1.7 Final project: Capture the flag

Capture the flag challenge:

You will hide an encrypted message in each of your pi400 computers connected wirelessly to the router you setup with a hidden wifi network.

The challenge is for your hacker friends to do the following:

1. find your wifi network (it may be hidden)
2. identify your wifi router by MAC address
3. access the "home" wifi network, using social engineering clues
4. scan your internal "home" network to find both of your pi400 units
5. get into each pi400 unit
6. find the hidden encrypted file
7. decode the file
8. leave an encrypted message in the same folder

Points will be given for each successful step!

Your "home" setup:

1. reset (erase) your router
2. setup your router with a hidden wifi network, and a password that the hackers can find about your team
3. connect each of your pi400 to the wifi network you have created and the wired connection to the router
4. on each of your pi400s, create a hidden folder
5. inside the folder, create a "hashed" SHA256 message using this:

https://docsallover.com/tools/sha256-encrypt-decrypt/

1. example: the word "secret" hashes into `2bb80d537b1da3e38bd30361aa855686bde0eacd7162fef6a25fe97bf527a25b` which is how your passwords are actually stored (test this to confirm)

Hacker tools:

Wifi explorer

IPnetmonitor

nmap (terminal command)

password hash encoder decoder

Migrated from Apple Server Wiki. Original page ID: H8A544

Revision #2
Created 2026-09-29 15:59:40 UTC by Admin
Updated 2026-09-29 16:22:27 UTC by Admin