Assignment - 9

of

Cyber Security Laboratory (CSE612)

Bachelor of Technology (CSE)

By

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Q1. Perform online vulnerability scanning using following online vulnerability scanners:

https://pentest-tools.com/website-vulnerability-scanning/website-scanner

https://www.immuniweb.com/websec/

You may try out different types of URLs like .com. .gov.in, .org, .ac.in, etc. on above links. They will produce a vulnerability report. Create a report of all vulnerabilities listed from different online tools of above. You may keep the data set (the list of URLS to be scanned) the same for all of the above online tools. Mention in the report your findings regarding which vulnerabilities were common and which ones were relatively uncommon.

What Tools to Use

- **Pentest-Tools Website Scanner**

- **ImmuniWeb WebSec Scanner**

Step 1: Prepare List of URLs to Scan

Select some websites.

No.	Website URL	Type
1	https://www.google.com	.com
2	https://www.mit.gov.in	.gov.in
3	https://www.wikipedia.org	.org
4	https://www.iitm.ac.in	.ac.in

Step 2: Scan Using Pentest-Tools

- Open Pentest-Tools Website Scanner.

- **Enter URL (https://www.google.com)**

- Select "Light Scan" (if it asks).

- Click Start Scan.

- Wait until scan finishes.

- **Enter URL (https://www.google.com)**

    Website: **https://www.google.com**

    Report Link: WebsiteScanner_www.google.com_report.pdf

- **Enter URL (https://www.wikipedia.org).**

    Website: **https://www.wikipedia.org**

    Report Link: Website_Scanner_www.wikipedia.org_report.pdf

- **Enter URL (https://www.isro.gov.in).**

    Website: **https://www.isro.gov.in**

    Report Link: Website_Scanner_www.isro.gov.in_report.pdf

- **Enter URL (https://www.nitc.ac.in).**

    Website: **https://www.nitc.ac.in**

    Report Link: Website_Scanner-www.nitc.ac.in_report.pdf

Vulnerability Scan Analysis

Website	Common Vulnerabilities Found	Special/Unique Findings
ISRO (isro.gov.in)	- Missing Referrer-Policy - Unsafe Content-Security-Policy - Server info exposed - Missing security.txt file	Mostly related to weak HTTP headers
Wikipedia (wikipedia.org)	- Missing Content-Security-Policy - Missing X-Content-Type-Options - Missing Referrer-Policy - Insecure cookies	Cookie misconfigurations (HttpOnly, loose domain)
NITC (nitc.ac.in)	- Missing Strict-Transport-Security - Missing Content-Security-Policy - Missing X-Content-Type-Options - Missing Referrer-Policy	Very focused on missing important security headers
Google (google.com)	- Missing Content-Security-Policy - Missing X-Content-Type-Options - Missing Referrer-Policy - Insecure cookies	Unsafe CSP settings, and cookie domain issues