Openfabric AI Developer Challenge

Turn text prompts into beautiful AI-generated images and 3D models using Openfabric apps with memory built in.

Project Overview

This project takes a creative text prompt, enhances it with a mock LLM, and runs it through:

1. *Text-to-Image* Openfabric App
2. *Image-to-3D* Openfabric App
3. Stores outputs (output.png, model.glb) and logs prompt history

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Example Prompt

"Make me a glowing dragon standing on a cliff at sunset"

Output:
- AI-generated image output.png
- AI-generated 3D model model.glb
- Memory log memory.json

How to Run

Run Locally
chmod +x start.sh
./start.sh

Run via Docker
docker build -t openfabric-ai .
docker run -p 8888:8888 openfabric-ai

Then visit:

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

Pipeline Logic

Prompt Enhanced Text-to-Image output.png

Image-to-3D model.glb

Memory Log

Project Structure

main.py # Core execution pipeline
ignite.py, stub.py # Utility logic
config/ # App + token configs
datastore/ # Token file
ontology_/ # IO & config schemas
memory.json # Log of all generated prompts
output.png, model.glb # Sample results

Screenshots

- Swagger UI (swagger-ui.png)

Testing Instructions

1. Go to Swagger endpoint: POST /App/execution
2. Enter prompt like:
{ "prompt": "A futuristic cyberpunk city at night" }
3. Check:
- output.png
- model.glb
- memory.json

Submission
Submit your GitHub repo to:
https://forms.gle/tkEwb6P62sRbg2dY7

Author
Made with for the Openfabric challenge.

Final Project Folder Structure

openfabric-ai-test/
main.py full working pipeline
ignite.py app starter (optional but included)
stub.py handles Openfabric app calls
remote.py, config.py support code
input.py, output.py Input/Output schema interfaces
ontology_dc8f06af066e4a7880a5938933236037/
init.py
input.py
output.py
config.py

config/
manifest.json app ID + schema info

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execution.json              test prompt mapping
properties.json             metadata
state.json                  system state (optional)

datastore/
tokens.json                 auth tokens for Openfabric apps

start.sh                    run locally script
Dockerfile                  run in Docker
pyproject.toml              Poetry deps
poetry.lock                 Poetry lock file
README.md                   I created this for you
swagger-ui.png              screenshot of Swagger
memory.json                 memory logs (autogenerated)
output.png                  sample image (autogenerated)
model.glb                   sample 3D model (autogenerated)
```

Git Commands for Submission

```
cd openfabric-ai-test
git init
git add .
git commit -m "Final submission for Openfabric AI Challenge"
git remote add origin https://github.com/your-username/openfabric-ai-test.git
git push -u origin main
```