

# Week 5 — Ethical Hacking & Exploitation (Final Report)

Intern: Syeda Bushra Hamdani   Repo: <https://github.com/SyedaBushra914/Cyber-Security-Internship-Week-04-6>

## Executive Summary

Performed safe exploitation on test app; identified SQLi and CSRF, applied fixes.

## SQL Injection

Demonstrated injectable parameter 'q' on /vulnerable using SQLMap; fixed with parameterized queries in /fixed.

## CSRF Testing

Implemented csrf middleware; verified missing token causes 403 using Burp Suite.

## Remediation

Applied prepared statements and CSRF tokens; added documentation and tests.

### sqlmap — Injection Found

GET parameter 'q' appears injectable  
Payload: q=test' OR '1'='1'

Generated: 2025-08-15 11:20 UTC

## Burp Suite — CSRF Test

POST /submit without CSRF token -> 403 Forbidden  
Intercepted request shows missing token header

Generated: 2025-08-15 11:20 UTC