Owen Burek

CMPT 220L-200

Professor Rivas

April 6, 2017

Project Milestone

Abstract

This project deals with creating a port scanner that will check on the status of all ports on a system, given the IP address.

Introduction

I wan to create a port scanner in order to better understand the networking tools within Java, and programming techniques using networking libraries as a whole. In addition, I want to learn how to use threading in order to more efficiently implement code in times where I may be performing a time consuming task.

Detailed System Description

The system initializes a unique object of type Comp for each time it wants to scan a system. This object, which will contain both preliminary and conclusive data on the system being scanned such as IP address, and port states (arranged in an array) will be the mechanism by which the user can create a scanning instance. Furthermore, Socket will be a subclass of the Thread class, which is a built-in library that will help the program run more efficiently.

User Manual

Users can input any private or public IP address to scan for open and closed ports in that system. Exploiting a system using this is not proper use, and thus constitutes a misuse of the software.

Conclusion

This project will, by using the Socket and Thread classes, allow for efficient (ie. timely) scanning of a system. The Comp class will store all relevant information regarding the scan, including the status of all ports on the system, as well as how long the scan took to complete. By proving empirical evidence, I could try to optimize this process more efficiently, so that it can be applied to a much larger scale.

UML Diagrams

(Thread from java.lang.Thread and Socket from java.net.Socket)