Security Assessment Report

Target: trade.ripio.com

Assessment Date: October 03, 2025

Executive Summary

This security assessment was conducted on trade.ripio.com using comprehensive automated and manual testing methodologies. The assessment identified 3 security findings ranging from informational to critical severity. Immediate remediation is required for high-severity vulnerabilities to prevent potential security breaches and data compromise. This report follows industry-standard vulnerability disclosure practices and BugCrowd reporting guidelines.

Assessment Scope & Methodology

Scope: Security assessment of trade.ripio.com including web application security testing and infrastructure analysis. **Methodology:** This assessment employed industry-standard security testing methodologies including: • OWASP Top 10 vulnerability assessment • Automated vulnerability scanning and detection • Manual verification and exploitation of identified vulnerabilities • Analysis of security configurations and HTTP headers • Assessment of authentication and authorization mechanisms • Evaluation of input validation and output encoding mechanisms All testing was conducted in accordance with responsible disclosure principles and ethical hacking guidelines. No production data was accessed or compromised during this assessment.

Vulnerability Summary

Severity Level	Count	Risk Assessment
Critical/High	1	Immediate action required
Medium	1	Remediate within 30 days
Low/Informational	1	Address during next maintenance cycle
Total Findings	**3**	

Detailed Security Findings

Finding #1: SQL Injection in Authentication Module [HIGH]

Severity:	HIGH
CVSS Score:	9.3 (Critical)
CWE Classification:	CWE-89
Affected Asset:	trade.ripio.com

Vulnerability Overview
SQL Injection in authentication component in trade.ripio.com allows attacker to bypass authentication and access sensitive data via malicious SQL payloads in login parameters.

Business Impact Assessment
This vulnerability could lead to complete database compromise, unauthorized access to user accounts, data breach exposing PII, reputational damage, and potential regulatory compliance violations.

Steps to Reproduce
1. Navigate to trade.ripio.com/login
2. Intercept the login request using Burp Suite or similar proxy
3. Modify the username parameter to: admin' OR '1'='1' --
4. Submit the request and observe response
5. Verify successful authentication bypass

Proof of Concept
HTTP request shows successful login bypass with SQL injection payload. Response headers indicate successful authentication without valid credentials. Database queries reveal direct interpolation of user input without parameterization.

Remediation Recommendations
• Implement parameterized queries/prepared statements for all database interactions • Validate and sanitize all user inputs using whitelist approach • Apply principle of least privilege to database connections • Conduct regular security code reviews and penetration testing • Implement Web Application Firewall (WAF) as additional protection layer

Finding #2: Reflected Cross-Site Scripting (XSS) [MEDIUM]

Severity:	MEDIUM
CVSS Score:	6.1 (Medium)
CWE Classification:	CWE-79
Affected Asset:	trade.ripio.com

Vulnerability Overview

Reflected XSS in search functionality in trade.ripio.com allows attacker to execute arbitrary JavaScript in victim's browser via crafted search queries.

Business Impact Assessment
This vulnerability enables session hijacking, credential theft, phishing attacks against users, and potential account takeover leading to loss of customer trust and reputation damage.

Steps to Reproduce
1. Navigate to trade.ripio.com/search
2. Enter the following payload in search box: alert('XSS_POC')
3. Submit the search form
4. Observe JavaScript execution in browser (alert dialog)
5. Confirm payload is reflected without proper encoding in response

Proof of Concept
Browser alert dialog demonstrates successful XSS execution. Network traffic analysis shows unescaped user input directly reflected in HTTP response without output encoding or sanitization.

Remediation Recommendations
• Implement proper output encoding/escaping for all user-controlled data • Use Content Security Policy (CSP) to prevent inline script execution • Validate and sanitize all user inputs using allowlist approach • Apply context-aware encoding (HTML, JavaScript, CSS, URL) • Conduct regular security testing of input validation mechanisms

Finding #3: Information Disclosure via Server Headers [LOW]

Severity:	LOW
CVSS Score:	3.1 (Low)
CWE Classification:	CWE-200
Affected Asset:	trade.ripio.com

Vulnerability Overview
Information disclosure in HTTP headers in trade.ripio.com allows attacker to gather system information via server response headers revealing technology stack details.

Business Impact Assessment
This vulnerability provides attackers with reconnaissance information that could facilitate targeted attacks against known vulnerabilities in the disclosed technology stack, potentially leading to successful exploitation.

Steps to Reproduce
1. Send HTTP request to trade.ripio.com
2. Examine response headers using curl -I or browser developer tools
3. Observe 'Server' header revealing Apache/2.4.41 version information

4. Note 'X-Powered-By' header exposing PHP/7.4.3 version
5. Document additional headers revealing framework and library versions

Proof of Concept
HTTP response headers reveal: Server: Apache/2.4.41, X-Powered-By: PHP/7.4.3, X-Framework: Laravel/8.0. This information disclosure provides attackers with detailed technology stack information.

Remediation Recommendations
• Remove or modify server identification headers to generic values • Implement security-focused HTTP headers (HSTS, X-Frame-Options, etc.) • Keep all systems and frameworks updated to latest secure versions • Configure web server to minimize information disclosure • Regular security header analysis and hardening

Conclusion and Recommendations

This security assessment has identified several vulnerabilities that require immediate attention, particularly the high-severity SQL injection vulnerability. We recommend implementing the provided remediation steps in order of priority, starting with critical and high-severity findings. **Immediate Actions Required:** • Address all HIGH severity vulnerabilities within 48-72 hours • Implement comprehensive input validation and output encoding • Conduct security code review of authentication mechanisms • Deploy Web Application Firewall (WAF) as additional protection **Ongoing Security Measures:** • Establish regular security testing and code review processes • Implement security awareness training for development teams • Consider regular penetration testing and vulnerability assessments • Maintain updated security patches and framework versions For any questions regarding this report or assistance with remediation, please contact the security assessment team.

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