

## Technical Task:

Design and create an API that will be used to manage “projects”.

“Project” in our terminology is basically a plot of land, that we will be analyzing by utilizing the satellite imagery captured in selected date range.

Supported operations:

- Create
- Read
- List
- Delete
- Update

Basic project attributes:

- name (required, character limit, up to 32 characters)
- description (optional)
- date range (required)
- area of interest (required, geojson file)

Technical requirements:

- FastAPI
- The projects have to be persisted
- [Optional] Test coverage
- [Optional] Provide dockerfile/docker-compose to run the application in a container

The READ/LIST endpoints will be tested using the siege (<https://github.com/JoeDog/siege>) benchmark utility fired with 100 concurrent users doing 10 requests each.

CREATE/UPDATE endpoints will be tested with both valid and invalid payload.

Send us the solved task in the form of public repository, or zipped directory with project. Include basic readme on how to start the project.

Sample geojson file content:

Terra\_de\_meio.json

```
{
  "type": "Feature",
  "geometry": {
    "type": "MultiPolygon",
    "coordinates": [
      [
```

```
[
  [
    -52.8430645648562,
    -5.63351005831322
  ],
  [
    -52.8289481608136,
    -5.674529420529012
  ],
  [
    -52.8114438198008,
    -5.6661010219506664
  ],
  [
    -52.797327415758296,
    -5.654301057317909
  ],
  [
    -52.788292917171,
    -5.651491506446291
  ],
  [
    -52.7803877309072,
    -5.640815088854069
  ],
  [
    -52.7555428597923,
    -5.641377010471558
  ],
  [
    -52.738603174941204,
    -5.63800547260297
  ],
  [
    -52.729568676354,
    -5.631262338119598
  ],
  [
    -52.719404865443295,
    -5.626204935899693
  ],
  [
```

```
-52.709241054532704,  
-5.616089999567166  
],  
[  
-52.6708444355369,  
-5.569446637469866  
],  
[  
-52.6787496218007,  
-5.558206718303779  
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-52.687784120388,  
-5.534602190108217  
],  
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-5.5390983634896  
],  
[  
-52.7244867708986,  
-5.546404572245265  
],  
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-52.7600601090859,  
-5.5722565836830285  
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[  
-52.7843403240391,  
-5.584058210883924  
],  
[  
-52.8074912266689,  
-5.589115978388449  
],  
[  
-52.823301599196604,  
-5.618337778382639  
],  
[  
-52.8385473155626,  
-5.620585548523252
```

```
    ],  
    [  
      -52.8430645648562,  
      -5.63351005831322  
    ]  
  ]  
]  
]  
}  
}
```