Website SEO Analyzer & Web Scraper

# Usage / How to Run

## Step 1: Install Required Python Libraries

Before running the script, make sure you have Python installed. Then, install the necessary libraries using the following command:

pip install requests beautifulsoup4 pandas validators

## Step 2: Open the Python Script

Locate the script file 'seo\_analyzer.py' in your project folder. You can open it in any Python IDE (VS Code, PyCharm, Jupyter Notebook) or a text editor.

## Step 3: Set Your Target Website

Inside 'seo\_analyzer.py', set the URL of the website you want to analyze. Replace 'https://example.com' with your actual website URL:

START\_URL = 'https://example.com'

## Step 4: Run the Script

Execute the Python script using the terminal or command prompt:

python seo\_analyzer.py

The script will start crawling the website, extract SEO data, check for issues, and detect broken links.

## Step 5: Check the Reports

After the script completes, it will generate two reports in your project folder:

1. CSV Report: seo\_audit\_report.csv – can be opened in Excel or Google Sheets.

2. JSON Report: seo\_audit\_report.json – useful for programmatic analysis or web dashboards.

Both reports contain:
- Page URLs
- Page titles
- Meta descriptions
- H1 & H2 headings
- Status codes
- SEO issues found
- AI-style suggestions
- Broken links

## Tips

- Make sure the website is accessible; otherwise, pages may show 'Failed' in the reports.
- You can adjust DELAY in the script for faster crawling if the website allows.
- For large websites, consider increasing Python script timeout or using multithreading for speed.