

Web Application Vulnerability Scanner

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Introduction

This project involves building a Web Application Vulnerability Scanner that detects common security flaws like Cross-Site Scripting (XSS) and SQL Injection (SQLi).

Abstract

The tool crawls web pages, identifies input fields, and injects known payloads to test for vulnerabilities. A Flask-based web interface accepts target URLs and displays results. Vulnerabilities are logged for reporting.

Tools Used

- Python 3
- Flask
- Requests
- BeautifulSoup4
- Regex
- HTML/CSS

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Steps Involved

1. Setup Python environment.
2. Implemented scanner.py for crawling and injection.
3. Built detection for XSS and SQLi.
4. Created Flask UI in app.py.
5. Added scan logging to scan_log.txt.

Conclusion

This scanner effectively detects critical web vulnerabilities. It's suitable for educational use and can be extended to detect CSRF, header issues, and more.

Log File

See scan_log.txt for vulnerability logs.