

Openfabric AI Application - Project Overview

This project is an AI pipeline that converts text prompts into both images and 3D models using Openfabric's composable applications.

Project Structure:

- main.py: Orchestrates the full pipeline
- stub.py: Connects to Openfabric apps
- ignite.py, remote.py: Utility support
- input.py/output.py: Data schemas
- Dockerfile, start.sh: Deployment scripts
- config/*.json: Metadata, tokens, execution settings

Workflow:

1. Accept user prompt
2. Enhance with mock LLM (optional)
3. Generate image using Text-to-Image app
4. Generate 3D model from image using Image-to-3D app
5. Log the prompt, image, and model to memory.json

How to Run:

Local:

```
$ chmod +x start.sh  
$ ./start.sh
```

Docker:

```
$ docker build -t openfabric-ai .  
$ docker run -p 8888:8888 openfabric-ai
```

Swagger UI:

http://localhost:8888/swagger-ui/#/App/post_execution

Output:

- output.png
- model.glb
- memory.json

This system demonstrates AI prompt engineering, API integration, and multi-stage model transformation for

Openfabric's challenge.