



AI Blog Generator

A simplified AI-powered content generator built with Flask and OpenAI.

Given a keyword, it performs mock SEO analysis and generates a blog post in HTML format using GPT models.

It also supports daily scheduled post generation.



Demo Presentation

ai blog generator interview JianxiaoCai



Tech Stack

- **Python 3.10+**
- **Flask** – REST API framework
- **OpenAI API** – For content generation
- **APScheduler** – For daily scheduled post creation
- **python-dotenv** – Environment variable handling

Setup & Run Instructions

1. Clone the repository

```
git clone https://github.com/your-username/ai-blog-generator-interview-JianxiaoCai.git
cd ai-blog-generator-interview-JianxiaoCai
```

2. Create virtual environment and install dependencies

```
python -m venv venv
source venv/bin/activate
pip install -r requirements.txt
```

3. Create .env file with your OpenAI API key

From <https://platform.openai.com/docs/overview>

```
OPENAI_API_KEY=sk-xxxxxxxxxxxxxxxxxxxxxx
```

4. Run the app

```
python app.py
```

5. API Endpoint

GET /generate?keyword=<your_keyword>

Example:

```
curl "http://127.0.0.1:5000/generate?keyword=wireless%20earbuds"
```

Returns:

```
{
  "keyword": "...",
  "seo": {
    "search_volume": "...",
    "keyword_difficulty": "...",
    "avg_cpc": "..."
  },
  "content": "<!DOCTYPE html>...</html>"
}
```

6. Daily Blog Generation (Scheduler)

The app uses **APScheduler** to generate a blog post once every 24 hours.

- Default keyword: wireless earbuds
- Output is saved in the project root directory as: *generated_<YYYYMMDD_HHMM>.html*

You can test this manually by calling *scheduled_job()* inside [scheduler.py](#).

7. Example Output

An example blog post is included here:

example_wireless_earbuds.html

This HTML was generated using actual GPT model output, with affiliate link placeholders replaced.



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