NodeGoat

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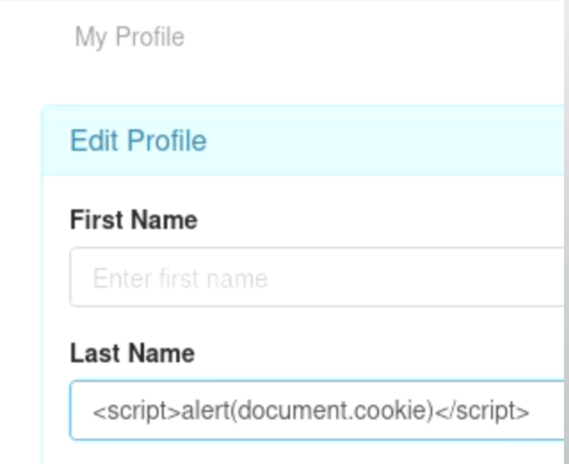
A3 Cross Site Scripting (XSS)

- XSS allows attackers to execute code on the target's browser.
- Is usually caused by improper input sanitation.
- To prevent it:
  - Verify that user inputs are being sanitized before being used


My Profile

Edit Profile

First Name

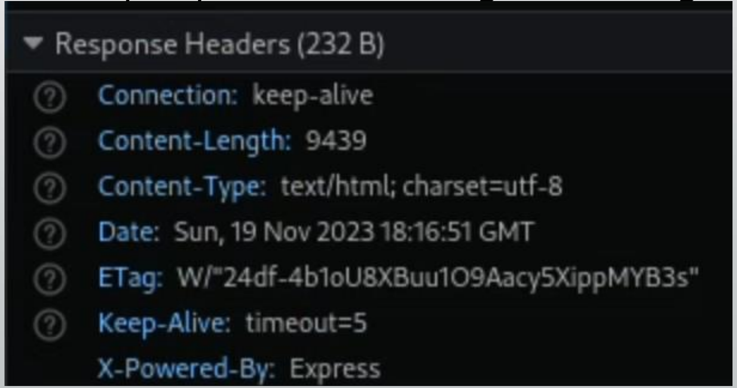
Enter first name

Last Name

<script>alert(document.cookie)</script>

A5 Misconfiguration

- Misconfiguration allows an attacker to accesses resources they should not have access to and may give them information on how the application is ran.
- Security misconfiguration can happen if the default configurations are kept as is.
- To prevent it:
  - Make sure that all default credentials are changed.
  - Consult documentation to verify any insecure settings are changed.



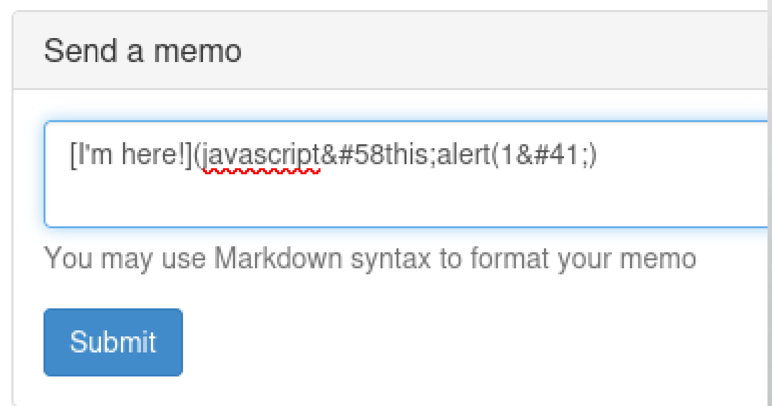
```
▾ Response Headers (232 B)
  ⓘ Connection: keep-alive
  ⓘ Content-Length: 9439
  ⓘ Content-Type: text/html; charset=utf-8
  ⓘ Date: Sun, 19 Nov 2023 18:16:51 GMT
  ⓘ ETag: W/"24df-4b1oU8XBuu1O9Aacy5XippMYB3s"
  ⓘ Keep-Alive: timeout=5
    X-Powered-By: Express
```

A6 Sensitive Data

- Allows an attacker to access sensitive data such as credit cards, authentication credentials, etc.
- If a site doesn't use SSL/TLS for authenticated pages, an attacker can monitor network traffic and steal a users' session cookie.
- To prevent it:
  - Use HTTPS network protocol
  - Encrypt sensitive data at rest & at transit
  - Use strong standard algorithms and strong keys and ensure proper key management
  - Disable autocomplete on forms collecting sensitive data and disable caching for pages with sensitive data

A9 Insecure Components

- Libraries, frameworks, and other software modules with known vulnerabilities may enable a range of possible attacks.
- Using insecure npm packages can lead to this vulnerability.
- To prevent it:
  - ○ Use resources such as npm audit to keep track of any existing vulnerabilities in installed packages



Send a memo

```
[I'm here!](javascript&#58this;alert(1&#41;)
```

You may use Markdown syntax to format your memo

Demonstration and Patching Vulnerabilities