### **Sri Lanka Institute of Information Technology**



Web Security – IE2062

Topic: Bug Bounty Report 10
Y2S2.WE.CS

Name: S.D.W.Gunaratne (IT23241978)

### **Table of Content**

#### 1) How I started?

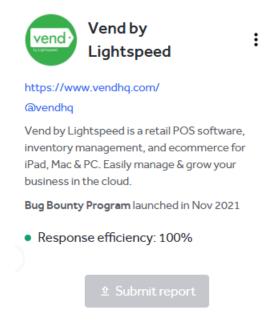
- 2) Introduction
- 2.1 Domain
- 2.2 Severity

#### 3) Vulnerability

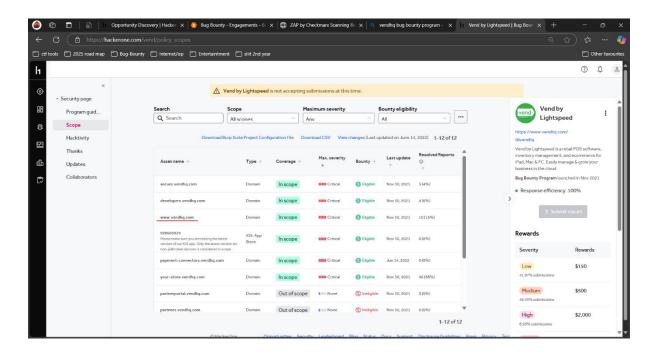
- 3.1 Vulnerability title
- 3.2 Vulnerability description
- 3.3 Affected components
- 3.4 Impact assessment
- 3.5 Steps to reproduce
- 3.6 Proof of concept
- 3.7 Proposed mitigation or fix

#### How I started?

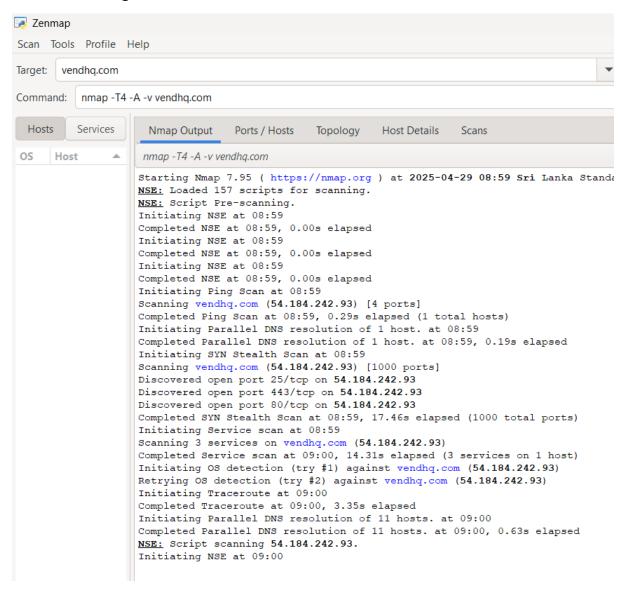
1. Once I search from Hacker one, I saw the Vendhq bug bounty program.



2. Then, I discovered full main domain allowed for scope, so that I choose <a href="https://www.vendhq.com">https://www.vendhq.com</a>.



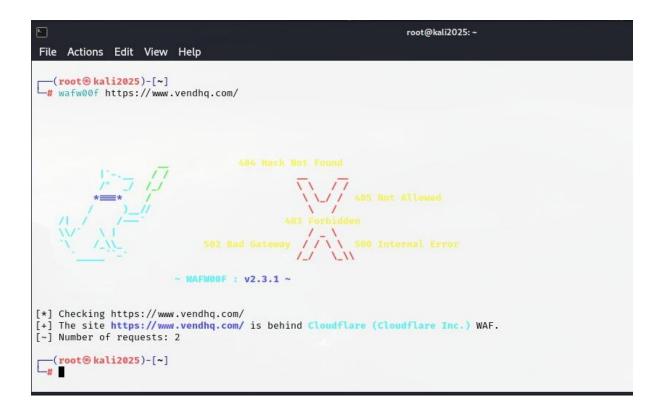
- 3. I use several methods/tools to do penetration testing.
- 4. First, I used Nmap. It helps me to find what are the open ports, Identify the web technologies such as webservers.



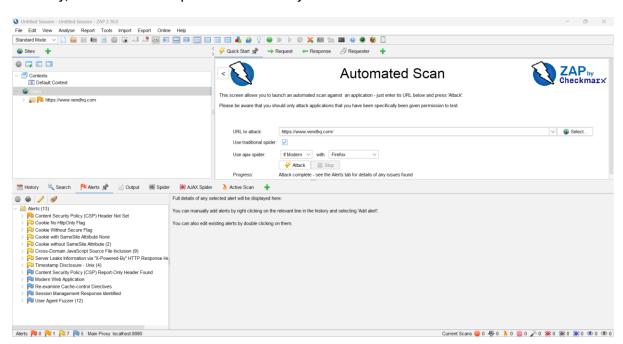
5. Secondly, I used Subfider tool to find hidden or forgotten web asserts. Because hidden web assert can have poor security, unpatched vulnerabilities.



6. Thirdly, I used Wafwoof tool to find website is protected by a WAF (web application firewall). Because if WAF is active, so pen tester do their test without blocked, and they can do their testing with bypass WAF.



7. Finaly, I use OWASP zap to automatically find the vulnerabilities.



With getting these tool's support, I found below details about vulnerability.

# 1) Introduction

1.1 Domain	https://www.vendhq.com/
1.2 Severity	• LOW

## 2) Vulnerability

2.1 Vulnerability title	Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)  OWASP_2021_A01 CWE-497
2.2 Vulnerability description	The web/application server is leaking information via one or more "X-Powered-By" HTTP response headers.  Access to such information may facilitate attackers identifying other frameworks/components your web application is reliant upon and the vulnerabilities such components may be subject to.
2.3 Affected components	Affected component is webserver headers.  The HTTP response also includes the X-Powered-By header, which reveals the backend technology:  X-Powered-By: PHP/7.4.33  Evidence  X-Powered-By: PHP/7.4.33  (This is from ZAP generated report)
2.4 Impact assessment	Reveals backend technology (e.g: - PHP version) and facilitates easier preparation of attacks on known vulnerabilities by hackers.  PHP/7.4.33 may be vulnerable if not patched.  Increases attack surface by leaking unwanted information.  May help in reconnaissance stage of an attack (e.g: - targeting with known CVEs).

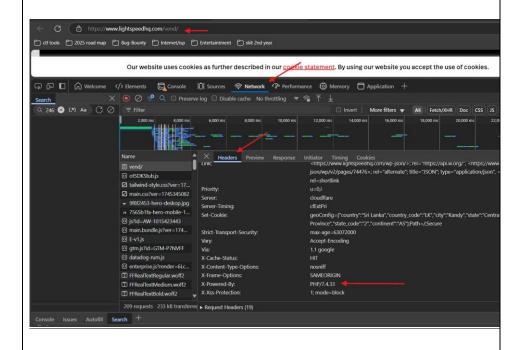
# 2.5 Steps to reproduce

#### Method 1: by using zap

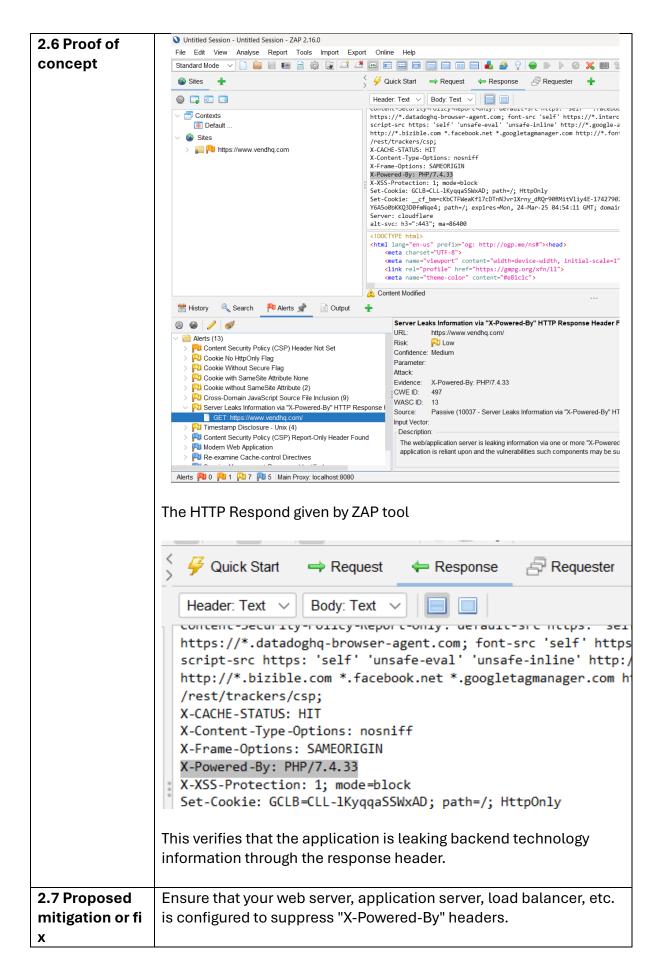
- 1. Launch ZAP tool and scan the <a href="https://www.vendhq.com/">https://www.vendhq.com/</a>.
- 2. Once scanned, head over to the "Alerts tab".
- 3. Look for an alert called "Server Leaks Information via 'X-Powered-By'".
- 4. Open up the alert and examine the prove section.

Check if the HTTP response has: X-Powered-By: PHP/7.4.33

Method2: by using developer tools



Check if the HTTP response has: X-Powered-By: PHP/7.4.33



This is how the mitigate X-powered-By header from server configuration(backends).
eg:- 1) Apache
Header unset X-powered-By