

A03:2021 – Injection

Issue Report

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Assignment report
Web Application Security TTC6500 / Joonatan Ovaska
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1 Cross-Site Scripting

1.1 Main Target – Stored XSS

Title: XSS Injection on create product in the wasdat.fi

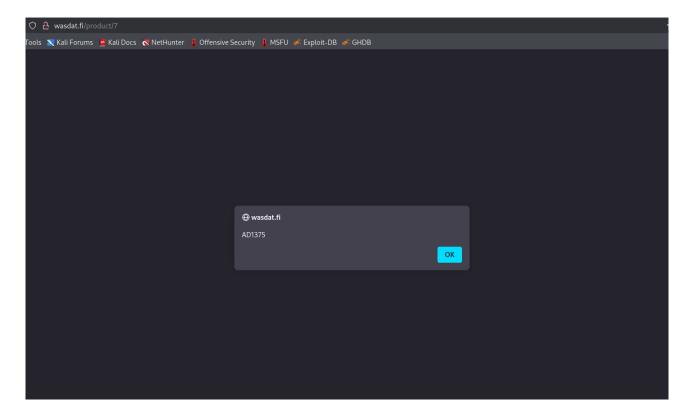
Description: I have found that if you inject your Java script in the Description when creating a new product, it triggers when you visit this product in the marketplace.

Steps to reproduce:

- Visit wasdat.fi and go to your profile, then select "Create your first product".
- Put the payload on the Description box.

XSS Payload: <script>alert('AD1375')</script>

• Visiting this product in the marketplace causes script to trigger (see Picture 1).



Picture 1

Impact estimation:

Medium severity: This XSS Vulnerability in the product description field allows attackers to inject
malicious JavaScript, which executes when users visit the affected product page. This could lead to
session hijacking, phishing attacks, or defacement of the marketplace. Risk can be increased if an
admin is the affected user, potentially compromising security of the platform.

Mitigation:

- Check prevention: https://cheatsheetseries.owasp.org/cheat-sheets/DOM_based_XSS_Prevention_Cheat_Sheet.html
- See CAPEC-592: https://capec.mitre.org/data/definitions/592.html

2 SQL Injection

2.1 Main Target – Retrieve Flag

Title: Website's database in vulnerable to SQL injections.

Description: Target is vulnerable to SQL Injections using searchbar, custom SQL queries can be executed without proper validation. Unauthorized user can access information stored in the database.

Steps to reproduce:

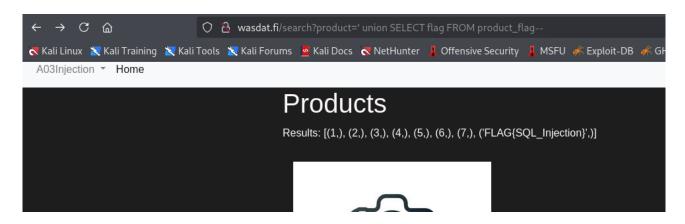
• Extract database structure using this payload:

http://wasdat.fi/search?product=%27%20un-ion%20SELECT%20sql%20FROM%20sqlite_schema--

- Flag is stored in the "product_flag" table.
- Retrieve the flag using this payload:

http://wasdat.fi/search?product=%27%20union%20SELECT%20flag%20FROM%20product_flag--

• Retrieved flag (see Picture 2).



Picture 2

Impact estimation:

• High severity: unauthorized user can dump all data and delete all database data.

Mitigation:

- How to prevent: https://cheatsheetseries.owasp.org/cheat-sheets/SQL Injection Prevention Cheat Sheet.html
- https://capec.mitre.org/data/definitions/66.html

3 Time management

| Date | Used | Description |
|------------|-------|---|
| | hours | |
| 14.02.2025 | 1h | Reading chapter and watching recording |
| 16.02.2025 | 0.5h | Exploiting the target weakness |
| 16.02.2025 | 1h | Writing the documentation and finding the suitable resource recommendations |
| Total | 2.5h | Finishing the assignment and reporting it |