Job Description: Al Application Developer - Openfabric Challenge

We are seeking a highly motivated AI Application Developer to build and deploy an end-to-end AI-powered pipeline using Openfabric's composable app ecosystem. This role centers around designing a system that transforms natural language prompts into AI-generated images and 3D models, while also maintaining a memory log of interactions.

### Responsibilities

## **Prompt Processing & Enhancement**

- Accept natural language prompts and optionally refine or preprocess them using mock LLM techniques.

# Integration with Openfabric Apps

- Use Openfabric APIs to:
- Convert enhanced text into images (Text-to-Image App)
- Generate 3D models from images (Image-to-3D App)

### Pipeline Orchestration

- Chain multiple AI services into a seamless workflow, ensuring output from one service feeds correctly into the next.

### Memory System Implementation

- Log each prompt and its outputs into a persistent file (memory.json) to simulate stateful behavior.

# **Deployment & Execution**

- Provide scripts and configurations for:
- Local development (start.sh)
- Docker-based deployment (Dockerfile)
- API interaction via Swagger UI

# Code Quality & Structure

- Follow modular, readable code practices. Use schema definitions (InputClass, OutputClass, ConfigClass) for consistency with Openfabric standards.

#### **Documentation & Submission**

- Prepare comprehensive README, sample output files, and submission materials for GitHub deployment and challenge entry.

# Skills Required

- Python (Core language for backend logic)
- RESTful API integration
- Docker (for containerized deployment)
- JSON handling & file I/O
- Familiarity with AI/ML workflows
- Basic understanding of 3D file formats (.glb)

#### Outcome

A fully functional, documented AI pipeline capable of turning simple prompts into rich visual and 3D content-with persistent memory and multi-platform deployment support.