

Project Evaluation Report

Version 1.0

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TauNet v1

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The Project

The project this term was to create a secure network of TauNet nodes that can communicate via text messages with each other.

Files Submitted

- TauNet.py
- protocol.py
- server.py
- client.py
- addresses.txt
- ReadMe.md

Documents Submitted

- TauNet Software Requirements Solicitation (SRS.pdf)
- TauNet Software Test Plan (STP.pdf)
- TauNet Software Design Document (SPD.pdf)
- TauNet Project Evaluation Report (PER.pdf)

Project Overview:

This project involved buying a raspberryPi, installing a linux operating system on it, and creating a software called TauNet to run on it. I didn't have a whole lot of difficulty completing the assignment.

Challenges:

This project was fairly straightforward. One of the challenges I ran into was actually waiting for the protocol to be complete. Another challenge I ran into was when I tried to create a client and server in the same python program. My server had to run concurrently with the client and main menu of my program, so that I can send and receive messages at the same time. My original version of the program improperly used threads, so that one thread was running at a time. This caused my server to run and didn't allow the rest of my program to execute. I finally figured out how to run a thread properly so that they can run concurrently.

Accomplishments:

To accomplish this project I had to learn about sockets, networking, tcp/ip, ciphers, testing, software solicitation, design specification, and project management. It was very enjoyable and I liked the scope of the class. I felt the learning by doing method was great, and also appreciated the looser approach to things. I believe it allowed me to take time to actually learn everything instead of being in a constant state of stress trying to accomplish things by the deadline.

Future Plans:

For my TauNet project in the future I would like to add a NCurses UI, as well as change some of the menus to be more intuitive. I would also like to add a log of who is online and who is offline so that the user doesn't have to wonder.

Final Thoughts:

I would highly recommend taking this class with Bart to all of my friends, it was well worth it. His teaching style, the learning style, the term project strategy, and the structure of the class was fantastic.