COMP 7005

Assignment 3

User Guide

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# Purpose

This program is a TCP SYN-based port scanner that allows users to scan a target IP for open, closed, or filtered ports within a specified range. The scanner sends SYN packets and interprets responses to determine port status, providing insights into network security and service availability.

# Obtaining

git clone <https://github.com/Aditya3650/COMP7005-Assignment3.git>  
(This is only the source code on this repo and the word docs. For correct submission directory and all the other docs, refer to the Learning Hub submission)

# Building

Only need python 3.10 or later along with scapy library.

# Running

To run the port scanner, use a Linux command line with root privileges (sudo) for packet sending. Both the scanner and target should ideally be on the same network for accurate results.

# Command Line Arguments

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| Argument | Purpose |
| target\_ip | Specifies the IP address of the target to scan |
| start\_port | |  | | --- | | Specifies the starting port number for the scan (default: 1) |  |  | | --- | |  | |
| end\_port | |  | | --- | | Specifies the ending port number for the scan (default: 65535) |  |  | | --- | |  | |
| delay | Specifies the delay between each scan in milliseconds (default: 0) |

# Examples

To run the program:  
