CSE 484: Computer Security and Privacy

Physical Security

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Announcements

- Final project Part B due today
 - No late days
- Section is actually OH this week!
 - Extended office hours!
- Next week
 - OH Tuesday, Monday (Monday will start late, see Ed)
 - No OH Wednesday
 - Remember to use the question template on Ed

Physical Security

- Relate physical security to computer security
 - Locks, safes, etc.
- Why?
 - More similar than you might think!
 - Lots to learn:
 - Computer security issues are often abstract; hard to relate to
 - But physical security issues are often easier to understand
 - Hypothesis:
 - Thinking about the "physical world" in new (security) ways will help you further develop the "security mindset"
 - You can then apply this mindset to computer systems, ...

Remember This Example?



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Physical Security: Adversarial Goals

- Confidentiality: adversary should not be able to enter and steal information (e.g., see spy movies, or think about bank computer screens facing windows)
- Integrity: adversary should not be able to enter property and remove items, damage items, or place new items (e.g., installing spy device)
- Availability: adversary should no be able to deny legitimate entry (denial of service) into an environment (e.g., put superglue in a lock, or gum, or break a wrong key in lock)

Physical Security: Approaches to Security

• Prevention

- Stop an attack
- E.g., door locks and fences and bars on windows in physical world environment
- Detection
 - Detect an ongoing or past attack
 - E.g., video camera in physical world environment
- Response
 - Respond to attacks
 - E.g., home alarm system that calls police when entry is detected

Physical Security is Part of Digital Security

- Securing a system involves a whole-system view
 - Cryptography
 - Implementation
 - People
 - Physical security
 - Everything in between
- This is because "security is only as strong as the weakest link," and security can fail in many places
 - No reason to attack the strongest part of a system if you can walk right around it.

Course Evaluation

- Please fill out the course evaluation!
 - https://uw.iasystem.org/survey/290594
 - Or check email



• A good activity for when you are done lockpicking or while you are waiting for locks ③