

Modal Environment Setup and Deployment Guide

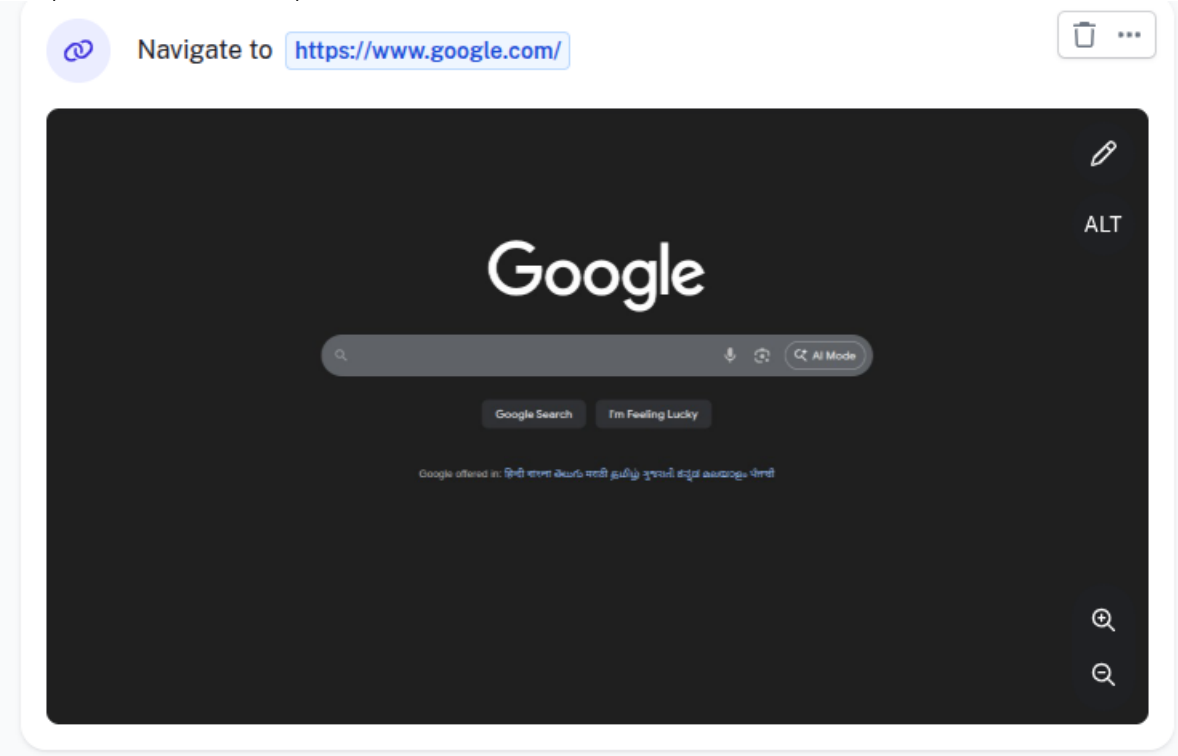
All commands have to be run on bash in same directory as of backend.

Step 1.

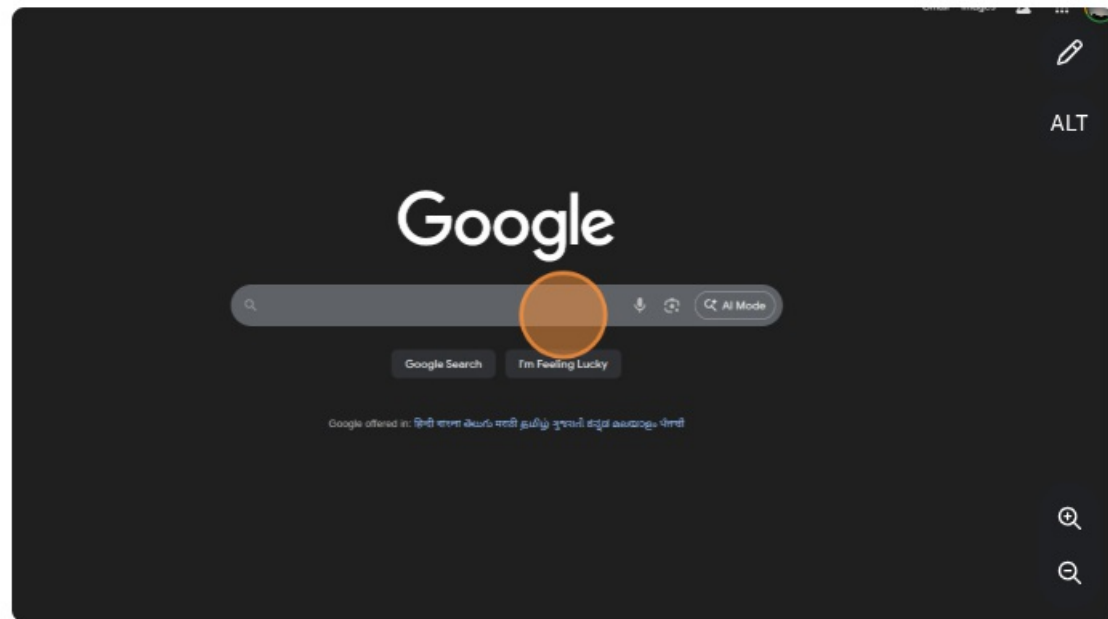
Install Dependencies: Begin by installing the necessary project dependencies. Execute the following command in your terminal to install the packages defined in your requirements file: `pip install -r requirements.txt`

Step 2.

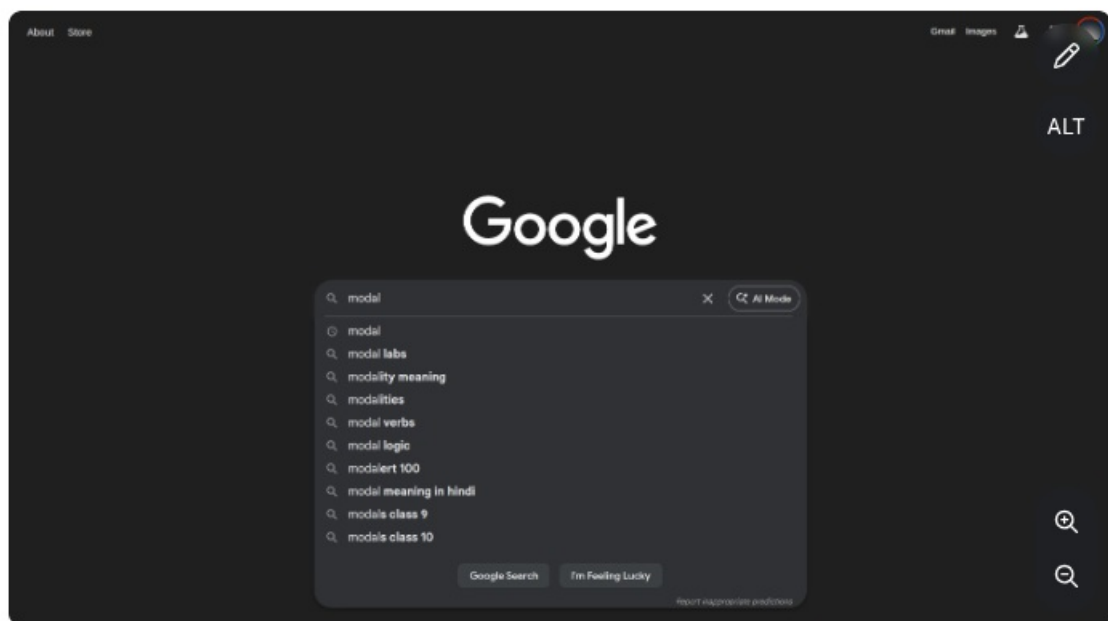
Account Registration Navigate to the Modal platform and register for a new account. Follow the sign-up workflow to create your credentials and establish your workspace, as illustrated in the sequence below:



Click this field.

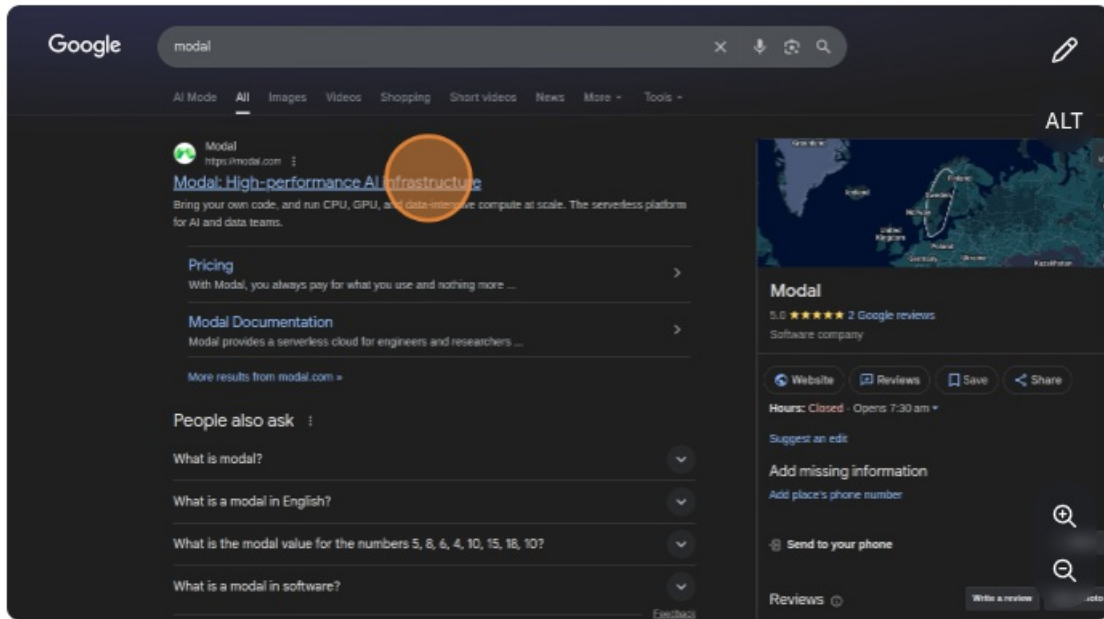


Type "modal"

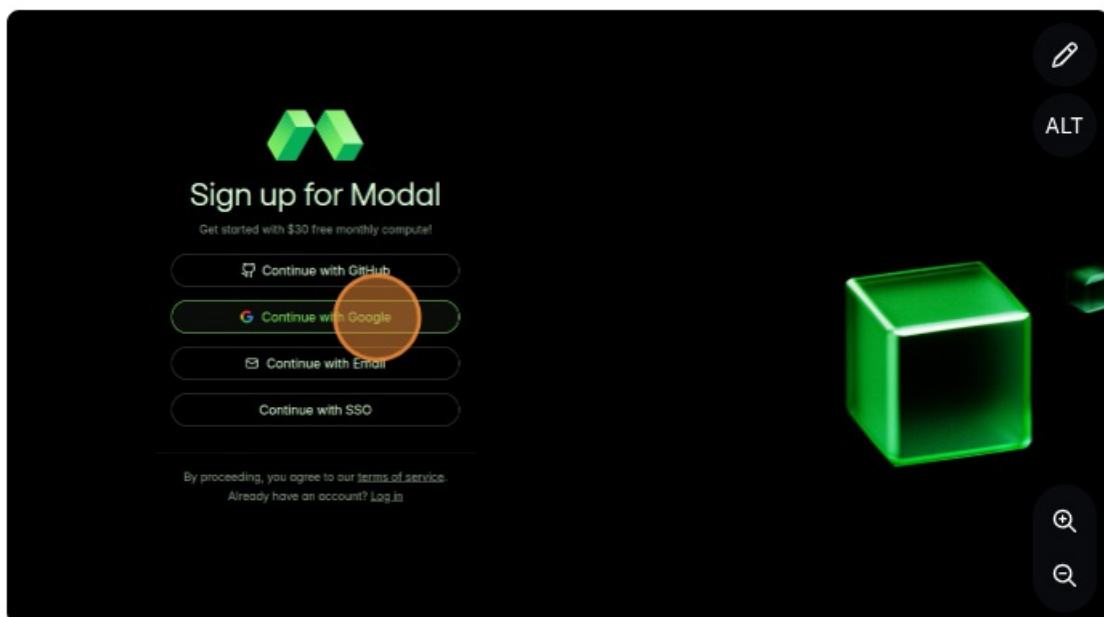




Click "Modal: High-performance AI infrastructure"



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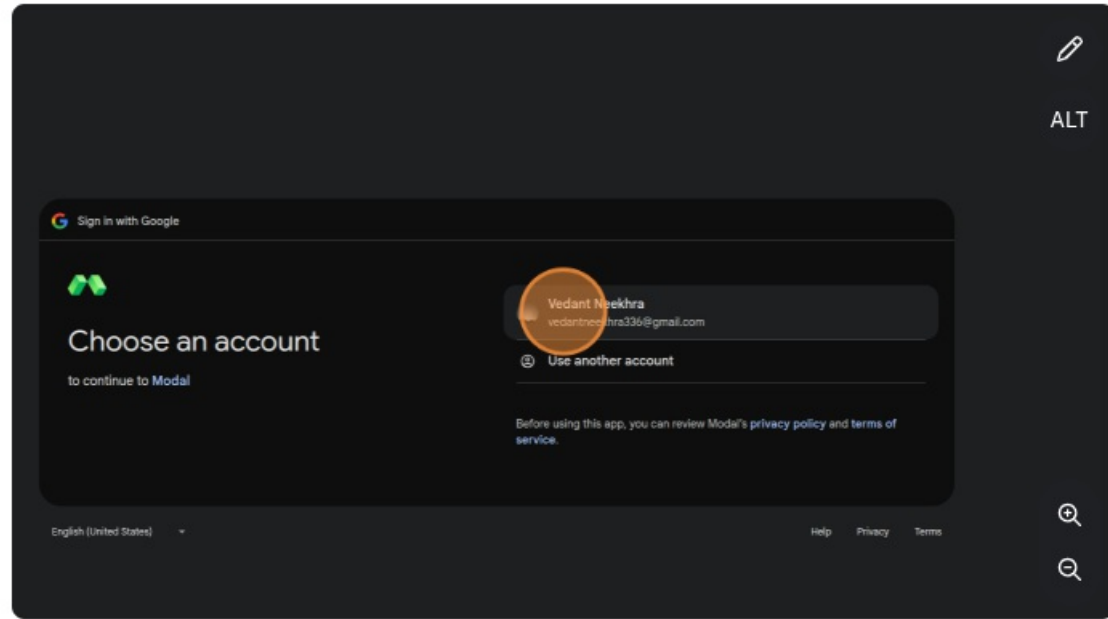




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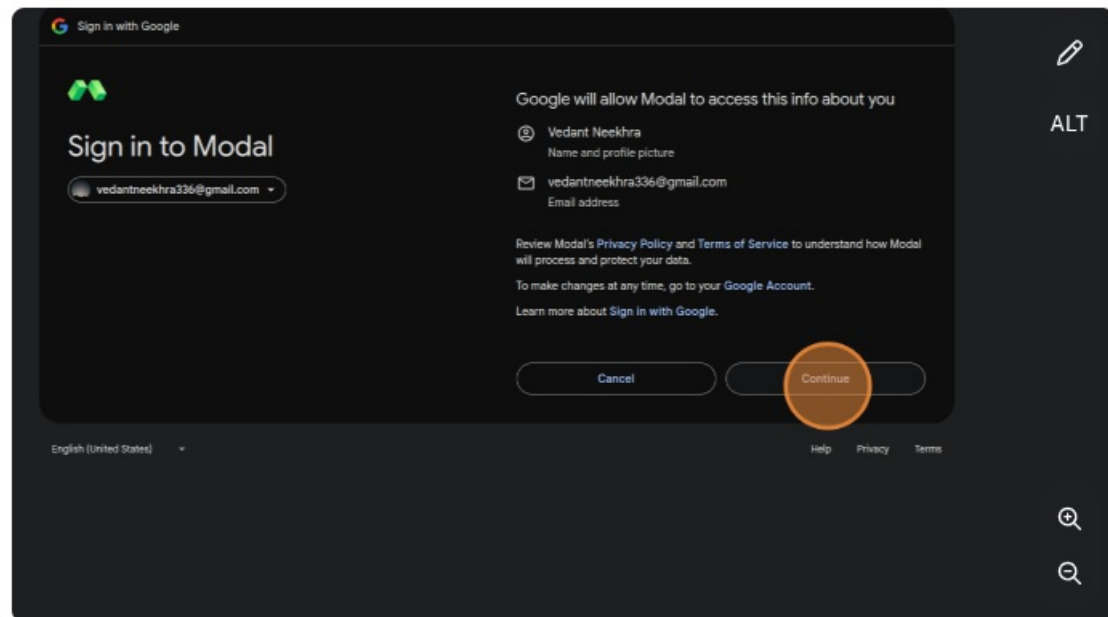
ALT



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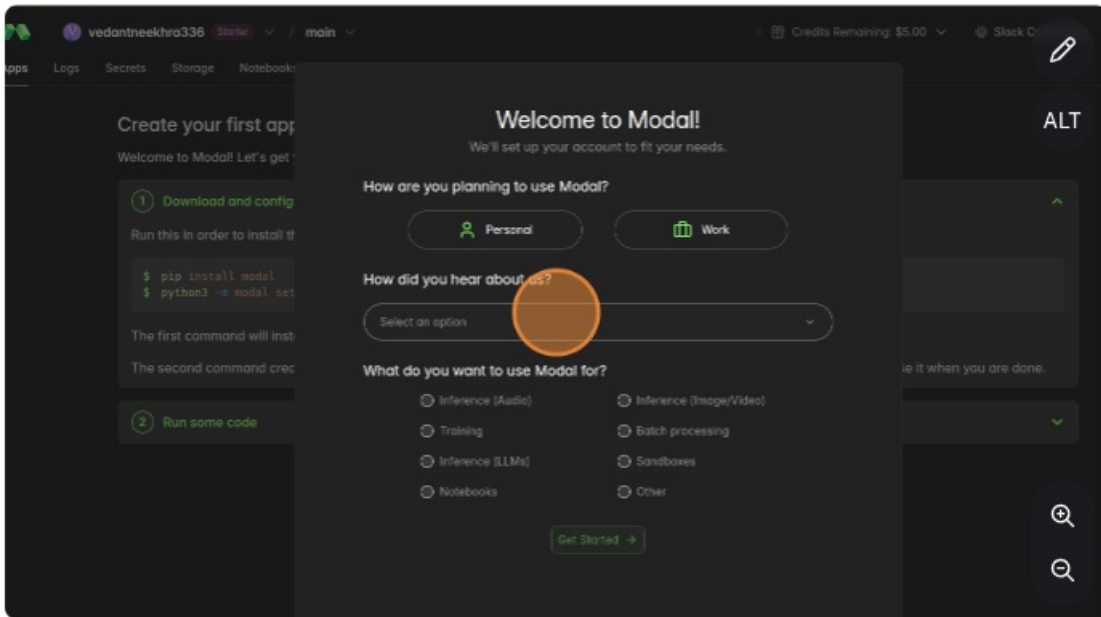


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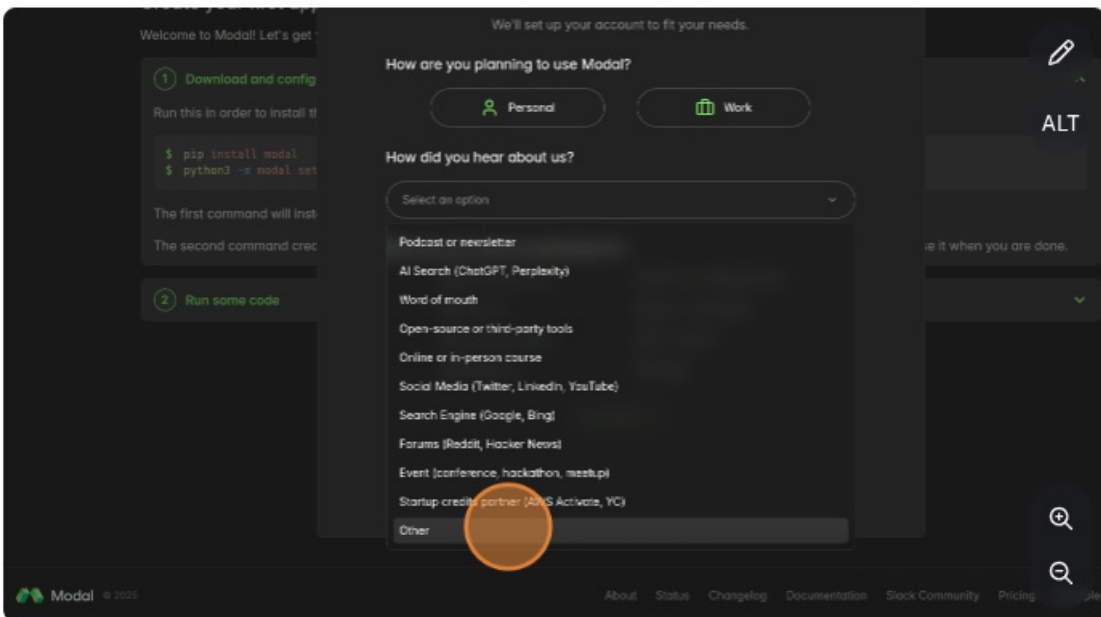




Click "Select an option"



Click "Other"





Click the "Please specify" field.



Secrets Storage Notebooks

Welcome to Modal!

We'll set up your account to fit your needs.

How are you planning to use Modal?

☐ Personal ☐ Work

How did you hear about us?

What do you want to use Modal for?

☐ Inference (Audio) ☐ Inference (Image/Video)

☐ Training ☐ Batch processing

☐ Inference (LLMs) ☐ Sandboxes

☐ Notebooks ☐ Other

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ALT



Type "friend"



Apps Logs Secrets Storage Notebooks

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ALT



Click the "Other" field.



Welcome to Modal! Let's get started.

1 Download and config

Run this in order to install the Modal CLI:

```
$ pip install modal
$ python3 -m modal set
```

The first command will install the Modal CLI.

The second command creates a new project.

2 Run some code

How are you planning to use Modal?

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Other

friend

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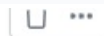
☐ Notebooks ☒ Other

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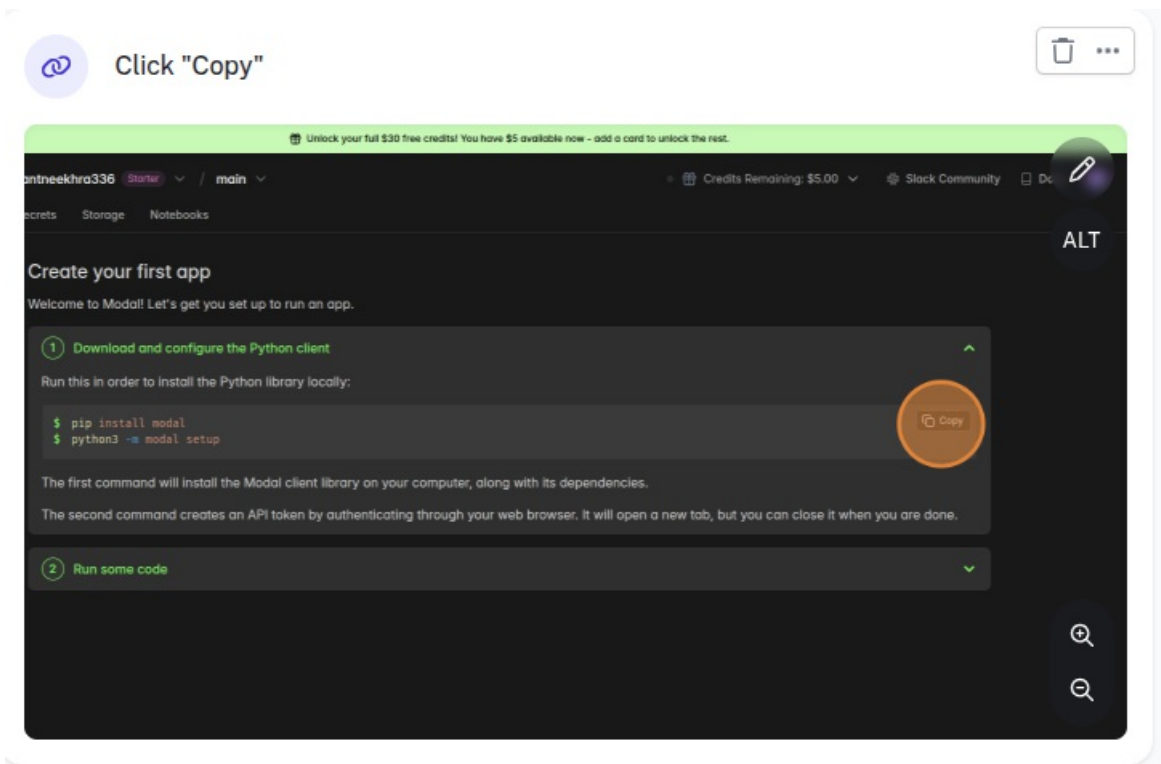
☐ Training ☐ Batch processing

☐ Inference (LLMs) ☐ Sandboxes

☐ Notebooks ☒ Other

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Step 3.

Client Installation and Configuration Install the Modal client library and initiate the setup process to authenticate your local environment with your cloud account. Run the following commands:

```
pip install modal
python -m modal setup
```

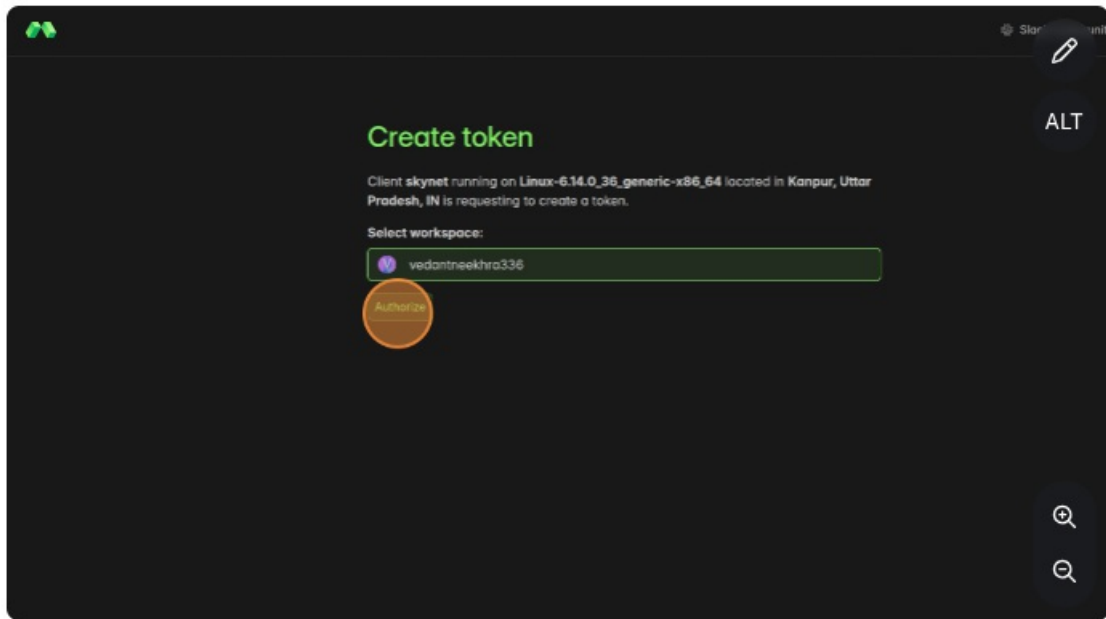
Step 4.

The setup command will generate an authentication URL in the terminal. Open this link in your web browser (either by manually copying and pasting it or using Ctrl + Click) to authorize the device.

```
Was not able to launch web browser
Please go to this URL manually and complete the flow:
https://modal.com/token-flow/tf-flwAKFeV2SoMG4MMStYcB2
❗ Waiting for token flow to complete...
```

Copy the link given in the terminal or do CTRL+CLICK

15 Click "Authorize"



Step 5.

Service Deployment and Endpoint Integration Deploy your script to the Modal cloud environment by executing the serving command:

```
modal serve script.py
```

Once the service is active, the terminal will output a unique web endpoint URL. A link will appear in the terminal copy this link

```
✓ Initialized. View run at https://modal.com/apps/vedantneekhra336/main/ap-YTgtBuYQb34PzZhUZSWItz
✓ Created objects.
├─ ⚡ Created mount /home/nigga/Desktop/ISRO/choding/ISRO_TEAM54/script.py
├─ ⚡ Created function ConsolidatedVLMModels.*.
```

and paste it to replace the link at the top of modal_request.py

```
modal_request.py 2 x
ISRO_TEAM54 > isro_v2 > modal_request.py > llama3_8b
1  import requests
2
3  base_url = "https://modal.com/apps/vedantneekhra336/main/ap-40P9C5QUDB09euuzythLfs"
4  def llama3_8b(messages):
5
```

Step 7

Now we can run the main python script for backend

```
python backend/main.py
```


Step 8

Navigate to frontend directory and run the following commands to start the frontend ..

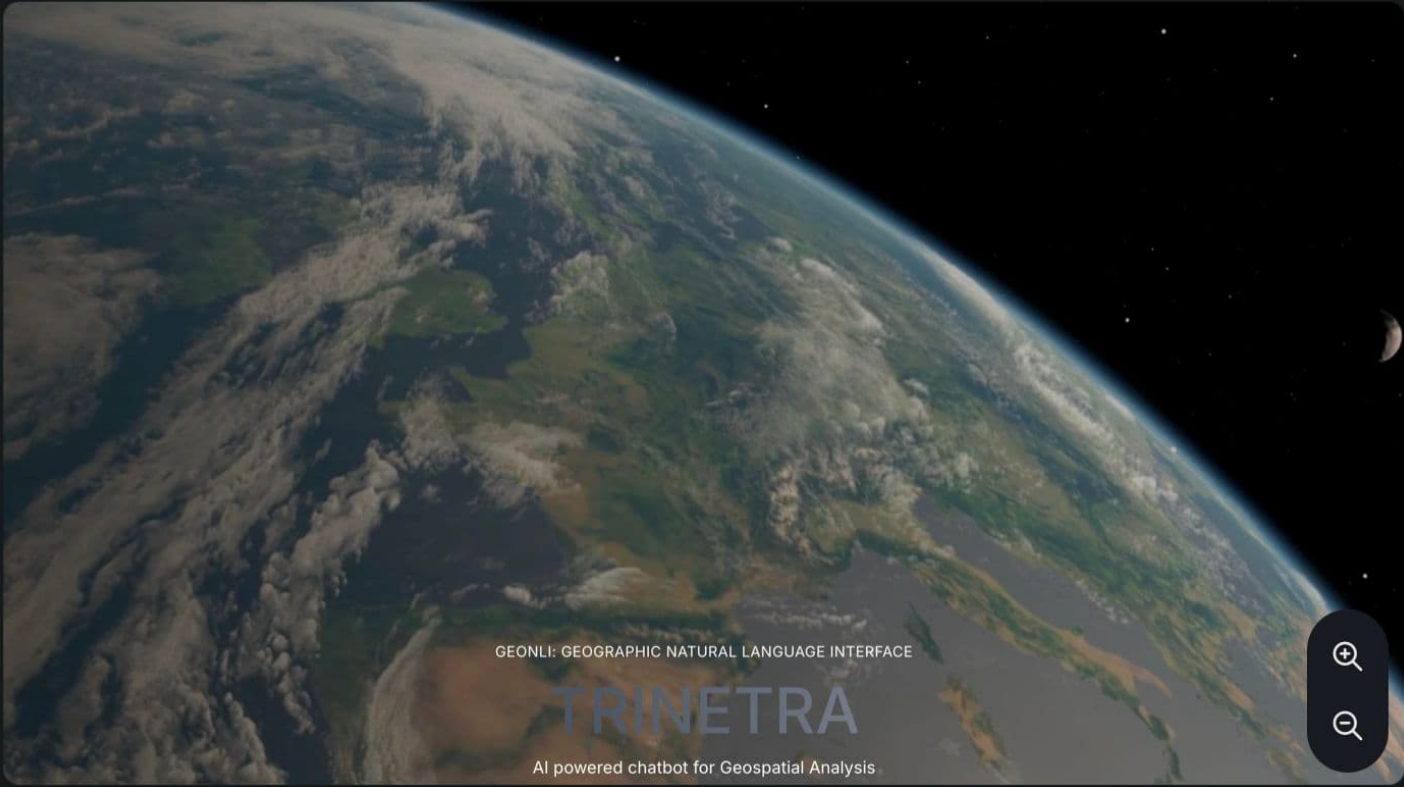
```
npm i
npm run dev
```

This will deploy the local frontend with flask as the backend and modal as our gpu servers.

Website Guide



Navigate to <https://trinetra-silk.vercel.app/>



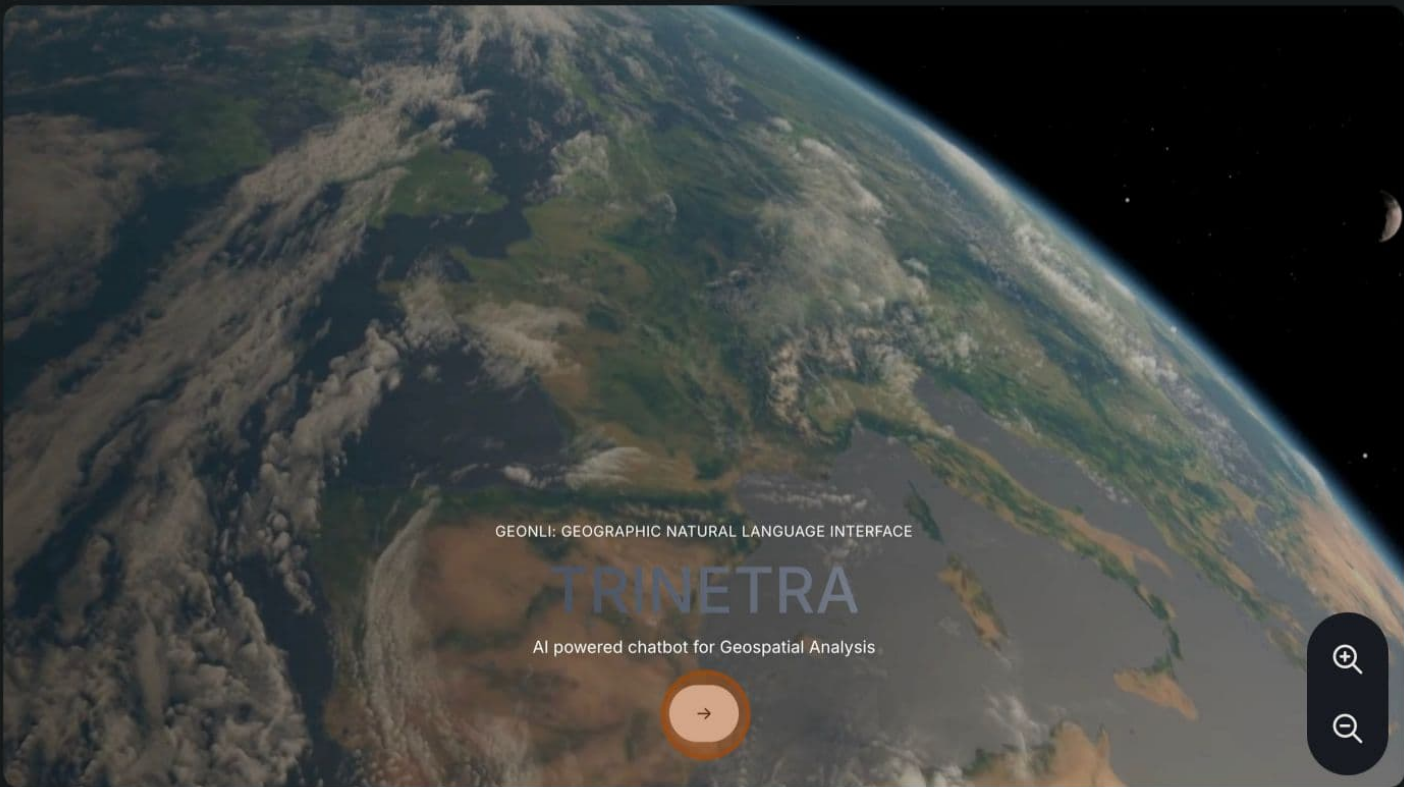
GEONLI: GEOGRAPHIC NATURAL LANGUAGE INTERFACE

TRINETRA

AI powered chatbot for Geospatial Analysis

2

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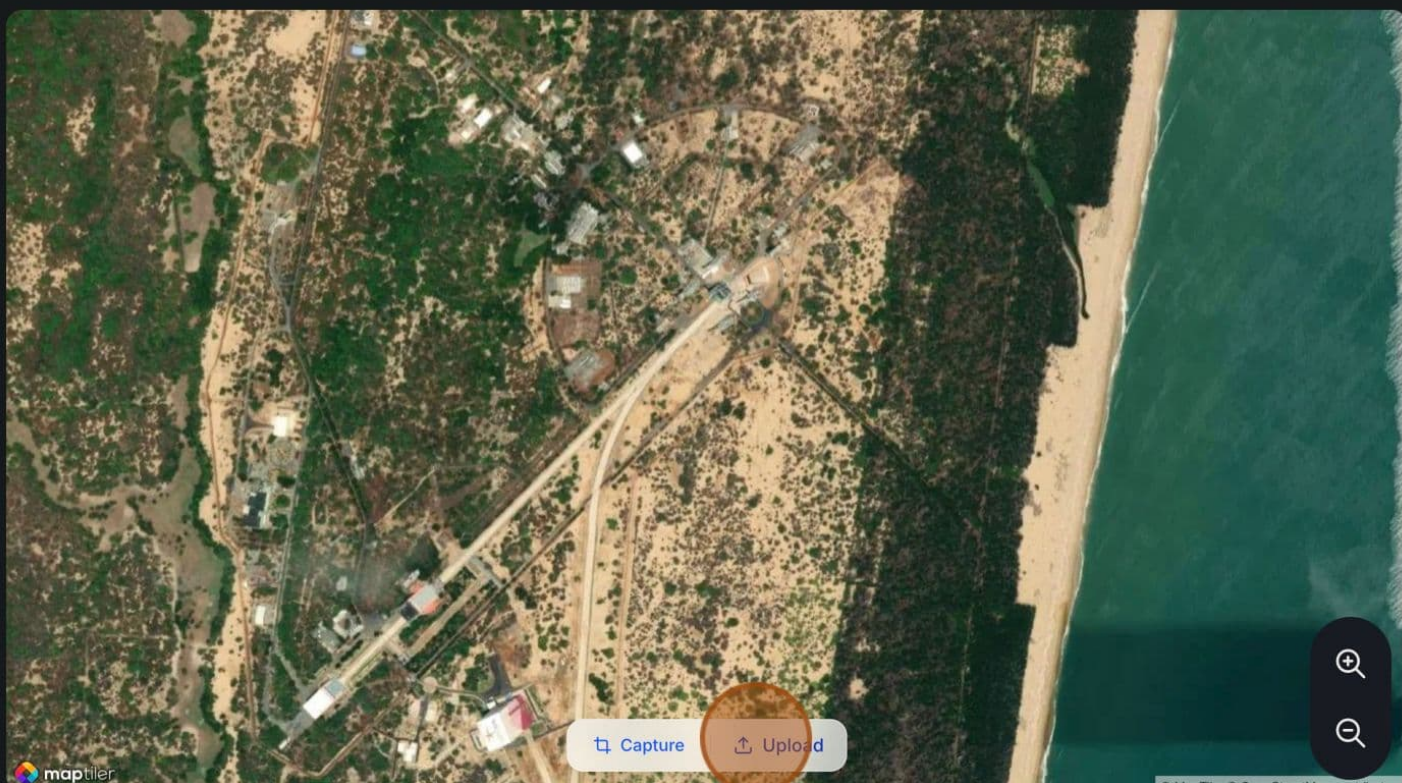
GEONLI: GEOGRAPHIC NATURAL LANGUAGE INTERFACE

TRINETRA

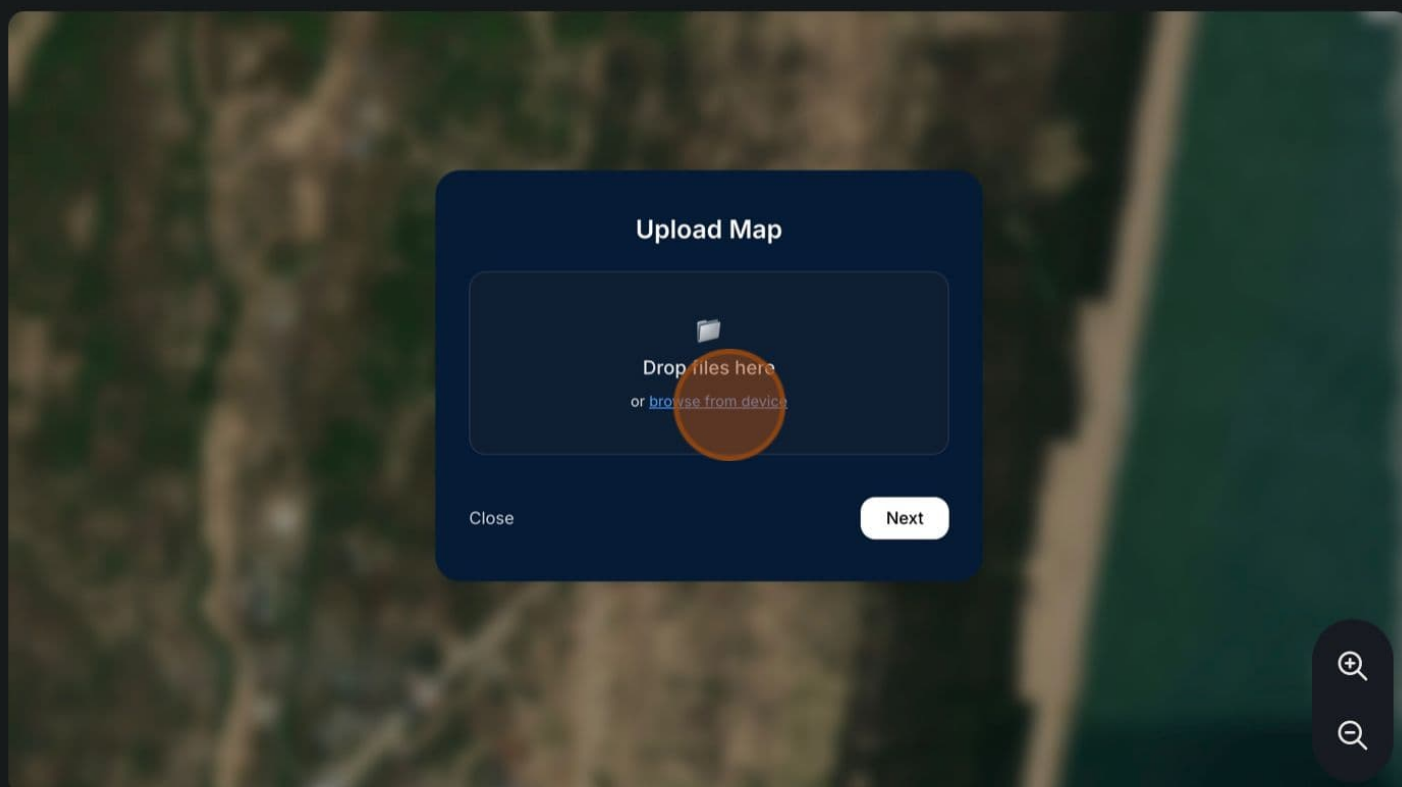
AI powered chatbot for Geospatial Analysis



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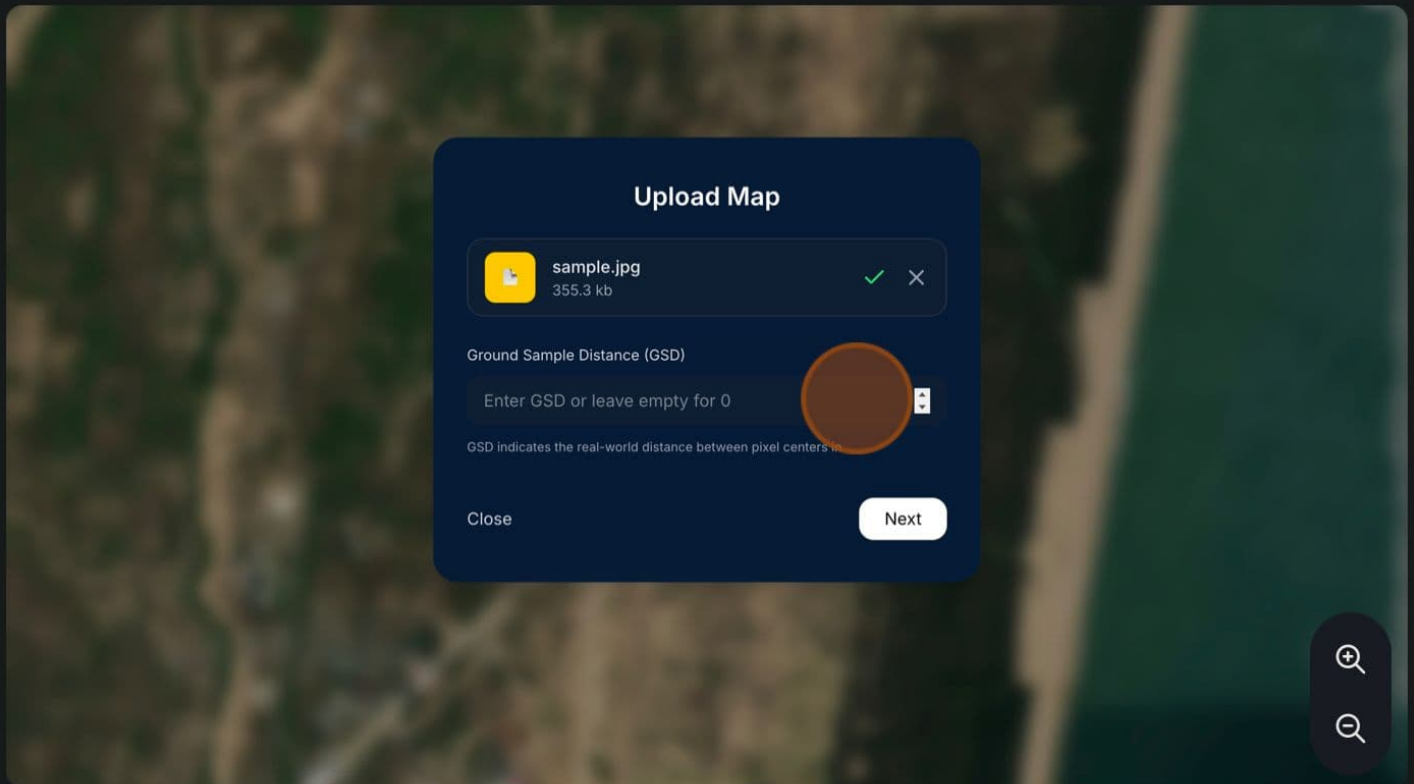


Click "browse from device"

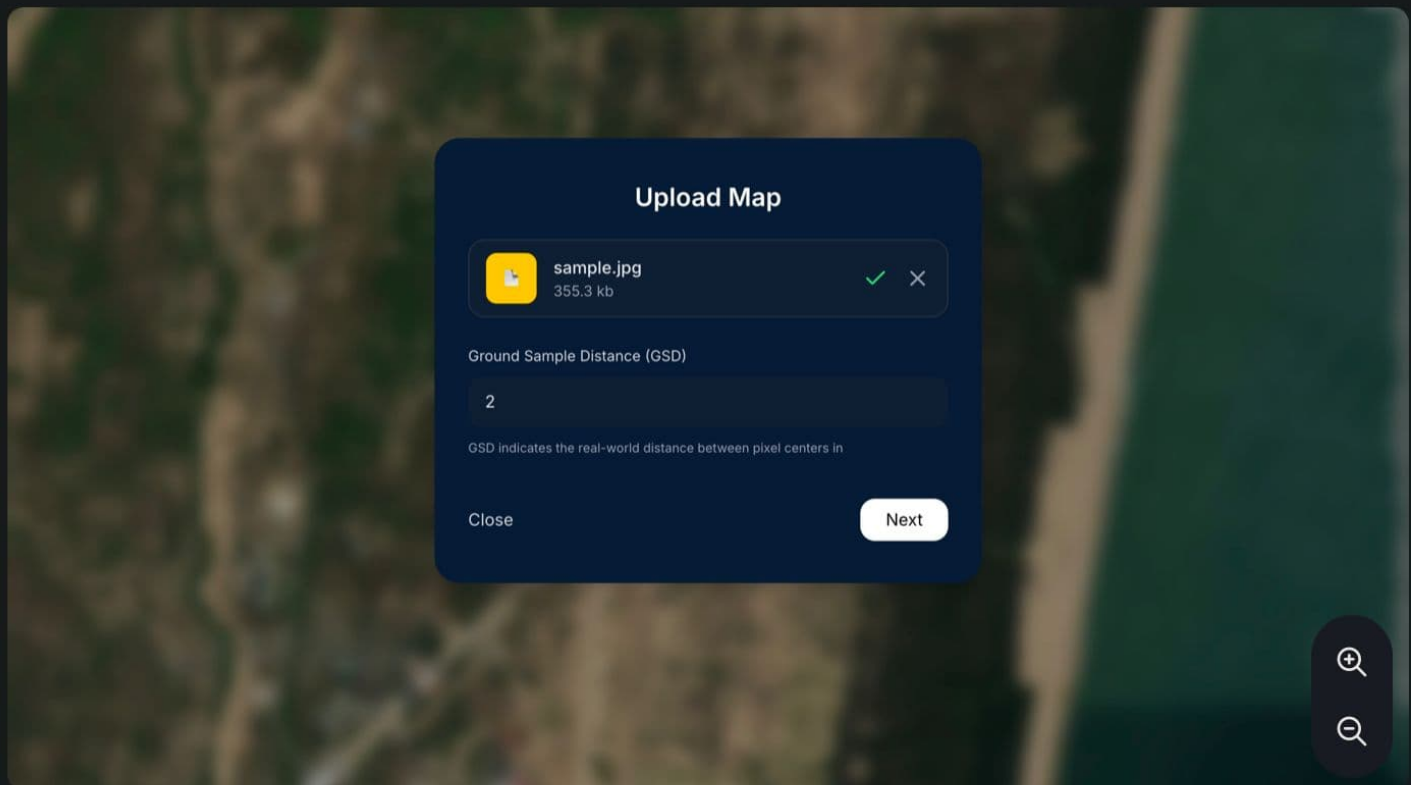




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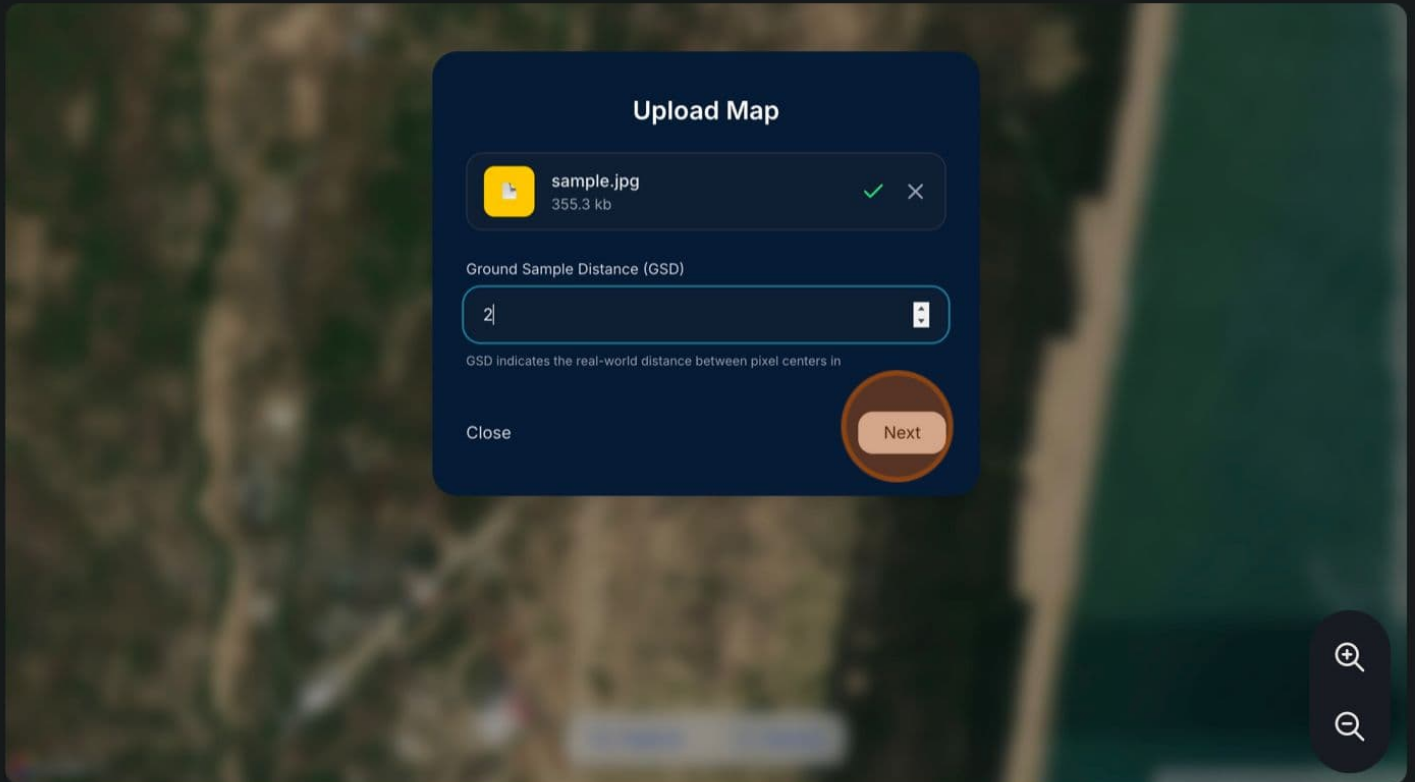


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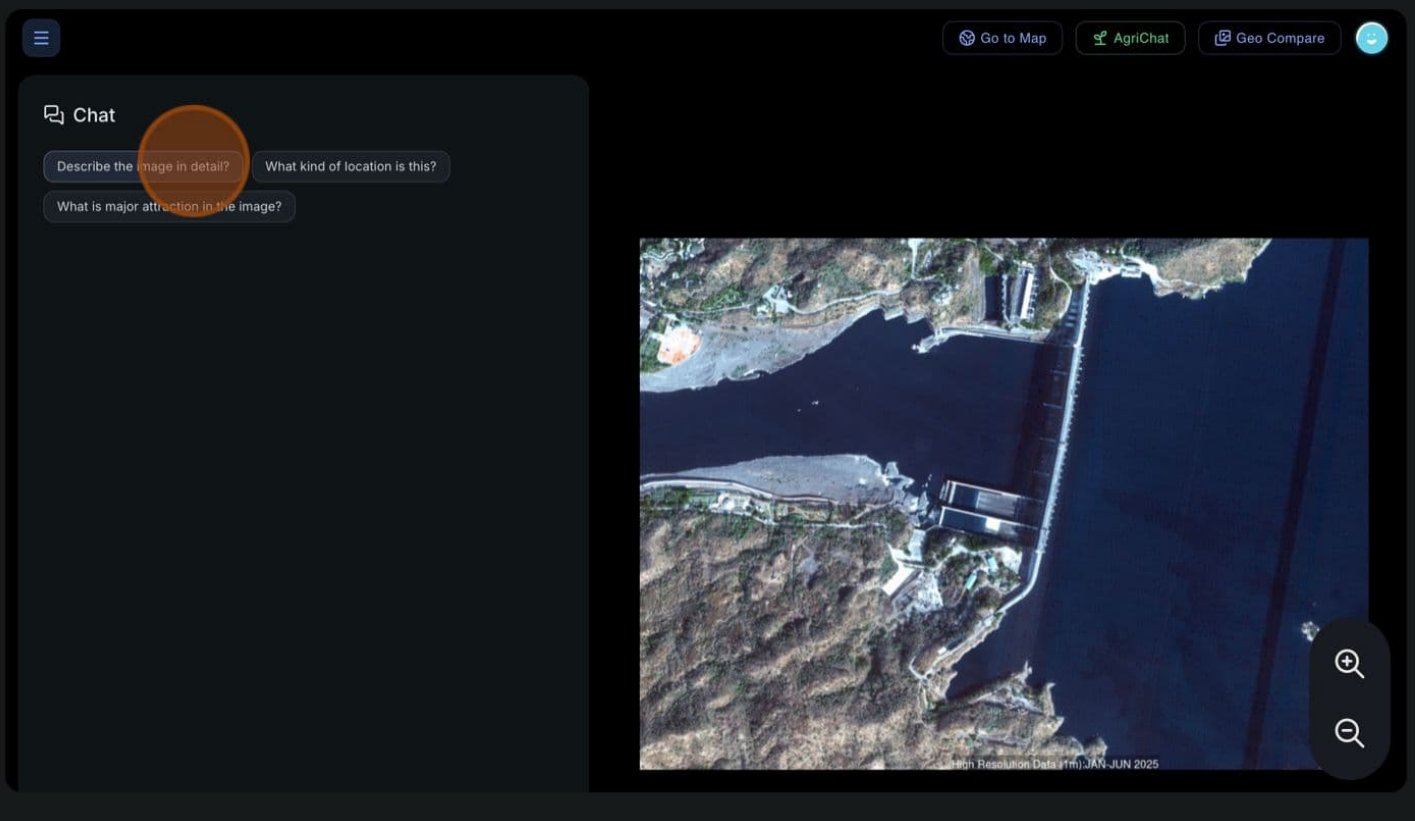




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