

**Threat Landscape**

**Introduction and/or Background**

Alyx wants to help her friend, Barb, get more acquainted with security issues. Knowing is half the battle! Alyx wants to do a little research on system vulnerabilities to educate herself and others.

**Objectives**

In this project/lab the student will:

* Research common computer threats

**Equipment/Supplies Needed**

* Internet Connection

**Procedure**

1. Using a search engine, research and answer the assignment questions.

**Assignment**

1. Ransomware
   1. How does ransomware affect the files on your computer?
   2. What is the best way to resolve a ransomware threat?
   3. Why is ransomware normally paid in bitcoin?
   4. What is the value (in US dollars) of bitcoin as of today?
2. Social Engineering
   1. What is social engineering in context to information security?
   2. What is the best way to combat social engineering?
3. Authentication
   1. What is two-factor authentication?
   2. Give an example of two-factor authentication.
   3. Why is two-factor authentication more secure?
4. Data Destruction
   1. How should hard drives be destroyed?
   2. How should old mobile phones be disposed of?
   3. How should papers holding PII be destroyed?
5. Infections
   1. What is a worm?
   2. How is a worm different from a virus?
   3. Why are rootkits difficult to detect?
   4. What is a Trojan Horse?
6. Virus Recovery
   1. How can a user ensure their virus scanner detects viruses on their system?
   2. What steps must be taken after a virus has been detected on a system?

**Rubric**

Checklist/Single Point Mastery

| Concerns  Working Towards Proficiency | Criteria  Standards for This Competency | Accomplished  Evidence of Mastering Competency |
| --- | --- | --- |
|  | Criteria #1: Student correctly answered assignment question #1  (20 points) |  |
|  | Criteria #2: Student correctly answered assignment question #2  (10 points) |  |
|  | Criteria #3: Student correctly answered assignment question #3  (20 points) |  |
|  | Criteria #4: Student correctly answered assignment question #4  (20 points) |  |
|  | Criteria #5: Student correctly answered assignment question #5  (10 points) |  |
|  | Criteria #6: Student correctly answered assignment question #6  (20 points) |  |