

■■ Security Audit Framework Report

Target: <https://vickykruzprogramming.dev>

Scan Mode: full

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■ EXECUTIVE SUMMARY

| OVERALL GRADE | Grade.F (29.2%) |
|------------------|-----------------|
| Total Checks | 24 |
| Passed | 7 |
| High Risk Issues | 7 |

■ CONFIGURATION DRIFT (vs Hardened Flask LMS)

Grade: Grade.F vs A
Pass delta: -15 checks vs baseline
Improved checks: None
Regressed checks: WS-HSTS-001, WS-SEC-001, WS-TLS-001, WS-SRV-001, WS-LIMIT-001

Risk Level: ■ HIGH RISK

■ APP LAYER FINDINGS

| ID | Check | Status | Severity | Details |
|----------------|----------------------------|---------------|-----------------|---|
| APP-DEBUG-001 | Debug mode disabled | ■ Status.PASS | Severity.HIGH | No obvious debug/traceback content in root response |
| APP-COOKIE-001 | Secure session cookies | ■ Status.PASS | Severity.HIGH | At least one cookie appears to use both Secure and HttpOnly |
| APP-CSRF-001 | CSRF protection enabled | ■ Status.PASS | Severity.MEDIUM | CSRF patterns detected. |
| APP-ADMIN-001 | No exposed admin endpoints | ■ Status.PASS | Severity.MEDIUM | Admin paths none found. |
| APP-RATE-001 | Rate limiting configured | ■ Status.PASS | Severity.MEDIUM | Rate limiting detected (429). |
| APP-PASS-001 | Strong password policy | ■ Status.PASS | Severity.LOW | Password hints: 2/5 complexity requirements met |

■ WEBSERVER LAYER FINDINGS

| ID | Check | Status | Severity | Details |
|--------------|------------------------------|----------------|-----------------|---|
| WS-HSTS-001 | HSTS header enabled | ■ Status.FAIL | Severity.HIGH | Strict-Transport-Security header is missing. |
| WS-SEC-001 | Security headers present | ■ Status.FAIL | Severity.HIGH | 0/4 security headers present: ['Server', 'Date', 'Content-Type'] |
| WS-TLS-001 | TLS 1.2+ with strong ciphers | ■■ Status.WARN | Severity.HIGH | TLS details unavailable or legacy cipher detected |
| WS-SRV-001 | No server version disclosure | ■ Status.FAIL | Severity.MEDIUM | Server: nginx/1.24.0 (Ubuntu). Version exposed. |
| WS-DIR-001 | Directory listing disabled | ■ Status.PASS | Severity.MEDIUM | Directory listing disabled |
| WS-LIMIT-001 | Request size limits | ■■ Status.WARN | Severity.LOW | No direct request limit test available. Content-Length header present |

■ CONTAINER LAYER FINDINGS

| ID | Check | Status | Severity | Details |
|-----------------|----------------------------|----------------|-------------------|---|
| CONT-USER-001 | Non-root container user | ■■ Status.WARN | Severity.HIGH | Pending Docker API - requires 'docker inspect' to confirm |
| CONT-PORT-001 | Minimal ports exposed | ■■ Status.WARN | Severity.MEDIUM | Pending Docker API - requires 'docker ps' to check |
| CONT-RES-001 | Resource limits configured | ■■ Status.WARN | Severity.MEDIUM | Pending Docker API - requires docker-compose.yml |
| CONT-HEALTH-001 | Health checks configured | ■■ Status.WARN | Severity.LOW | Pending Docker API - requires Dockerfile HEALTHCHECK |
| CONT-REG-001 | Trusted image registry | ■■ Status.WARN | Severity.MEDIUM | Pending Docker API - requires image source validation |
| CONT-SEC-001 | No hardcoded secrets | ■■ Status.WARN | Severity.CRITICAL | Pending file parsing - requires docker-compose.yml |

■ HOST LAYER FINDINGS

| ID | Check | Status | Severity | Details |
|-----------------|----------------------------|----------------|-----------------|---|
| HOST-SSH-001 | SSH hardened configuration | ■■ Status.WARN | Severity.HIGH | Pending SSH connection - requires 'cat /etc/ssh/sshd_config' |
| HOST-SVC-001 | No unnecessary services | ■■ Status.WARN | Severity.MEDIUM | Pending SSH - requires 'systemctl list-units --type=service' |
| HOST-UPDATE-001 | Automatic security updates | ■■ Status.WARN | Severity.MEDIUM | Pending SSH - requires 'systemctl is-enabled unattended-upgrades' |
| HOST-PERM-001 | Correct file permissions | ■■ Status.WARN | Severity.HIGH | Pending SSH - requires 'find /etc -perm -o+w -ls 2>&1' |
| HOST-FW-001 | Firewall configured | ■■ Status.WARN | Severity.HIGH | Pending SSH - requires 'ufw status' or 'iptables -L' |
| HOST-LOG-001 | Logging and monitoring | ■■ Status.WARN | Severity.MEDIUM | Pending SSH - requires 'systemctl is-active rsyslog' |

■ CRITICAL ATTACK PATHS

| # | Attack Path | Risk | Score |
|---|----------------------------|--------|-------|
| 1 | Web → Container Escape | HIGH | 8.5 |
| 2 | Server → Internal Services | MEDIUM | 6.5 |

2 attack path(s) identified. Fix highest-risk paths first.

■ SERVER FINGERPRINT

Detected stack: **Nginx + Docker + Ubuntu**

This fingerprint is inferred from HTTP headers, framework-specific behaviours, and container/host findings where available.