

CSCI 476: Computer Security

Fall 2022

Lab 1: Threat Modeling

Due: Friday September 16th @ 11:59 PM

Objective: This assignment is meant to be a fun, low stakes way to get you thinking about threat modeling. For this assignment we'd like you to present a threat model and reflect on your approach. We will discuss this assignment in class on Tuesday, September 13

Consider The following scenario:

You are studying abroad in Germany during the Winter. You are studying at a busy café on your laptop using the café's free public Wi-Fi and you have brought along your backpack that contains some personal belongings. Because you have slight amnesia, you cannot remember the passcode to your laptop, so you have written your username and password on a sticky note next to your laptop. At some point during the afternoon, you step away to go to the bathroom for 2 minutes, leaving your laptop and backpack unattended....

1. Develop a threat model for the scenario above. You can present your threat model in a textual or graphical form (or a combination of both). This can be something including but not limited to a brainstorming list, an attack tree, or a mind map.

In your threat model/brainstorming process, you should answer the following questions

- i. What are the assets?
- ii. What can go wrong?
- iii. What can be done to prevent things from going wrong?
- iv. If something does go wrong, what can be done in response?

(The answers to those questions should be a list. Not just one answer 😊)

We don't expect that you would use a formal approach to threat modeling, such as STRIDE, but we do want to understand your approach. If you want to go beyond simple brainstorming, consider reading up a bit more on other resources and strategies such as [Attack Trees](#) or attack libraries such as [CAPEC](#) or [OWASP's Top 10](#), or [OWASP Threat Modeling Cheat Sheet](#).

2. Please describe your approach. What brainstorming method did you use? What other questions did you ask yourself? What kind of scenarios did you imagine?

Submission

Submit your assignment as a single PDF to the appropriate D2L drobox. Handwritten submissions are acceptable (but must be readable).