



JAIN
DEEMED-TO-BE UNIVERSITY

SCHOOL OF
COMPUTER
SCIENCE AND IT

Department of
Bachelor of Computer Applications

Information Security & Mobile Applications – Section <A>

Ethical Hacking Fundamentals
Activity #01

LinkedIn Learning Certification Course
[Part-V: Hacking Web Servers & Web Applications]

Subject Code: 19BCA4C02
Class: IInd Year IInd Semester

Submitted On:

23-12-2022

By:

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Signature

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Dr. Ajay Shriram

Khushwaha

Signature



Certificate

This is to certify that Mr./Ms. Suman Garai with USN 20BCAR0246 has satisfactorily completed the Activity I Part 1 LinkedIn Course Name: Hacking Web Servers & Web Applications Hours: 1 hour 26 minutes prescribed by Department of BCA, School of Computer Science & IT, Jain (Deemed-to-be-University), Bengaluru for the partial fulfilment of fifth semester BCA Degree Course in the year 2021-2022, and has secured _____ out of 10.

23-12-2022

Date of Submission

Signature of Student

A handwritten signature in blue ink, appearing to read 'S. K. Sharma', is written over a horizontal line.

Signature of Faculty
In-Charge



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Evaluation Criteria

Sr. No.	Criteria / Parameters	Total Marks	Marks Obtained
1	On-time submission Certification	05	
2	Certification of Completion	05	
3	Report (with Assessment Screenshots test attempted)	05	
4	Conclusion [Minimum one page without any kind of plagiarism]	10	
	TOTAL	25	
	CONVERT	10	

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Introduction to the Course

Websites and web applications are—by their very nature—accessible remotely, which puts them at high risk of cyberattacks. Knowing how to detect and prevent web attacks is a critical skill for developers and information security professionals alike. We started by explaining web protocols and the basics of web design. And looked at the OWASP top 10 web vulnerabilities. We saw demonstration some of the popular tools available to do web testing, including Burp Suite, ZAP and WebScarab. And saw how to use these to scan websites and run as web proxies. We also look at some websites, where we can practice your web testing. After finishing this course, we have a great understanding of how to test for website weaknesses.

Learning objectives

- Key elements of web-based applications
- Working with cookies
- Web testing with WebGoat and Burp Suite
- Running basic tests, such as fingerprinting web servers
- Advanced testing, including testing for SQL injections

Screenshots

Applications

Search for skills, subjects or software

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You answered 7 of 7 questions correctly. [Continue watching](#) [Retake quiz](#)

Question 1 of 7
What is the OWTF?

- ☐ OWASP Top Flaws
- ☒ OWASP Web Testing Framework **Correct**
- ☐ Open Web Testing Framework
- ☐ Online Web Test Form

Question 2 of 7
What HTML verb indicates a hyperlink?

- ☐ link
- ☐ content
- ☒ href **Correct**
- ☐ h1

Question 3 of 7
A cookie can be used to maintain session state.

- ☒ TRUE **Correct**
- ☐ FALSE

Question 4 of 7
QUIC is a form of TCP connection.

- ☐ TRUE
- ☒ FALSE **Correct**

Question 5 of 7
HTML5 introduces a sophisticated state management web server protocol. What is it?

- ☐ HTTP
- ☒ WebSockets **Correct**
- ☐ REST
- ☒ QUIC **Incorrect**

Question 6 of 7
What HTTP method causes the proxy to connect to another host?

- ☒ PROXY **Incorrect**
- ☒ RELAY **Incorrect**
- ☐ POST
- ☒ CONNECT **Correct**

Question 7 of 7
A reverse proxy allows incoming traffic to be monitored for malicious content such as SQL injection.

- ☒ TRUE **Correct**
- ☐ FALSE

Figure: Section 01 – Introduction to Web Servers

Applications

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You answered 3 of 5 questions correctly. [Continue watching](#) [Retake quiz](#)

Question 1 of 5
Webscarab is written in what language?

- ☒ C **Incorrect**
- ☒ Python **Incorrect**
- ☐ Ruby
- ☒ Java **Correct**

Question 2 of 5
ZAP cannot be used to change message contents.

- ☐ TRUE
- ☒ FALSE **Correct**

Question 3 of 5
Kali comes with ZAP pre-installed.

- ☐ TRUE
- ☒ FALSE **Incorrect**

Review this video: Scanning with ZAP 2m 47s

Question 4 of 5
What BurpSuite main screen tab is used to switch intercept on or off?

- ☒ Site **Incorrect**
- ☒ Preferences **Incorrect**
- ☐ Options
- ☐ Proxy

Review this video: Introducing Burp Suite 4m 7s

Question 5 of 5
What is Webgoat?

- ☐ an online testing website
- ☒ a web testing tool **Correct**
- ☒ a web testing tool **Incorrect**
- ☐ a web application firewall

Figure: Section 02– Getting Ready to Test

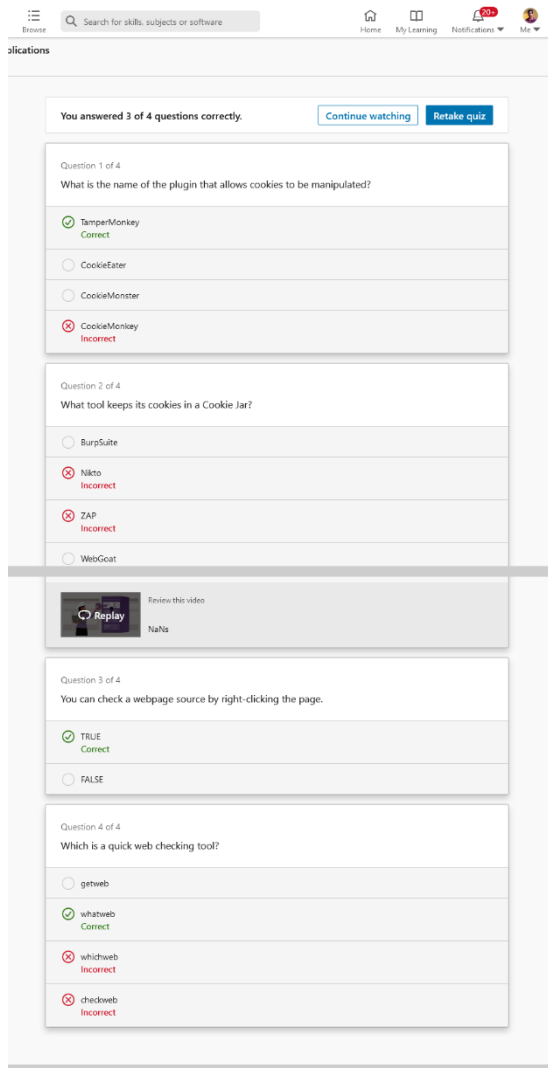


Figure: Section 03 – Running Basic Application Tests

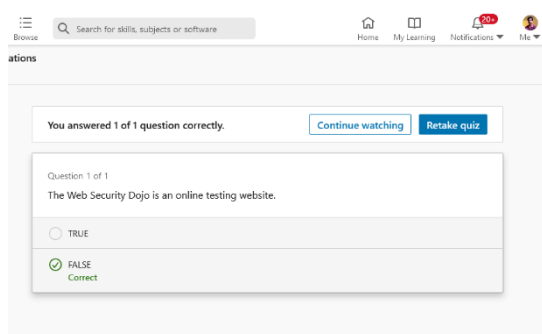


Figure: Section 05 – Practicing Your Skills

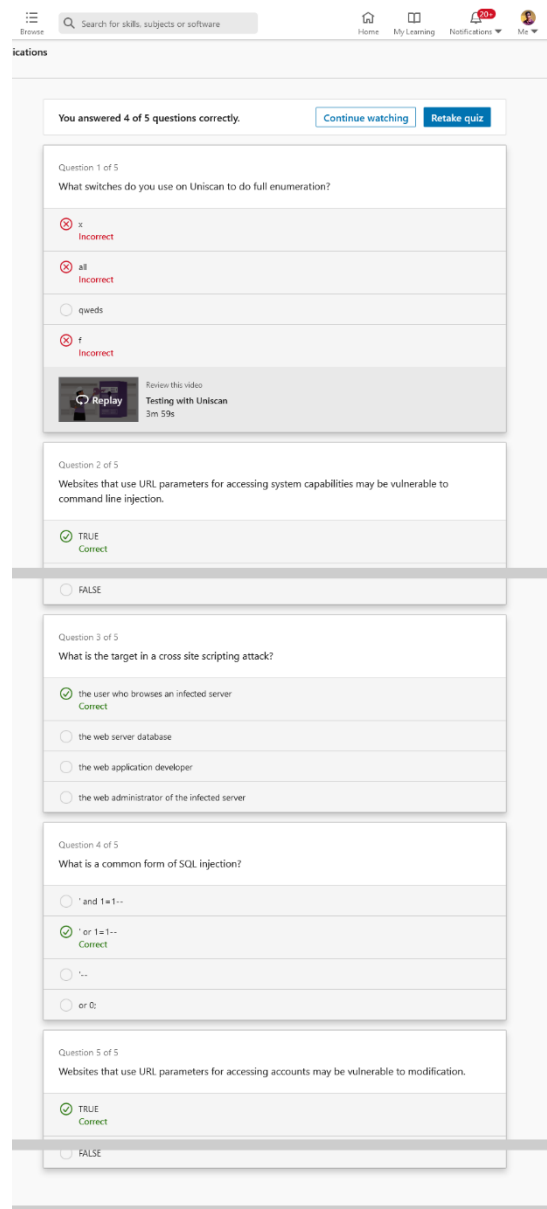


Figure: Section 04- Advanced Web Application Tests

Conclusion

In this course, we have learnt the concepts of web applications and covered topics such as - Core defence mechanisms, Web application technologies, Bypassing client-side controls, Dissecting the HTTPS protocol, Web sockets, cookies, QUIC Protocol, OWSAP, ZAP & Zero Bank, Authentication and authorization, XSS - Cross site scripting, Bypassing blacklists and whitelists, CSRF - Cross site request forgery, Unvalidated redirects, SQL injection, File upload vulnerabilities, Attacking the application server, Web application hacker's toolkit, and Web application hacker's methodology.

Certificate

