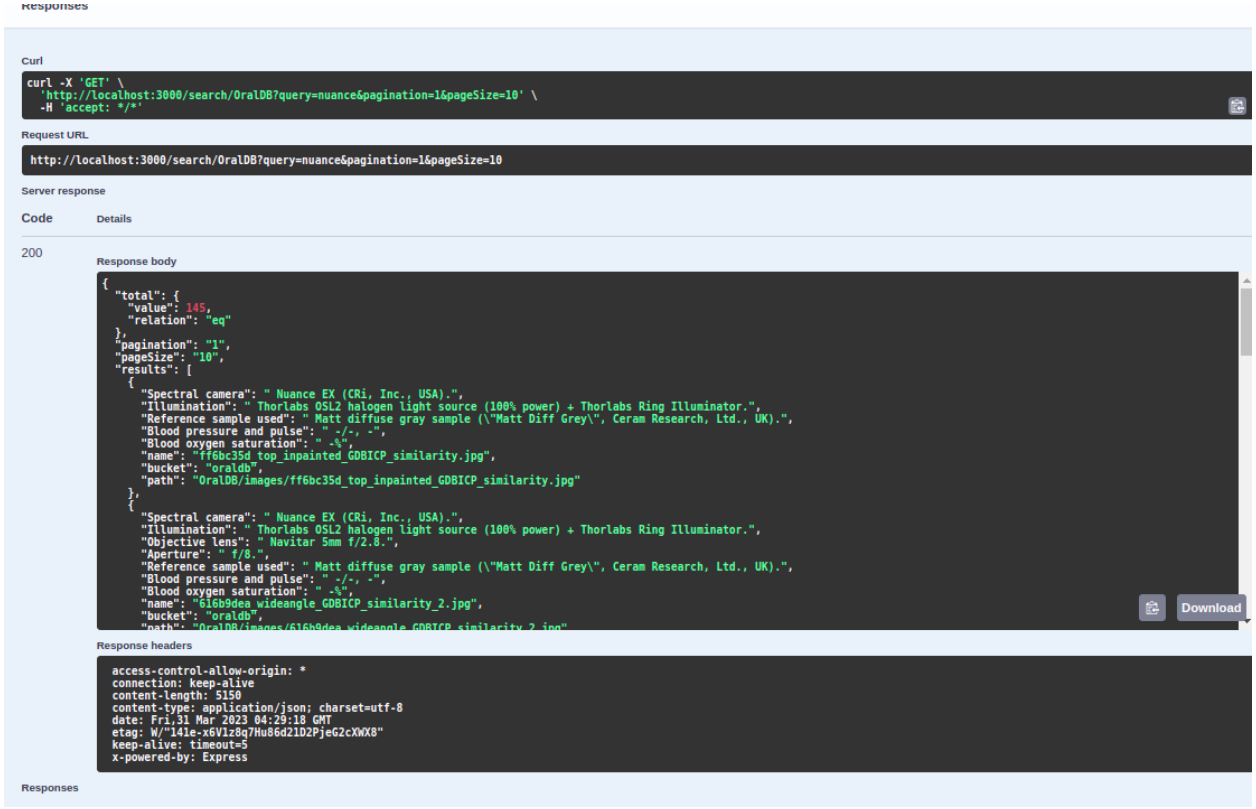
Sample response 1 :



Sample request 2 :



Sample response 2:



Responses

Curl

```
curl -X 'GET' \
  'http://localhost:3000/search/OralDB?query=nuance&pagination=1&pageSize=10' \
  -H 'accept: */*'
```

Request URL

```
http://localhost:3000/search/OralDB?query=nuance&pagination=1&pageSize=10
```

Server response

Code	Details
200	Response body


```
{
  "total": {
    "value": 145,
    "relation": "eq"
  },
  "pagination": "1",
  "pageSize": "10",
  "results": [
    {
      "Spectral camera": " Nuance EX (CRi, Inc., USA).",
      "Illumination": " Thorlabs OSL2 halogen light source (100% power) + Thorlabs Ring Illuminator.",
      "Reference sample used": " Matt diffuse gray sample (\"Matt Diff Grey\", Ceram Research, Ltd., UK).",
      "Blood pressure and pulse": " -/-, -",
      "Blood oxygen saturation": " -%",
      "name": "ff6bc35d_top_inpainted_GDBICP_similarity.jpg",
      "bucket": "oraldb",
      "path": "OralDB/images/ff6bc35d_top_inpainted_GDBICP_similarity.jpg"
    },
    {
      "Spectral camera": " Nuance EX (CRi, Inc., USA).",
      "Illumination": " Thorlabs OSL2 halogen light source (100% power) + Thorlabs Ring Illuminator.",
      "Objective lens": " Navitar 5mm f/2.8.",
      "Aperture": " f/8.",
      "Reference sample used": " Matt diffuse gray sample (\"Matt Diff Grey\", Ceram Research, Ltd., UK).",
      "Blood pressure and pulse": " -/-, -",
      "Blood oxygen saturation": " -%",
      "name": "616b9dea_wideangle_GDBICP_similarity_2.jpg",
      "bucket": "oraldb",
      "path": "OralDB/images/616b9dea_wideangle_GDBICP_similarity_2.jpg"
```


Download

Response headers

```
access-control-allow-origin: *
connection: keep-alive
content-length: 5150
content-type: application/json; charset=utf-8
date: Fri,31 Mar 2023 04:29:18 GMT
etag: W/"141e-x6V1z8q7Hu86d21D2PjeG2cXWX8"
keep-alive: timeout=5
x-powered-by: Express
```

Responses