

# **Vulnerability Assessment Report**

## **Future Interns Task 1**

By Aayush Kussial

# INTRODUCTION

This is a task given to me by Future interns to complete which involved doing a vulnerability assessment report on a live public website. The website i had selected to do this report on is <http://testphp.vulnweb.com>. The scope of this assessment had included passive and non intrusive testing only, manual inspection using browser developer tools, automated scanning using the tool OWASP ZAP and no exploitation or active attacks were performed.

Tools used were: OWASP ZAP, Google chrome developer tools and Canva



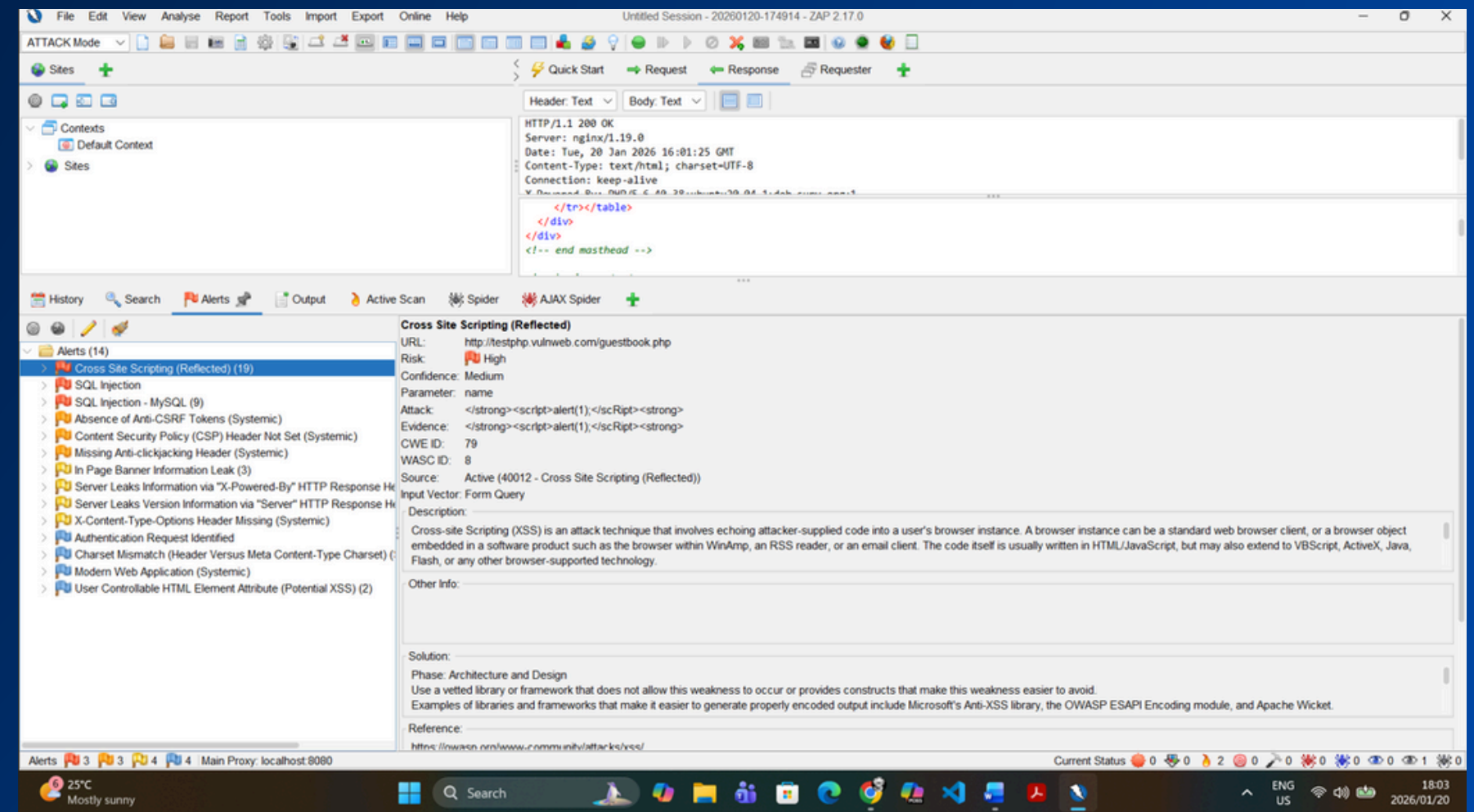
# Scope and Methodology

- Website tested : <http://testphp.vulnweb.com>.
- Passive testing only
- Tools used : OWASP ZAP, Google chrome developer tools, Canva
- No exploitation



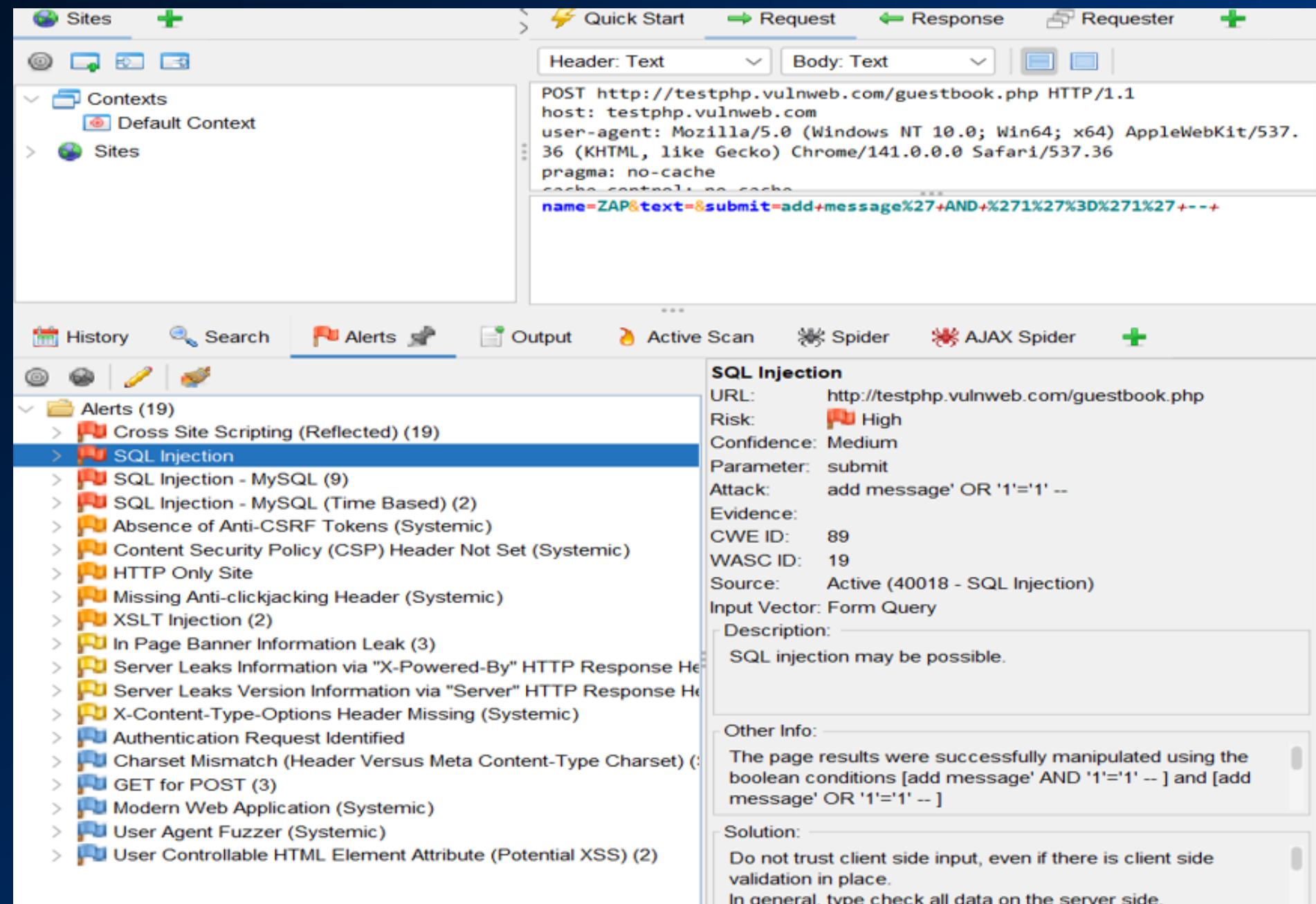
# Vulnerabilities

- Cross site scripting( Risk Level: High):attack technique that involves echoing attacker-supplied code into a user's browser instance



# SQL Injection (Risk Level:High):

A cyber attack where malicious SQL code is inserted into database queries.



# Absence of anti CSRF token (Risk Level: Medium) :

No anti CSRF tokens were found in HTML submission form.

The screenshot displays the Burp Suite interface. The top pane shows the HTTP response details for a GET request to `http://testphp.vulnweb.com`. The response status is 200 OK, and the content type is `text/html; charset=UTF-8`. The body of the response contains HTML code, including a search form: `<div id="search"><form action="search.php?test=query" method="post">`.

The bottom pane shows the Alerts tab with a list of 19 alerts. The alert "Absence of Anti-CSRF Tokens (Systemic)" is selected. The details for this alert are as follows:

- URL:** `http://testphp.vulnweb.com`
- Risk:** Medium
- Confidence:** Low
- Parameter:**
- Attack:**
- Evidence:** `<form action="search.php?test=query" method="post">`
- CWE ID:** 352
- WASC ID:** 9
- Source:** Passive (10202 - Absence of Anti-CSRF Tokens)
- Input Vector:**
- Description:** No Anti-CSRF tokens were found in a HTML submission form. A cross-site request forgery is an attack that involves forcing
- Other Info:** No known Anti-CSRF token [anticsrf, CSRFToken, \_\_RequestVerificationToken, csrfmiddlewaretoken, authenticity\_token, OWASP\_CSRFTOKEN, anoncsrf,
- Solution:**



# Remediation Recommendations

- Cross site scripting – encode output before rendering in HTML, validate all user input on server side, implement a strong content security policy.
- SQL Injection – use parameterized queries, apply strict server side input validations, use least privilege database accounts.
- Absence of anti CSRF token – Implement unique CSRF tokens in all state changing forms, validate tokens on the server.

# Conclusion

The vulnerability assessment identified multiple security weaknesses including high risk issues such as cross site scripting and SQL injection. These vulnerabilities could potentially be exploited if not resolved. Implementing the recommended remediation measures would improve the security of the application.





**THANK  
YOU**