**\Test Plan**

**Project: Evil Twin wifi router**

**Introduction**

* **Overview**
  + **Set up a hotspot on my laptop, run the Python script, and have another device connect to the router to see if it can log all of the packets and see if their payload was encrypted.**
* **Goals**
  + **Collect and store all of the packets**
  + **See if the packets are encrypted**
  + **If not, store the number of packets that were not encrypted**
* **Limitations**
  + **Not committing a felony by storing data that I can not**

**Project Plan**

* [**https://github.com/TWHamiltonJR/CSU-Senior-Project/blob/master/docs/proposal.md**](https://github.com/TWHamiltonJR/CSU-Senior-Project/blob/master/docs/proposal.md)

**Test Items**

* **Python** 
  + **Version: 3.13**
* **Kali**
  + **Version: Kali 2024.3**
* **Airgeddon**
  + **Version: 11.40**
* **Wireshark**
  + **Version: 4.4.5**

**Features to be Tested**

* **Can the router be connected to**
  + **Requirement 1**
* **Can it log data and then delete it**
  + **Requirements 3, 4, 5, 6, 7**

**Approach**

* **The approach will be a mock-up of doing it altogether. It will only use one device that is personal and will be controlled. This test is mainly for seeing if everything works, can be implemented, and runs correctly.**

**Item Pass/Fail Criteria**

* **A pass is if it works correctly and does not throw errors.**
* **A fail is it not compiling, not getting correct data, or not storing it correctly**

**Test Deliverables**

* **Test Plan**
* **Test Cases**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Scenario | Test Case | Test Step | Test Data | Expected Result |
| Check Program Functionality | Check program health when running while trying to record packets from another device | -launch VMs  -launch airgeddon  -connect device to wifi  -attempt to browse internet  -check database for packet data | Launching Chrome and search for a Wikipedia article | The packets with the data being documented and logged |

* **Test Scripts**
  + **https://github.com/TWHamiltonJR/CSU-Senior-Project/blob/master/code.pyDefect/Enhancement Logs**
* **Defect/Enhancement Logs**
  + **https://github.com/TWHamiltonJR/CSU-Senior-Project/blob/master/Defect\_and\_Enhancement\_Logs.txt**
* **Test Reports**
  + **https://github.com/TWHamiltonJR/CSU-Senior-Project/blob/master/Test\_Report.txt**

**Test Environment**

* **Environment**
  + **USB wifi adapter and the virtual machines**
  + **Desktop**
    - **Windows 10**
      * **Version: 22H2**

**Schedule**

* **Week 6 – 7**
  + **Testing on the private network**
* **Week 10 – 11**
  + **Testing on public network**

**Risks**

* **If done incorrectly, it could be illegal**