**7 Layers of Cyber Security & Vulnerabilities**

8 Module

# **Module Objectives:**

# Familiarize yourself with the 7 Layers of Cyber Security

# Be introduced the risk of malware used by hackers

1. Understand how vulnerabilities can compromise a computer system
2. Learn about penetration testing and its step
3. Start running a pen test by performing passive reconnaissance

# **Module Lesson**

| **Component** | **Title** | **Purpose** |
| --- | --- | --- |
| 1. [Slideshow](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | 7 Layers of Cyber Security & Web Vulnerabilities | Learn how hackers can intrude on computer users |
| (10-20 minutes) | Extra time to complete Module 7 Activity 2 |  |
| 2. [Activity 1](https://www.cyio.iastate.edu/cyber-defense/)  (30 minutes) | Passive Reconnaissance | The hands of a hacker! |

Total Duration: 55 minutes

Note: All activities designed for this module are hands-on. The speed at which the activities can be completed will vary. Each module should approximately take one club or class time to complete.

# **Additional Resources:**

* Malware
  + [Lesson 15: Varieties of Malware](https://youtu.be/pFETP9CAJj4)
  + [Lesson 16: Functions of Malware](https://youtu.be/dkFlFLLwJ3s)
  + [Lesson 17: Sources of Malware](https://youtu.be/AxfEJnQaBAY)
  + [Lesson 18: Layers of Defense Against Malware](https://youtu.be/ORJ4atMk7Z4)
* Google!
* [VMware Glossary](https://www.vmware.com/topics/glossary/)