**Web Vulnerabilities**

9 Module

# **Module Objectives:**

# Familiarize yourself with Web Vulnerabilities

# Know what OWASP is

1. Understand how the top ten web vulnerabilities are determined
2. Learn about each of the ten most common web vulnerabilities
3. Discover a little more about each vulnerability
4. Run through the exercises involving OWASP

# **Module Lesson**

| **Component** | **Title** | **Purpose** |
| --- | --- | --- |
| 1. [Slideshow](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | Web Vulnerabilities | Finding the top ten most common vulnerabilities in web applications |
| 2. [Activity 1](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | OWASP Top Ten Part 1 | Learn a little bit more about 1-5 of the top ten vulnerabilities and put them to use |
| 3. [Activity 2](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | OWASP Top Ten Part 2 | Learn a little bit more about 6-10 of the top ten vulnerabilities and put them to use |

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:**

* OWASP Top Ten
  + [OWASP Top 10: Injection Attacks](https://youtu.be/rWHvp7rUka8)
  + [OWASP Top 10: Broken Authentication](https://youtu.be/mruO75ONWy8)
  + [OWASP Top 10: XML External Entities](https://youtu.be/g2ey7ry8_CQ)
  + [OWASP Top 10: Broken Access Control](https://youtu.be/P38at6Tp8Ms)
  + [OWASP Top 10: Security Misconfiguration](https://youtu.be/JuGSUMtKTPU)
  + [OWASP Top 10: Cross-Site Scripting (XSS)](https://youtu.be/IuzU4y-UjLw)
  + [OWASP Top 10: Insecure Deserialization](https://youtu.be/nkTBwbnfesQ)
  + [OWASP Top Ten: Using Components With Known Vulnerabilities](https://youtu.be/IGsNYVDKRV0)
  + [OWASP Top Ten: Insufficient Logging and Monitoring](https://youtu.be/IFF3tkUOF5E)
* [OWASP Top 10](https://www.hacksplaining.com/owasp)
* Google!
* [VMware Glossary](https://www.vmware.com/topics/glossary/)