**Port Scanner GUI - Documentation**

**Description:**

The Port Scanner GUI is a Python script that provides a graphical user interface (GUI) for scanning open TCP ports on a target IPv4 address. The GUI allows users to input the target IP address, the starting port number, and the ending port number. It then performs a port scan on the specified range of ports and displays the results on the GUI window.

**Usage:**

1. Prerequisites:

- Python installed on the system (Python 3.x recommended).

2. Dependencies Installation:

- Ensure that you have the necessary Python packages installed. If you don't have them already, you can install them using pip:

*pip install tkinter*

3. Run the Script:

- Open the terminal or command prompt.

4. Navigate to the Directory:

- Change the directory to the location where *"scanner\_gui.py"* is saved.

5. Executing the Script:

- Enter the following command to run the Port Scanner GUI:

*python scanner\_gui.py*

6. Using the Port Scanner GUI:

- The GUI window will open, displaying the input fields and the "Scan Ports" button.

7. Provide Target Information:

- Enter the IPv4 address of the target you want to scan in the provided entry field.

-Open Command Prompt or Terminal.

-Enter the comm following command: *"ipconfig"* to know your ipv4 address.

- Enter the starting port number and the ending port number for the scan range(1-65535) in the respective entry fields.

8. Scanning Process:

- Click the *"Scan Ports"* button to initiate the scan.

- The GUI will display the scanning progress in the text area, showing which TCP ports are open on the target IP address.

- If any specific well-known ports are open (e.g., FTP, SSH, Telnet), the GUI will provide additional information about potential risks and recommendations.

9. View Scan Results:

- After the scan is completed, the results will be displayed in the text area.

- If there are no open ports found on the target IP address, the GUI will indicate this in the results.

10. Exiting the Script:

- You can close the GUI window at any time.

- If you wish to quit the port scanner, the GUI will prompt for confirmation before closing the application.

Important Note:

Port scanning can be considered a sensitive operation and should be used responsibly. Ensure that you have proper authorization and permissions before scanning any target that does not belong to you. Unauthorized port scanning may be considered unethical and may even violate laws or regulations. Always obtain proper consent before running the port scanner on any network or system.