

Home Network Security Analyzer

Matthew Kavanagh - C00250995

Introduction

The Home Network Security Analyzer is a tool to find devices and determine their security on Home Networks. The application is provided through a web interface. It is implemented in Python and uses Nmap, Flask, NIST National Vulnerability Database API.



Flask

Nmap

The functionality to discover hosts on a network and scan them is implemented with a Python library that uses Nmap. This provides easy detection of devices and allows for the detection of running software.



NMAP

Flask

The Home Network Security Analyzer is intended for easy use, as such it implements a web app in Flask. This provides the application in a simple interface that the end user will most likely be familiar

NVD API

The NIST National Vulnerability Database offers an API to search for vulnerabilities. The Home Network Security Analyzer uses a python library to access the NVD API and search for vulnerabilities associated with a device and its running operating system, services, software, etc.

