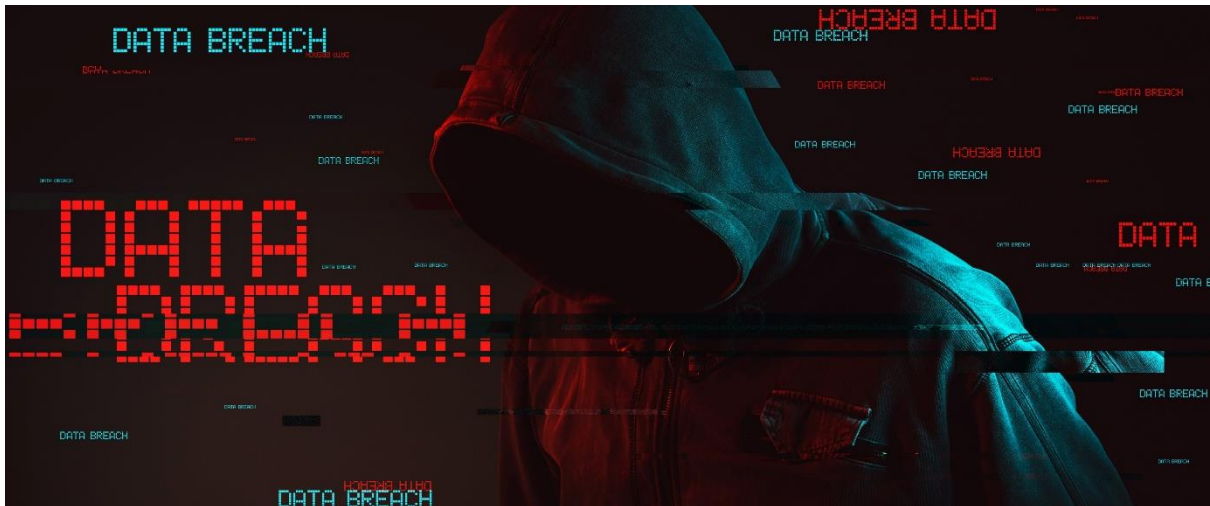


# Vulnerability Assessment Report

Cyber Security Internship – **Task 1**

**Organization:** Future Interns



**Prepared by:** Harshit Shrivastav

**Date:** Feb 1<sup>st</sup>, 2026

# Executive Summary

This report presents a vulnerability assessment conducted on a test website using passive scanning techniques.

The objective of this assessment is to identify common security vulnerabilities and recommend improvements to enhance the website's security posture.

# Scope & Methodology

**Target Website:** *testphp.vulnweb.com*

**Testing Type:** Passive Vulnerability

## Assessment

**Tools Used:** Nmap, OWASP ZAP

**Testing Approach:** Observation and analysis only.

No active exploitation or attacks were performed.

# Vulnerability Findings

## Finding 1

### Vulnerability Name:

Open HTTP Service with Version Disclosure

**Risk Level:** Low

### Description:

An open HTTP service was detected running on port 80. The service is using nginx version 1.19.0, which reveals version information to potential attackers. This information disclosure may assist attackers in targeting known vulnerabilities.

### Technical Details:

- Open Port: 80/tcp
- State: Open
- Service Name: HTTP
- Version: nginx 1.19.0

### Recommendation:

Disable unnecessary service banners and hide server version information to reduce information disclosure.

## **Finding 2**

### **Vulnerability Name:**

Missing Security Headers

**Risk Level:** Medium

### **Description:**

Important security headers are not implemented, which may expose the application to attacks such as clickjacking and content injection.

### **Recommendation:**

Implement security headers such as X-Frame-Options, Content-Security-Policy, and X Content - Type-Options.

## **Finding 3**

### **Vulnerability Name:**

Cookie Without Secure Flag

**Risk Level:** Low

### **Description:**

Cookies are transmitted without secure attributes, increasing the risk of interception over unsecured connections.

### **Recommendation:**

Enable Secure and Http Only flags for all sensitive cookies to improve session security.

# Conclusion

The assessment highlights the importance of basic security configurations.

Addressing these vulnerabilities will improve the overall security of the application.

# Disclaimer

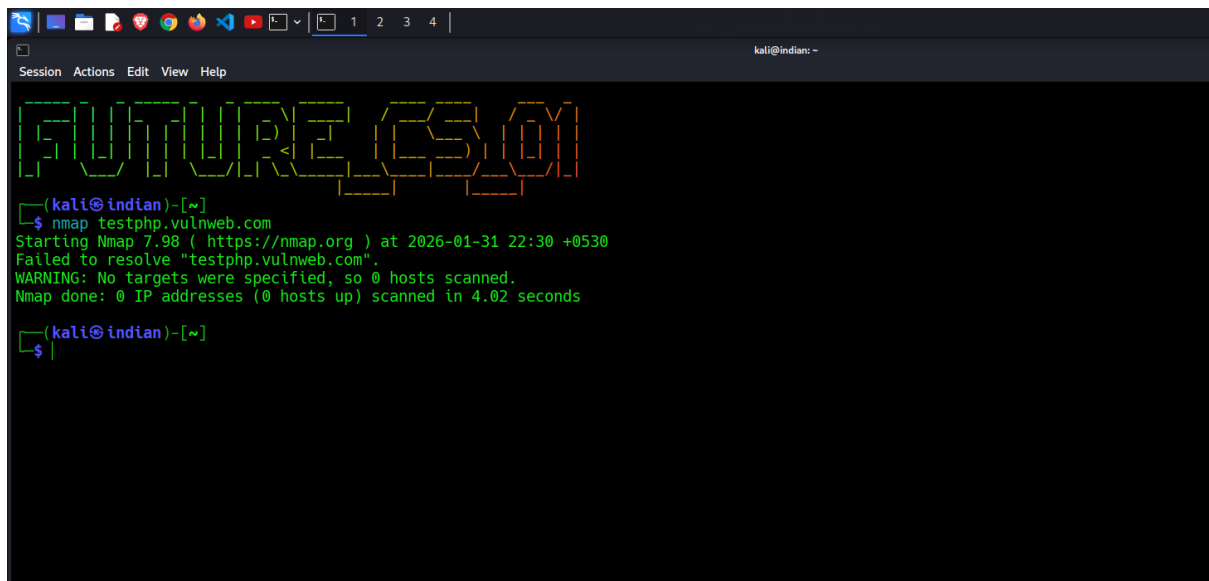
This report is created strictly for educational purposes as part of a Cyber Security internship.

No unauthorized access or exploitation was performed.

# Supporting Evidence

## Screenshot 1:

### Nmap – Basic Scan



```
(kali@indian)-[~]
$ nmap testphp.vulnweb.com
Starting Nmap 7.98 ( https://nmap.org ) at 2026-01-31 22:30 +0530
Failed to resolve "testphp.vulnweb.com".
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 4.02 seconds

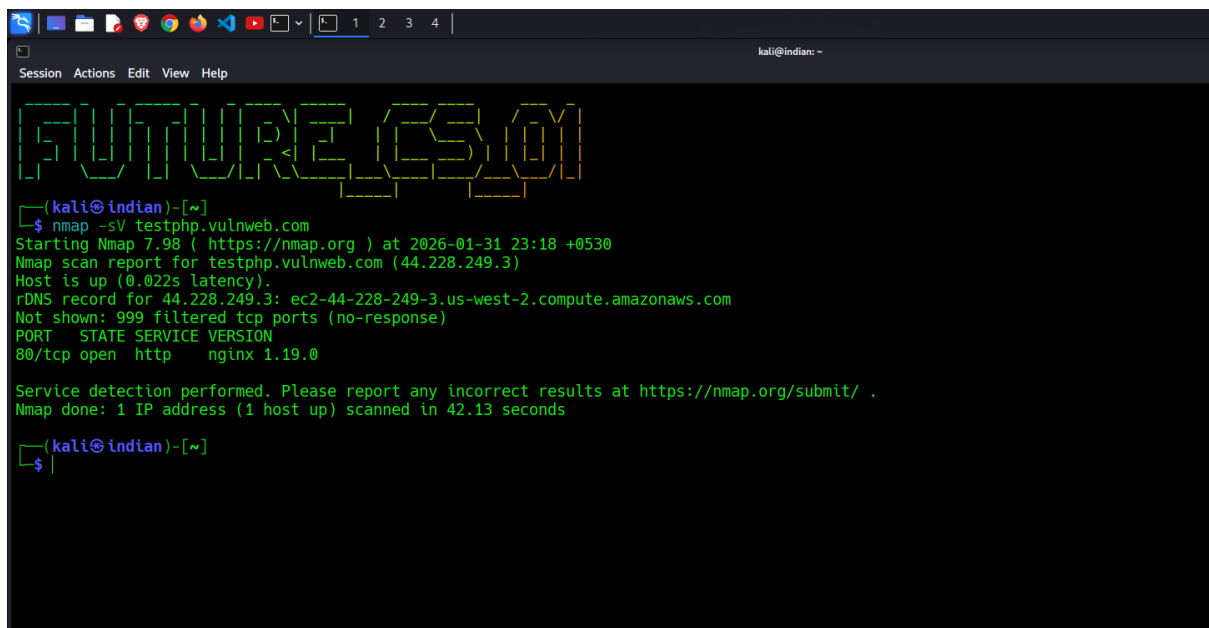
(kali@indian)-[~]
$
```

**Figure 1:** *Nmap basic scan showing open ports on the target website.*



# Screenshot 2:

## Nmap– Service Version Scan



```
(kali@indian)-[~]
└─$ nmap -sV testphp.vulnweb.com
Starting Nmap 7.98 ( https://nmap.org ) at 2026-01-31 23:18 +0530
Nmap scan report for testphp.vulnweb.com (44.228.249.3)
Host is up (0.022s latency).
rDNS record for 44.228.249.3: ec2-44-228-249-3.us-west-2.compute.amazonaws.com
Not shown: 999 filtered tcp ports (no-response)
PORT      STATE SERVICE VERSION
80/tcp    open  http    nginx 1.19.0

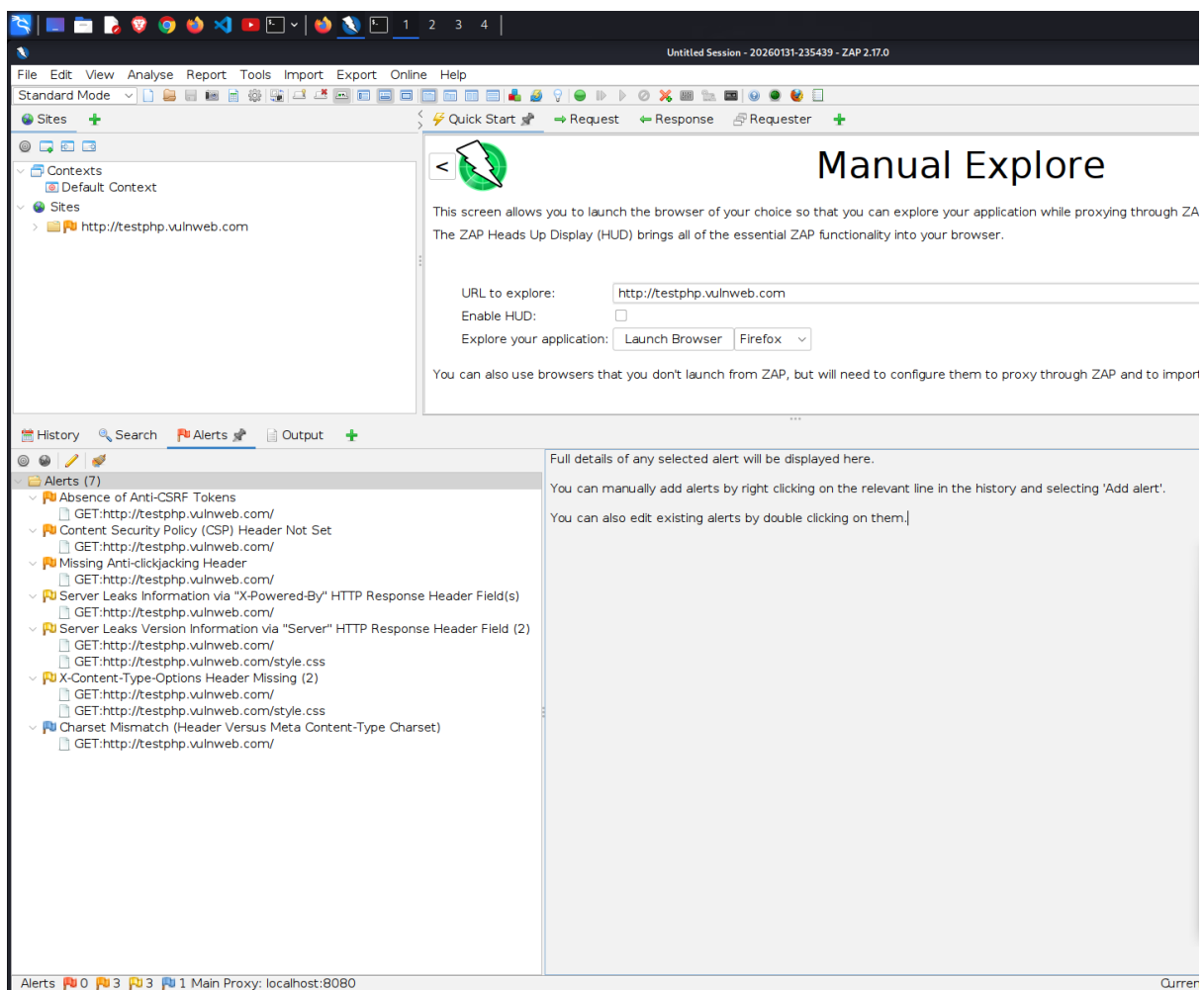
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 42.13 seconds

(kali@indian)-[~]
└─$
```

**Figure 2:** *Nmap service version scan displaying detected services and versions.*

# Screenshot 3:

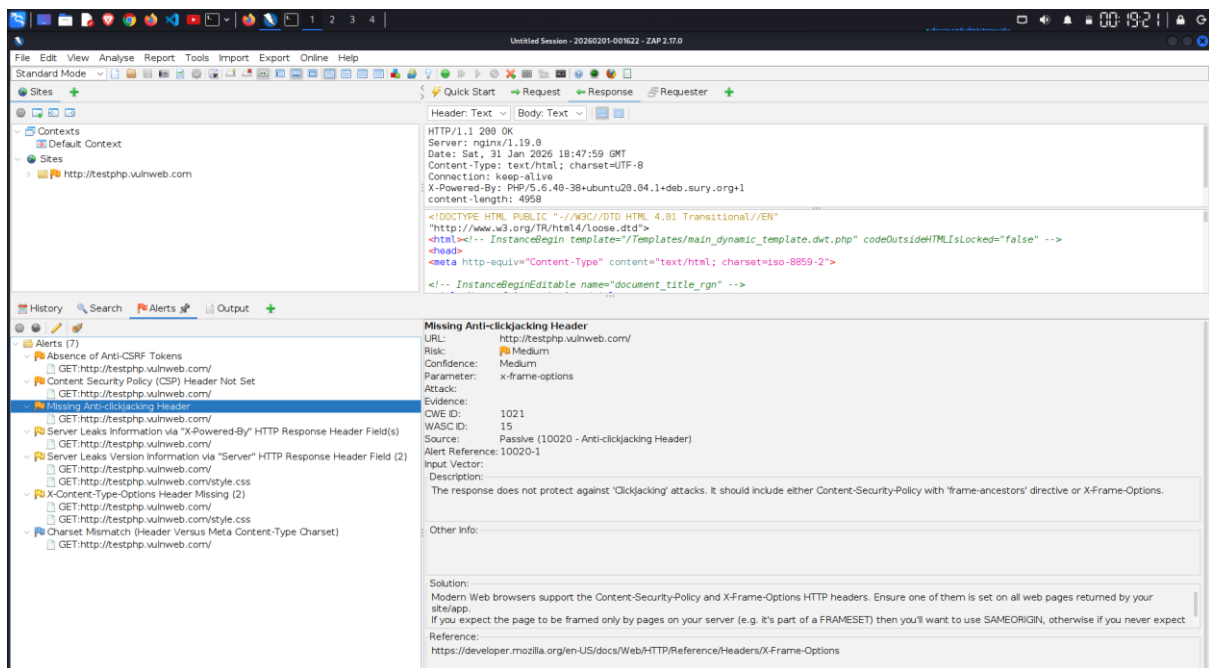
## OWASP ZAP – Alerts Overview



**Figure 3:** *OWASP ZAP passive scan alerts highlighting identified security issues.*

# Screenshot 4:

## OWASP ZAP – Vulnerability Details



**Figure 4:** *Detailed view of a vulnerability detected during OWASP ZAP analysis.*

# Author Details

**Name:** Harshit Shrivastav

**Role:** Cyber Security Intern

**LinkedIn:** <https://www.linkedin.com/in/harshit-shrivastav-14790338b>

**GitHub:** <https://github.com/harshshrii-2000>

## Skills Used:

- Nmap
- OWASP ZAP
- Vulnerability Assessment
- Report Writing