Report

1).Findings:

The site Zero Bank Of url:http://zero.webappsecurity.com/ is vulnerable to some major extent. In our vulnerability assessment of the domain, we have found about 24 vulnerabilities from zap tool ranging from severity of high to some informational category of vulnerabilities.

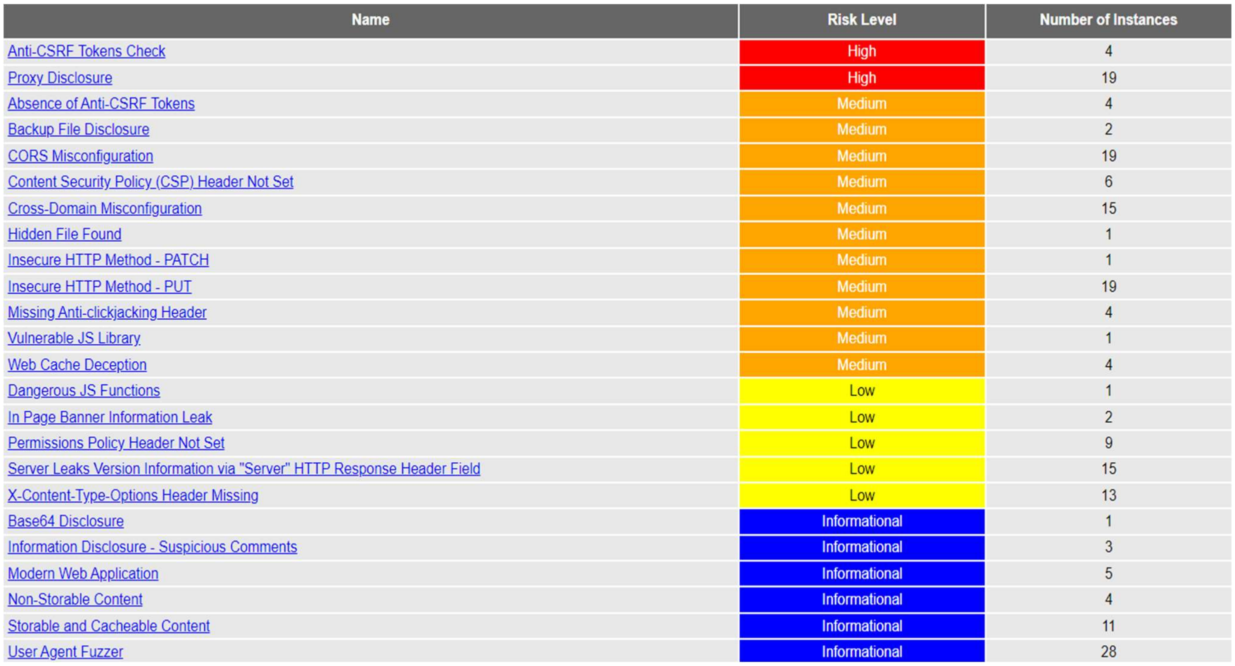
2).Risk Assessment:

High: 2

Medium: 11

Low: 5

Informational: 6



Name	Risk Level	Number of Instances
Anti-CSRF Tokens Check	High	4
Proxy Disclosure	High	19
Absence of Anti-CSRF Tokens	Medium	4
Backup File Disclosure	Medium	2
CORS Misconfiguration	Medium	19
Content Security Policy (CSP) Header Not Set	Medium	6
Cross-Domain Misconfiguration	Medium	15
Hidden File Found	Medium	1
Insecure HTTP Method - PATCH	Medium	1
Insecure HTTP Method - PUT	Medium	19
Missing Anti-clickjacking Header	Medium	4
Vulnerable JS Library	Medium	1
Web Cache Deception	Medium	4
Dangerous JS Functions	Low	1
In Page Banner Information Leak	Low	2
Permissions Policy Header Not Set	Low	9
Server Leaks Version Information via "Server" HTTP Response Header Field	Low	15
X-Content-Type-Options Header Missing	Low	13
Base64 Disclosure	Informational	1
Information Disclosure - Suspicious Comments	Informational	3
Modern Web Application	Informational	5
Non-Storable Content	Informational	4
Storable and Cacheable Content	Informational	11
User Agent Fuzzer	Informational	28

3).High Severity Vulnerability:

Name : Anti-CSRF Tokens Check

Impact:

A Cross site request forgery is an attack in which a victim sends an HTTP request to target destination without their knowledge and it is performed with an intent to attack the destination url as a valid user. The use is of using the predictable syntax of URL/form actions in a repetable way. In this CSRF exploits the trust that a website has for user in which an attacker analyzes the html code or the syntax of the commands, html and php an manipulates it in order to exploit this vulnerability. CSRF attacks are not necessarily cross-site but it can be.Cross-site request forgery is also known as CSRF, XSRF, one-click attack, session riding, confused deputy, and sea surf.

CSRF attacks are effective in a number of situations, including:

1.The victim has an active session on the target site.

2.The victim is authenticated via HTTP auth on the target site.

3.The victim is on the same local network as the target

4).Instances:

There has been 4 instances where the high severity vulnerability have been detected in the site of the Zero Bank.

1.) URL: http://zero.webappsecurity.com

Method: GET

Evidence : <form action="/search.html" class="navbar-search pull-right" style="padding-right:20px">

2.) URL: http://zero.webappsecurity.com/

Method: GET

Evidence : <form action="/search.html" class="navbar-search pull-right" style="padding-right:20px">

3.) URL: http://zero.webappsecurity.com/index.html

Method: GET

Evidence : <form action="/search.html" class="navbar-search pull-right" style="padding-right:20px">

4.) URL: http://zero.webappsecurity.com/search.html?searchTerm=ZAP

Method: GET

Evidence : <form action="/search.html" class="navbar-search pull-right" style="padding-right:20px">

CWE id : 352

Tags: OWASP_2021_A05, WSTG-v42-SESS-05, OWASP_2017_A06

Reference : http://projects.webappsec.org/Cross-Site-Request-Forgery

http://cwe.mitre.org/data/definitions/352.html

5).Solution:

Phase: Architecture and Design

Use a vetted library or framework that does not allow this weakness to exploit the system and also remediates the problem.

eg:use anti-CSRF packages like OWASP CSRFGuard

Phase: Implementation

Ensure the implementation of code free of cross-site scripting issues.

Phase: Architecture and Design

Do not use GET method for any requests that triggers a state change.