Final Project Proposal – Milestone 1

Project Title: Flipper Zero Attacks

Team Members:

- Ethan Kanyid

Chosen Category: Simulation

Suggested Subcategory: Security Attack Simulation

1. Introduction & Motivation
(Brief background and motivation for the chosen project. Why this topic is important/relevant.)

This project is intended to demonstrate the attacks that can be implemented with a Flipper Zero. The Flipper Zero is a cyber security multitool and can implement several wireless attacks. This topic is important to us because we are interested in demonstrating how many signals and waves are all around us, and how with the right device, these can be hijacked for illegitimate purposes.

2. Project Scope & Objectives
Define what your project will and will not cover
List specific objectives as bullet points.

What our project will cover:

- Introducing the Flipper Zero
- Customizing the Flipper Zero with a third-party firmware and installing applications
    - Bluetooth attacks
    - WiFi attacks
    - RFID/NFC
    - Infared
    - Sub GHz

What our project is not directed at:

- Development of apps on the Flipper Zero
- Intentionally malicious activity

3. Approach / Initial Plan

(Describe your methodology, tools, datasets, frameworks, or platforms you plan to use.)

First, we plan to break down the roles for the different parts of the project and assign them to team members. We will need a Flipper Zero device. We will need firmware that enables our attacks. We will need a WiFi module to attach to the device for different attacks. Lastly, devices will be needed to be test against.

4. Expected Outcomes

(What deliverables do you expect? How will success be measured?)

We expect to produce several attacks, documentation of the attacks, and efficacy of the attacks. We expect to be able to show differences between the OEM firmware and custom firmware. It is considered successful when attacks succeed but also when we can show a veritable way to deflect attacks.

5. Timeline

(Provide a short week-by-week plan leading to Milestones 2 & 3.)

Milestone 2: October 2nd (4 weeks)

1. List the steps we need to take to complete the project and divide up the roles.

2. Research and obtain a flipper zero

3. With OEM firmware, test the basics of the flipper zero

4. Research open-source firmwares and document best route

Milestone 3: December 2nd (9 weeks)

1. Install custom firmware

2 – 4. Implement different attacks with the different firmware

5. Refine documentation

6. Begin reports

7. Finalize reports

8. Practice presentation

9. Present

6. References

None yet