CS 313 Final Project Documentation

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# Objectives

* Create a man-in-the-middle attack using ARP poisoning (also known as ARP spoofing) on a Raspberry Pi.
* Explore other operating systems/languages to use instead of Linux.

# The Path We Took

We used a Raspberry Pi running Ubuntu Mate to perform a man-in-the-middle attack on McKenna’s house’s network. Since we were essentially hacking a network, we decided that McKenna would do the actual practical portion at her house.

# What We Learned

* ARP poisoning is ridiculously easy using Linux – all the commands are there; you just have to know how to use them.
* Relating to the previous point, Linux is the ideal choice for a host OS – again, all the commands are there; no extra code or setup is required.
* When we were deciding which OS to use as a host, we looked at C++ on Windows. We then decided to use Linux since the C++ samples we found online looked ridiculously complicated.
* You can ARP spoof individual devices; you don’t have to spoof the whole network at once.

# Where the Project Could Go Next

* What we have learned could be used to help develop techniques to prevent ARP spoofing.
* Or, on the opposite end of the moral spectrum, it could be used to do a larger scale attack.