LogicCraft AI Backend API

Prerequisites

- Python 3.10+
- Redis
- OpenPLC Validator (on system PATH)

Installation

1. Create a virtual environment: `python -m venv venv`
2. Activate it: `source venv/bin/activate`
3. Install dependencies: `pip install -r requirements.txt`
4. Create a `.env` file:

```
DEBUG=False
SECRET_KEY=your-secret-key-here
REDIS_URL=redis://localhost:6379/0
VLLM_SERVER_URL=http://localhost:8001/v1
CORS_ALLOWED_ORIGINS=http://localhost:3000
```

5. Run migrations: `python manage.py migrate`
6. Start the server: `python manage.py runserver`

API Reference

- **POST** `/api/generate/`
- **POST** `/api/validate/`

Connecting the Services

- Frontend: Set `NEXT_PUBLIC_API_BASE_URL` to this Django server (e.g., `http://localhost:8000/api`).
- AI Service: vLLM server must be running and accessible at `VLLM_SERVER_URL`.
- Redis: Redis server must be running.

Testing

Run the test suite with: `python manage.py test`