**PROJECT DOCUMENTATION**

**Folder Structure**

**Python\_Project/**

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├── start.py # Entry point to orchestrate URL validation and JSON fetching

├── requirements.txt # Project dependencies

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├── Project/

│ ├── \_\_init\_\_.py

│

│ ├── Constants/

│ │ ├── \_\_init\_\_.py

│ │ └── constants.py # Define folder names, retry limits, timeouts, etc.

│

│ ├── Logger/

│ │ ├── \_\_init\_\_.py # Logging configuration (log file creation, format, etc.)

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│ ├── Validation/

│ │ ├── \_\_init\_\_.py

│ │ └── url\_validation.py # URL format check, reachability check, async validation

│

│ ├── Parallel\_Requests/

│ │ ├── \_\_init\_\_.py

│ │ └── parallel\_requests.py # Async GET request with retry, backoff, concurrency

│

├── Logs/

│ └── logYYYY-MM-DD\_HH-MM-SS.log # Automatically generated logs (runtime)

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**To create virtual environment**

**1. Open terminal (or Anaconda Prompt)**

Make sure Conda is installed and accessible.

**2. Create the environment**

conda create --name venv python=3.12

**3. Activate the environment**

conda activate venv

**Install necessary dependencies**

pip install -r requirements.txt

**To run the project**

python start.py