Project: Website Link Checker

Description: The goal of this project is to create a Python script that scans a given website and checks for broken or invalid links. The script will crawl through the web pages of the website, extract all the links, and then check the status of each link to determine if it is valid or broken.

Requirements:

1. The script should take a website URL as input from the user.
2. It should crawl the web pages of the given website and extract all the links.
3. The script should check the status of each link to determine if it is valid or broken.
4. The output should display the total number of links checked, the number of valid links, and the number of broken links.
5. For each broken link found, the script should display the URL of the page where the broken link was found and the broken link itself.
6. The script should handle common HTTP status codes (e.g., 404 for not found, 200 for OK, etc.) to determine the status of the link.
7. The script should handle exceptions and errors gracefully.

Bonus: If you finish the main requirements early, you can consider adding these additional features to enhance your project:

1. Implement multi-threading or asynchronous requests to speed up the scanning process.
2. Provide an option to save the results to a file (e.g., CSV or text file).
3. Add an option to limit the depth of crawling (e.g., only scan links within a certain number of levels from the starting URL).
4. Improve the output format to make it more user-friendly and informative.

Keep in mind that this is an intermediate-level project, and it may require some knowledge of web scraping, HTTP requests, and error handling in Python. It's a good opportunity to practice your skills in these areas and learn more about website scanning and link checking.

Kindly create a new GitHub Repo and save the files there and send us a screen-recording of the code running along with it share the GitHub repo with us to verify the code.

NOTE - *We will mark you blacklist if you copy code from anywhere or any AI tool* (Tech Interview will be held to make sure you have yourself written and know the each piece of code & we can also ask to write another similar code at the same time)