AltoroMutual - demo.testfire.net

Web Application VAPT Level 1 Report

For

ASD Academy

Prepared By

Vaibhav khare

TestingDate(07/11/2025)

Disclaimerthis document or any of its content cannot account for, or be included in any form of legal advice. The outcome o
vulnerability scan (or security evaluation) should be utilized to ensure that diligent measures are taken to lower the risk of potential exploits carried out to compromise data. Legal advice must be supplied according to its legal context. All laws and the environments, in which they are applied, are constantly changed and revised. Therefore, no information provided in this document may ever be used as an alternative to a qualified legal body or representative. A portion of the information in this report is taken from OWASP's "The Ten Most Critical Web Application Security Vulnerabilities - 2023 Update" document, that can be found at https://www.owasp.org.

The results indicated in this report are reflective of the state of the site and its underlying code at the time of testing. **Testing Company** not be liable for any changes that happen after the submission of this report which might add to vulnerabilities in future.

1. Management Summary

1.1 Document Title

DOCUMENT VERSION CONTROL	
Document Title	Web Application Vulnerability Assessment and Penetration Testing Level 1 Report
Organisation Name	Altoro Mutual
Application Name	demo.testfire.net
Document Version	1.0
Last Edit Date	10/11/25

DOCUMENT DISTRIBUTION LIST	
Date	
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Designation	CTO
Address	
Contact Number	
E-Mail	

1.2 Contact Details

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Designation	Security Analyst
Company	ASD Academy
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Tel. No.	NA
Mobile No.	
E – Mail	

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2. Scope, Scan (Test) and Report (Creation/Review) Details

Following Websiteisconsidered asscopeofwork.Duringthesecurityassessmentwehave evaluated security of the modules from the application.

Scope of the work	
Application Name	empower web Portal
Scope	Website Audit
Audit URL	https://demo.testfire.net

Audit Activities and Timelines	
Start Date	07/11/2025
End Date	10/11/2025
Scan / Test Time	

Report Created / Reviewed / Approved / Released By	
Report Created By	Ms. Vaibhav khare (Information Security Analyst)
Report Reviewed By	Mr. Harshit (Sr. Cybersecurity Analyst)
Report Approved By	
Report Released By	
Report Released Date	

3. Assessment Methodology

Ahybrid approach is followedtoperform the assessment that is a combination of tools is used to discover the wide range of vulnerabilities. Additionally, the assessment being adaptive in nature allows us to control the assessment methodology as per the application functionality to focus on the critical areas of the application. The attack vectors are controlled as per the assessment needs and the attack selection ensures maximum coverage of the application.

Following diagram represents the assessment approach:

Figure 1

The table below describes various levels and types of assessment. The type of assessment done for current assessment is available in the “Assessment Scope” section of the document.

Scan/Audit Type		
Level	Type	Information
1	**Safe**	Safe scan discovers minimum types and instances of vulnerabilities. The safe scan mode avoid fault injection such as Java Scripts, HTML tags, crafted SQL queries etc. to ensure that the application retains its state at the end of the assessment. Any fault injections that may trigger Denial of Service situation are avoided in safe scans. Safe scan suits most when the assessment is to be done on a live application instance, and has already undergone either *Standard* or *Destructive* scan/s.
2	**Standard**	Standard scan discovers and exploits most standard checks such as OWASP Top 10 checks. The standard scan performs fault injection such as Java Scripts injection, HTML tag injection, crafted SQL queries etc. Any fault injections that may trigger Denial of Service situation are avoided in standard scans. Standard scan suits most when the assessment is to be done on a staging/pre-prod/testing application instance.
3	**Destructive**	Destructive scan discovers and exploits most comprehensive checks including checks that may trigger Denial of Service Attacks situations for the application. Destructive scan is usually done on staging/pre-prod/testing application instance. A destructive scan on a live environment is avoided on live/production systems unless it is really required.

The vulnerabilities discovered are associated with a risk level that indicates how critical the vulnerability is and helps application owners/developers to prioritize the vulnerabilities and choose an appropriate mitigation approach.

Risk Level Information and Necessary Actions

Risk Level	Risk Description and Necessary Action
High	The high risk level indicates maximum risk associated with a specific vulnerability instance. Such vulnerability may enable an attacker to successfully exploit the underlying application and its data and partially or completely to compromise the application and its data to modify application behaviour to become other than its original intended purpose. The vulnerability marked as "High Risk" is recommended to be handled with utmost priority.
Medium	The medium risk level indicates considerable risk associated with a specific vulnerability instance. Such vulnerability may enable an attacker to exploit the underlying application and its data to a particular level so that the attacker can gain low level information about the application. Such information can be used by an attacker to craft more specific attacks based on the information collected. The vulnerability marked with "Medium Risk" should be mitigated at the earliest or soon after "High Risk" vulnerabilities are mitigated.
Low	The low risk level indicates lowest risk associated with a specific vulnerability instance. Such vulnerability may allow an attacker to gain some information about the application which was not intended to be known otherwise. The attacker may not have exploiting techniques available at that instance based on the information revealed by the system. The vulnerability marked with "Low Risk" can be mitigated soon after high and medium risk vulnerabilities are mitigated.

Figure 2

Severity Level Information and Description

SEVERITY	CVSS SCORE	DESCRIPTION
CRITICAL	**9.00 – 10.00**	Critical Business Impact - e.g., Remote Code Execution, Database Access, System Take Over. Requires fix immediately.
HIGH	**7.00 – 8.99**	High Business Impact - e.g., Bypassing security controls, arbitrary script execution, takeover any user's account, bypass of user accounts on critical parts of the site. Requires fix as soon as possible

MEDIUM	**4.00 – 6.99**	Typically, vulnerabilities that requires the attacker to combine it with another vulnerability to cause serious damage
LOW	**0.01 – 3.99**	Can cause annoyance to the user and be used in a combination with similar vulnerabilities.
INFORMATIONAL	**0.0**	Bugs that do not create a threat directly or indirectly fall under this category.

Table 1

Assessment Constraints

We have covered the below modules during security audit:

- Data Management
- Admin Setting
- SupplierAssessment

- Survey

4. Tools Used

The below tools/scans/scripts were used for security audit:

- Burp Suite Professional (Commercial)
- Nmap (Open Source)
- Kali Linux Tools (Open Source)
- SSL Labs (Open Source)

5. Standard Followed

Below are the standards followed for VAPT –

1. Open Web Application Security Project (OWASP)
2. SysAdmin, Audit, Network, and Security (SANS)
3. Penetration Testing Execution Standard (PTES)
4. Payment Card Industry Data Security Standard (PCI DSS)
5. Information Systems Security Assessment Framework (ISSAF)
6. Open-Source Security Testing Methodology Manual (OSSTMM)

6. OWASP Top 10 and SANS 25 Application Security Risks

The Common Weakness Enumeration (CWE) is a list of software security vulnerabilities found all throughout the software development industry. It's a community-driven project maintained by MITRE, a non-profit research and development group. For each entry, the CWE provides a description of the vulnerability and steps for mitigating it.

MITRE partnered with the SANS Institute to develop the CWE/25, a list of the 25 most critical software vulnerabilities. A similar list is provided in the Open Web Application Security Project (OWASP) Top 10 Project, which is also a community-driven compilation of software vulnerabilities. Although the CWE/25 and OWASP Top 10 are different, they share many of the same vulnerabilities. Here is a list of the OWASP Top 10 entries for 2021 and their corresponding CWEs.

OWASP Top 10	SANS CWE Top 25
A01:2021-Broken Access Control	1. CWE-787 Out-of-bounds Write
A02:2021-Cryptographic Failures	1. CWE-79 Improper Neutralization of Input During Web Page Generation ('Cross-site Scripting')
A03:2021-Injection	1. CWE-89 Improper Neutralization of Special Elements used in an SQL Command ('SQL Injection')
A04:2021-Insecure Design	1. CWE-416 Use After Free
A05:2021-Security Misconfiguration	1. CWE-78 Improper Neutralization of Special Elements used in an OS Command ('OS Command Injection')
A06:2021-Vulnerable and Outdated Components	1. CWE-20 Improper Input Validation 1. CWE-125 Out-of-bounds Read
A07:2021-Identification and Authentication Failures	1. CWE-22 Improper Limitation of a Pathname to a Restricted Directory ('Path Traversal') 1. CWE-352 Cross-Site Request Forgery (CSRF)
A08:2021-Software and Data Integrity Failures	1. CWE-434 Unrestricted Upload of File with Dangerous Type
A09:2021-Security Logging and Monitoring Failures	1. CWE-862 Missing Authorization 1. CWE-476 NULL Pointer Dereference
A10:2021-Server-Side Request Forgery	1. CWE-287 Improper Authentication

	1. CWE-190 Integer Overflow or Wraparound 1. CWE-502 Deserialization of Untrusted Data 1. CWE-77 Improper Neutralization of Special Elements used in a Command ('Command Injection') 1. CWE-119 Improper Restriction of Operations within the Bounds of a Memory Buffer 1. CWE-798 Use of Hard-coded Credentials 1. CWE-918 Server-Side Request Forgery (SSRF) 1. CWE-306 Missing Authentication for Critical Function 1. CWE-362 Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition') 1. CWE-269 Improper Privilege Management 1. CWE-94 Improper Control of Generation of Code ('Code Injection') 1. CWE-863 Incorrect Authorization 1. CWE-276 Incorrect Default Permissions

Table 2

7. Zero-day (0-day) Application Security Risks

During thesecuritytesting, checks were alsoperformed for anyzero-day vulnerabilities / attacks.

Below is the brief summary of Zero-day (0-day) security risks –

"Zero-day" is a broad term that describes recently discovered security vulnerabilities that hackers can use to attack systems. The term "zero-day" refers to the fact that the vendor or developer has only just learned of the flaw – which means they have “zero days” to fix it. A zero-day attack takes place when hackers exploit the flaw before developers have a chance to address it.

Zero-day is sometimes written as 0-day. The words vulnerability, exploit, and attack are typically used alongside zero-day, and it’s helpful to understand the difference:
A zero-day vulnerability is a software vulnerability discovered by attackers before the vendor has become aware of it. Because the vendors are unaware, no patch exists for zero-day vulnerabilities, making attacks likely to succeed.

A zero-day exploit is the method hackers use to attack systems with a previously unidentified vulnerability.

A zero-day attack is the use of a zero-day exploit to cause damage to or steal data from a system affected by a vulnerability.

Protection against zero-day attacks –

For zero-day protection and to keep your computer and data safe, it’s essential for both individuals and organizations to follow cyber security best practices. This includes:

Keep all software and operating systems up to date. This is because the vendors include security patches to cover newly identified vulnerabilities in new releases. Keeping up to date ensures you are more secure.

Use only essential applications. The more software you have, the more potential vulnerabilities you have. You can reduce the risk to your network by using only the applications you need.

Use a firewall. A firewall plays an essential role in protecting your system against zero-day threats. You can ensure maximum protection by configuring it to allow only necessary transactions.
Within organizations, educate users. Many zero-day attacks capitalize on human error. Teaching employees and users’ good safety and security habits will help keep them safe online and protect organizations from zero-day exploits and other digital threats.

Use a comprehensive antivirus software solution.

8. Engagement Scope

S. No	URL	Hash Value (in case of applications)	Version (in case of applications)
1	https://demo.testfire.net	352c3725ddd88b56b5cc351dbbec353211abf5d8	Coyote JSP engine 1.1

9. Details of the Auditing team

S. No	Name	Designation	Email Id	Professional Qualifications/ Certifications	Whether the resource has been listed in the Snapshot information published on CERT-In's website (Yes/No)
1	Vaibhav khare	Security Analyst	_____	NO	NO

10. Server Details

a. OS/WebServer / Technology Details

OS Server	Windows
Web Server	Apache Tomcat/Coyote JSP engine 1.1
IP Address	65.61.137.117
Port	21,80,443,554,1723,8080
Technology Used	HTTP/2, Apache Tomcat, Java

11. Information Gathering

a. IdentificationofSpiders,Robots and Crawler

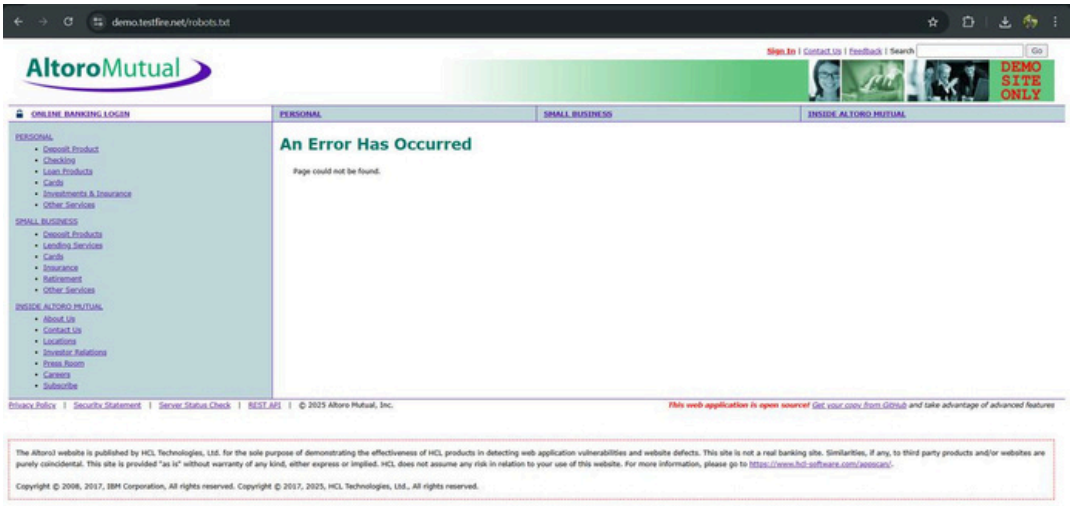
The first phase in security assessment was focused on collecting as much information as possible about a target application.

Tests Conducted:

The site and contains robots.txt or not.

While searching: https://demo.testfire.net/ robots.txt

Results: (Reference Image)



Severity: NIL

Search Engine Discovery/Reconnaissance

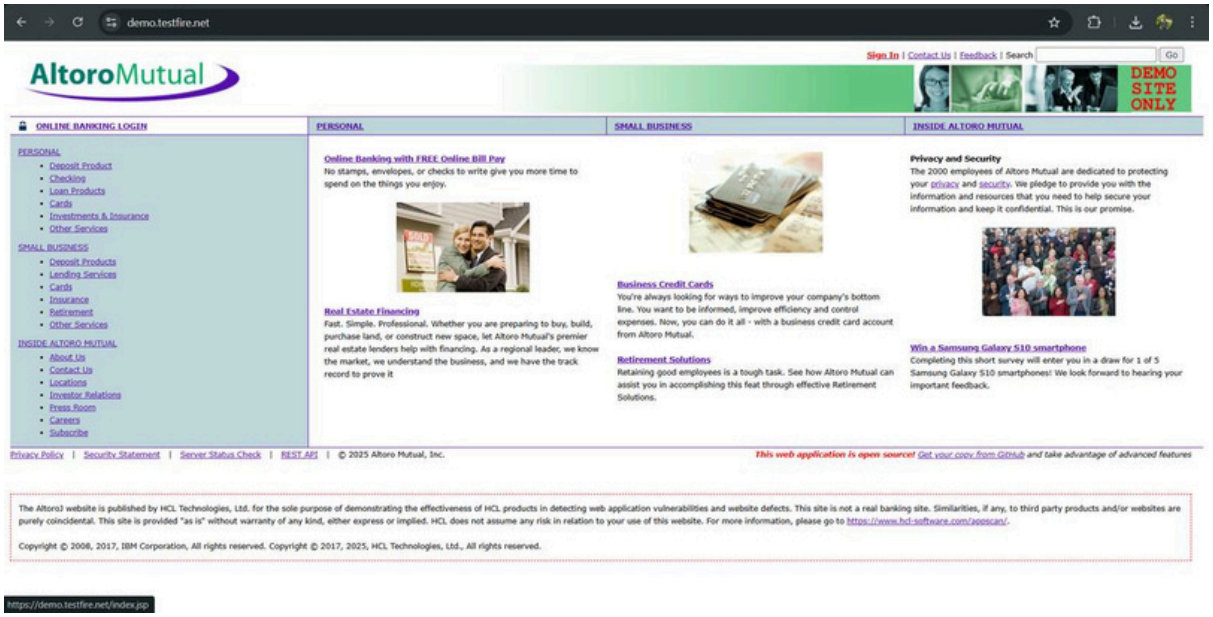
Tests Conducted:

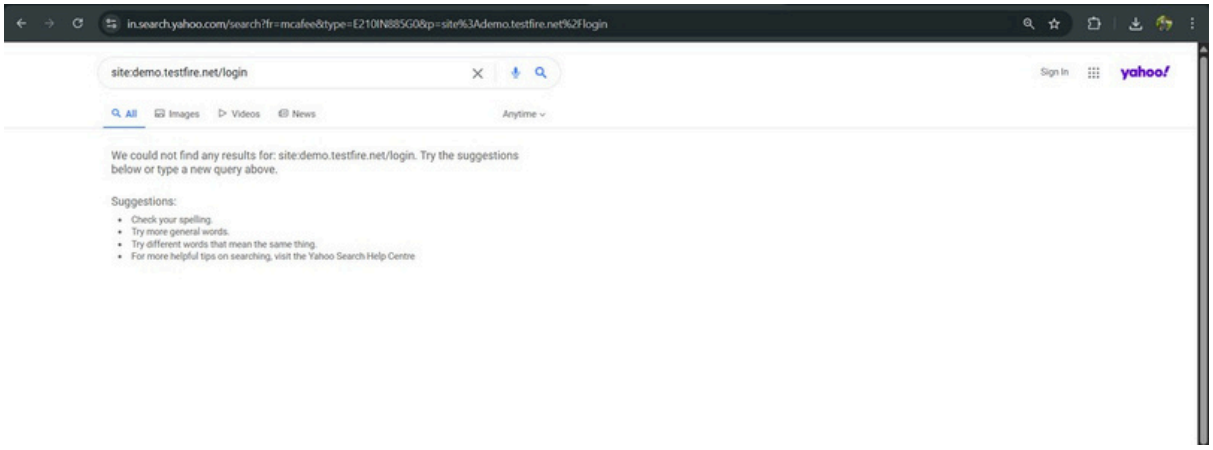
Using the advanced "site:" search operator, it is possible to restrict Search Results to a specific domain.

Results: (Reference Image)

To find the web content of site indexed by Google Search, the following Google Search Query is issued:

site: https://demo.testfire.net/login





To display the index of Web Application cached by Google, the following Google Search Query is issued

cache: https://xyz.com /

(Reference Image)

Severity: NIL

a. Port Scanning

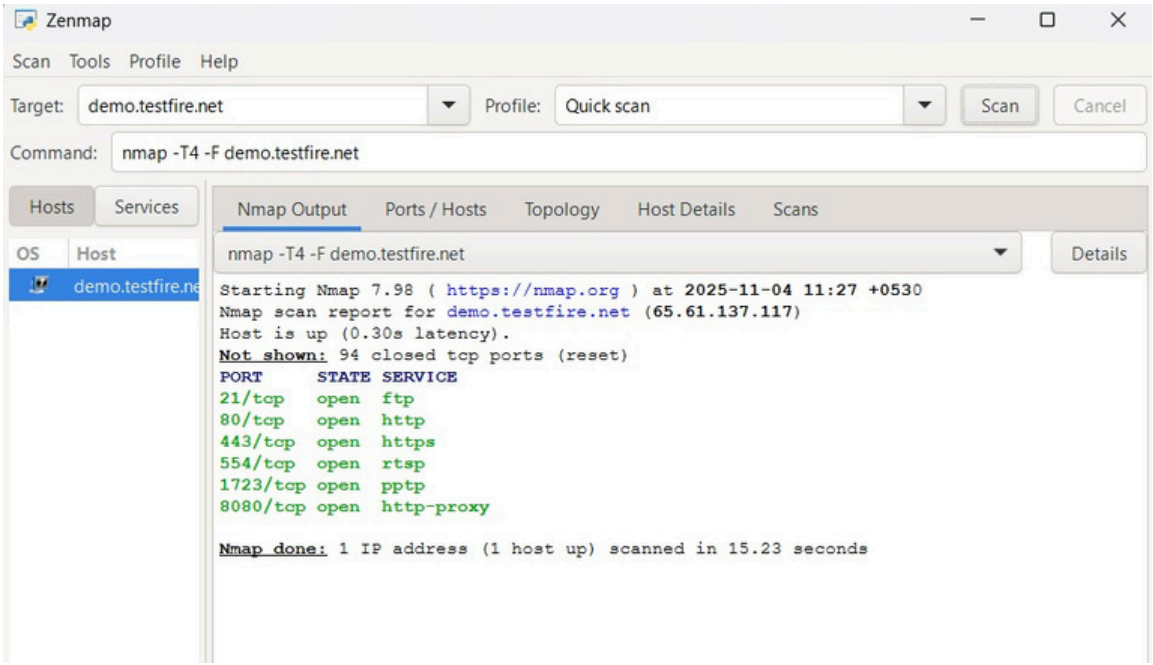
Tests Conducted:

Using the Nmap we checked for Open Ports for the following website.

Results:

site: https://demo.testfire.net/

(Reference Image)



Severity: NIL

1. Summary of Key Findings

Sr.no	Finding	Severity	Level 1 Status
1.	Authentication bypass – Sql injection	Critical	Open

2.	Client Side Request Forgery (CSRF)	High	Open
3	Insecure Direct Object Reference (IDOR)	High	Open
4	Default Credentials	High	Open
5	Login Brute-Force	High	Open
6	TLS 1.0/1.1 Protocol Detection	High	Open
7	Cross-Site Scripting(XSS)	High	Open
8	No Rate Limiting	High	Open
9	Improper Input Validation	High	Open
10	Plaintext Credentials	High	Open
11	Click-Jacking	Medium	Open
12	Accessible By IP Address	Medium	Open
13	HTML Injection	Medium	Open
14	Unvalidated URL Redirection	Medium	Open
15	2FA Not Implemented	Medium	Open
16	CAPTCH Not Found	Medium	Open
17	Missing X-Frame-Option Header	Medium	Open
18	Hardcoded Version Disclosure	Medium	Open
19	Missing X-Content-Type-Option Header	Low	Open

20	Missing Permissions-Policy Header	Low	Open

1. Graphical Representation

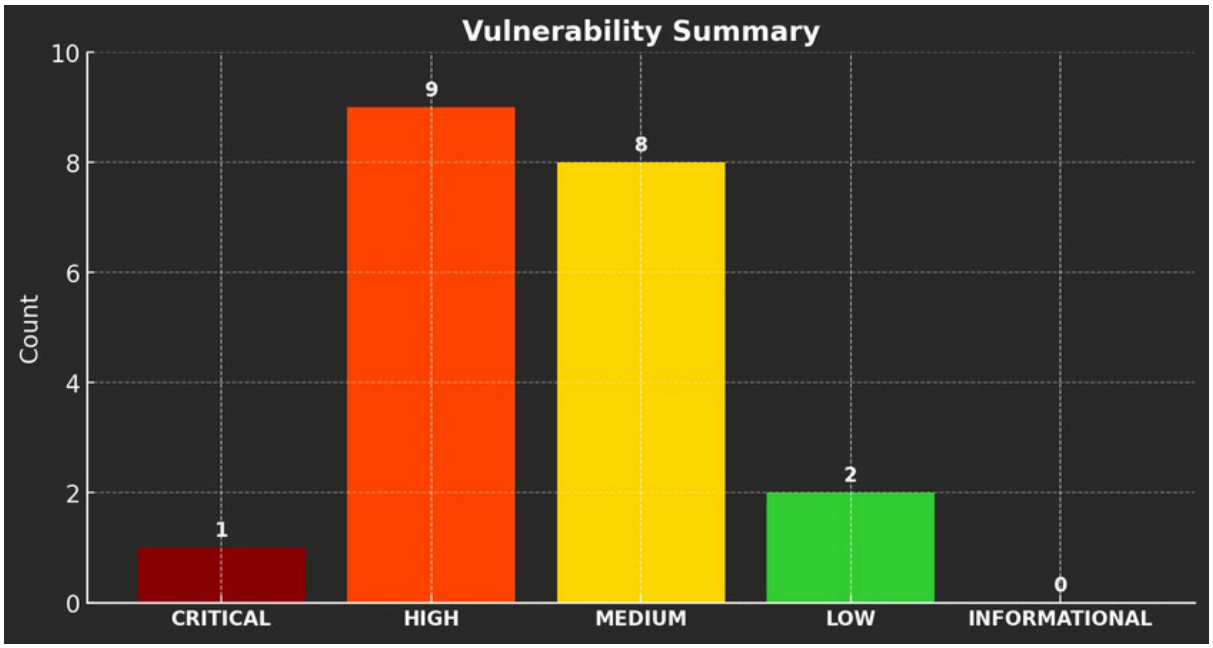


Figure 3

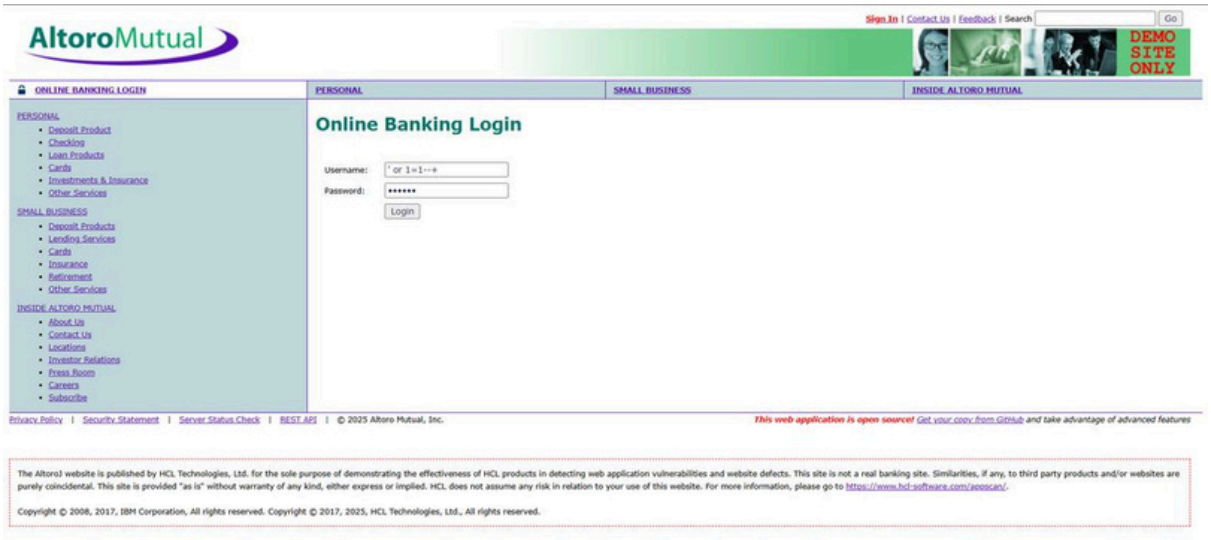
1. Detailed Technical Report with Recommendation

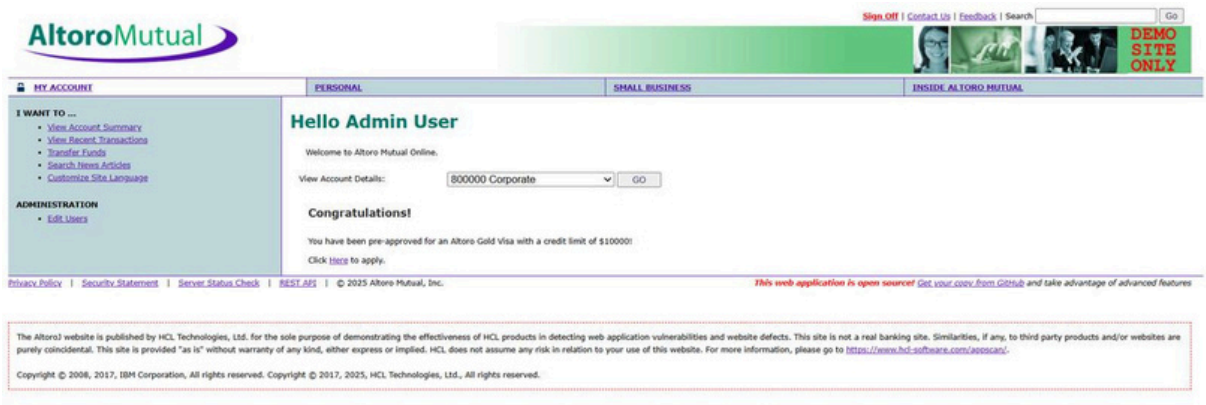
1.1. Authentication Bypass- SQL injection(Login)

Authentication Bypass - SQL Injection (Login)	
SEVERITY	Critical
STATUS	OPEN
CVSS SCORE	9.1
CWE-ID	CWE-89
OWASP CATEGORY	Injection
DESCRIPTION	
vulnerability that occurs when an attacker is able to manipulate a web application's SQL queries by injecting malicious input. This can allow the attacker to bypass authentication mechanisms, such as login pages, and . such as login pages, and potentially gain access to sensitive data, including admin credentials.	
IMPACT	
SQLi allows the attacker to bypass login page and take admin credentials	
AFFECTED URL	
https://demo.testfire.net/login.jsp	
REFERENCE URL FOR MITIGATION	

CWE-89: Improper Neutralization of Special Elements used in an SQL Command. cwe.mitre.org OWASP Web Security Testing Guide — Testing for Bypassing Authentication. OWASP Foundation PortsWigger / Web Security Academy (conceptual guidance for testing and prevention). portswigger.net+1
RECOMMENDATIONS
Use parameterized queries/prepared statements everywhere — never concatenate user input into SQL. Store passwords with strong hashing (bcrypt/argon2) and verify server-side, not in raw SQL. Limit database privileges for the app account and validate all input with strict server-side rules.
STEPS TO REPRODUCE / PROOF OF CONCEPT
First Step I will Go to http://testfire.net/login.jsp

Enter username as ' or 1=1 -- and password random some input and then click on login and we login as administrator

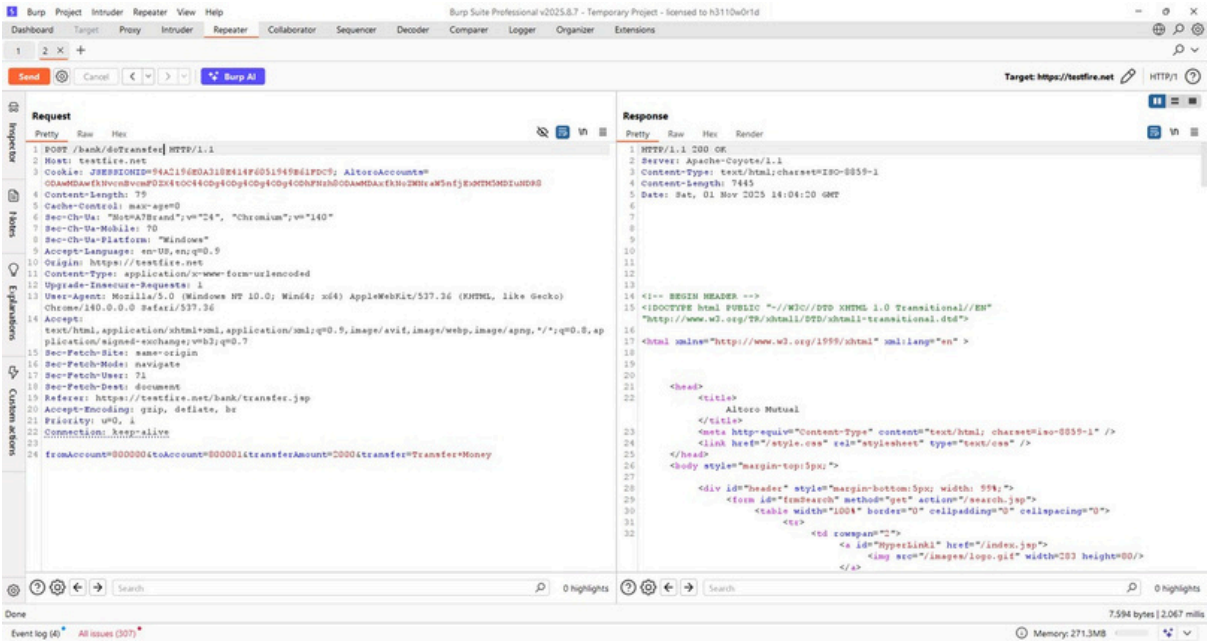




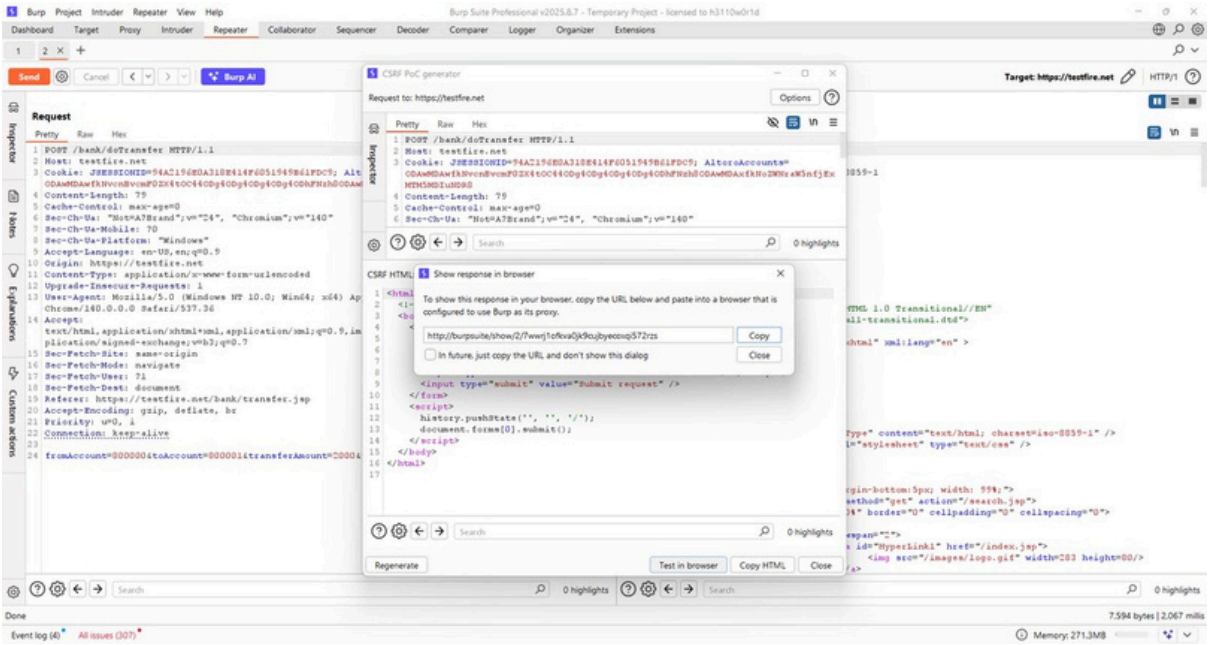
1.2 Client Side Request Forgery (CSRF)

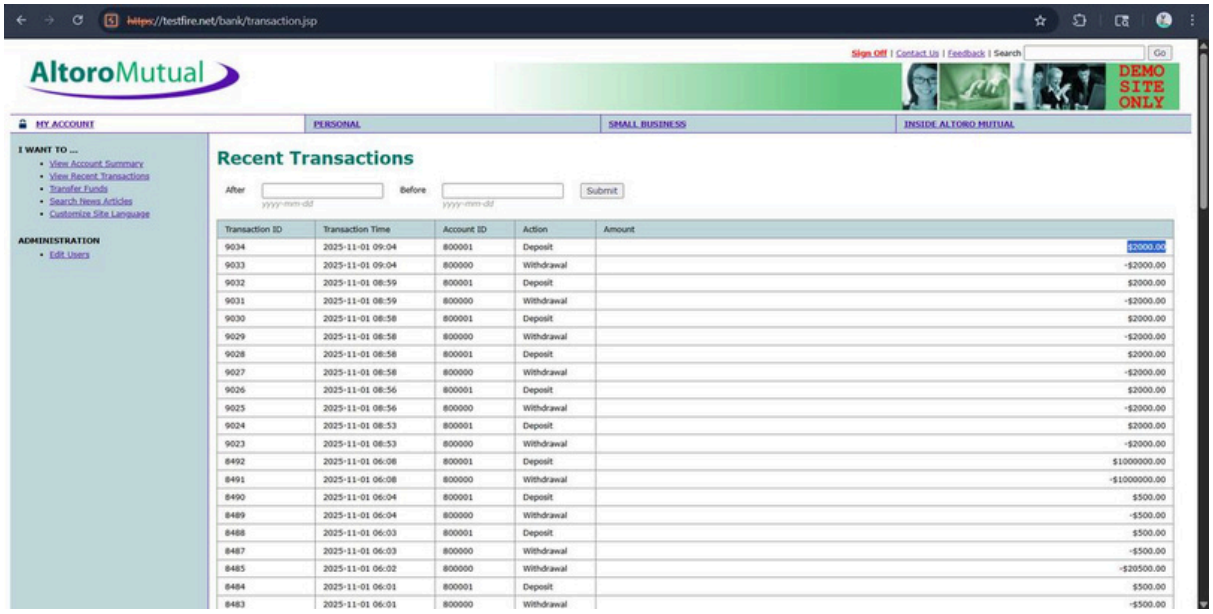
Client Side Request Forgery (CSRF)	
SEVERITY	High
STATUS	**OPEN**
CVSS SCORE	8.8
CWE-ID	CWE-352
OWASP CATEGORY	Broken Access Control
DESCRIPTION	
A CSRF vulnerability exists when state-changing requests (POST/PUT/DELETE or sensitive GETs) are accepted and executed by the application based only on the victim's browser credentials (cookies, basic auth), without a reliable proof of user intent or origin. An attacker can induce an authenticated user's browser to send such a forged request, causing the application to perform unintended actions.	

IMPACT
Attackers trick users into submitting unintended requests using their active session. Can lead to account takeover, data modification, or financial fraud. Exploits browser cookie handling mechanisms.
AFFECTED URL
http://altoro.testfire.net/bank/transfer.jsp
REFERENCE URL FOR MITIGATION
OWASP CSRF Prevention Cheat Sheet (detailed mitigations). cheatsheetseries.owasp.org OWASP Web Security Testing Guide — Testing for CSRF. OWASP Foundation CWE-352 (definition & context). cwe.mitre.org PortSwigger / Web Security (concepts, examples, SameSite discussion). portswigger.net+1 OWASP SameSite cookie guidance. OWASP Foundation
RECOMMENDATIONS
To prevent CSRF we can use CSRF tokens and use strict samesite cookie restrictions
STEPS TO REPRODUCE / PROOF OF CONCEPT
First I Select a request of transfer money in Burp Suite Professional that i want to test or exploit.



From the right-click context menu, select Engagement tools / Generate CSRF PoC. Burp Suite will generate some HTML that will trigger the selected request , I will choose the option test in browser and copy the link and paste in browser and enter the transfer 2000$ will done automatically

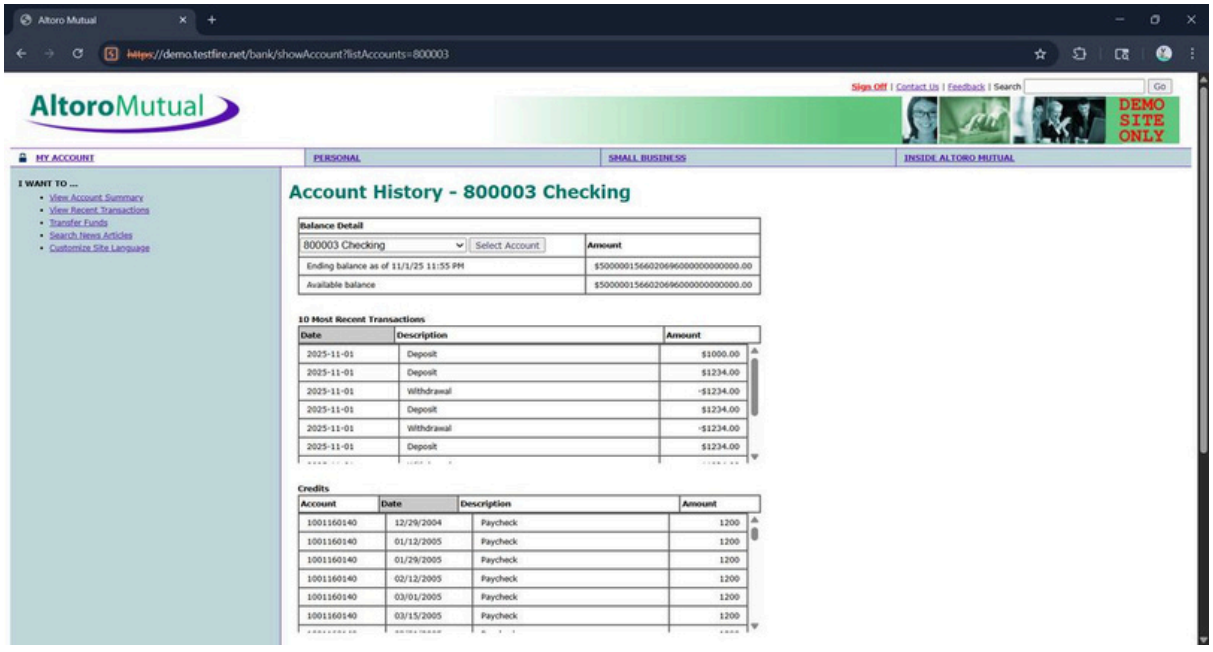




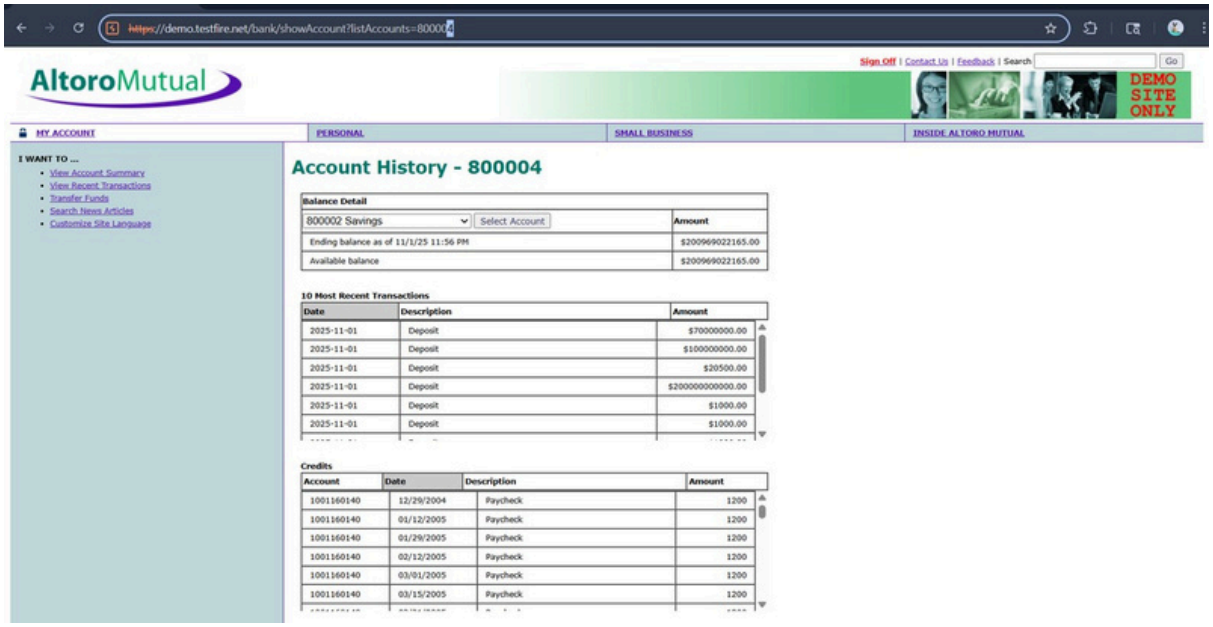
1.2 Insecure Direct Object Refernce (IDOR)

Insecure Direct object Reference (IDOR)	
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	8.7
CWE-ID	CWE-639
OWASP CATEGORY	Broken Access Control
DESCRIPTION	
This vulnerability allows any user to view all account info of different user without authentication. The user just has to change the account number of the get request and he/she will be able to view sensitive account information about a diiferent user.	
IMPACT	

Manipulating IDs (e.g., /user?id=123→124) accesses unauthorized data. Common in APIs lacking proper authorization checks. Leads to mass data leakage.
AFFECTED URL
https://demo.testfire.net/bank/showAccount?listAccounts=800000
REFERENCE URL FOR MITIGATION
CWE-639 — definition and context (MITRE/CWE). cwe.mitre.org OWASP Web Security Testing Guide — Testing for IDOR. OWASP
RECOMMENDATIONS
Implement access control checks for all object references. Use indirect reference maps. Log and monitor ID access patterns.Implement access control checks on the server side; avoid using predictable IDs; use indirect references or UUIDs
STEPS TO REPRODUCE / PROOF OF CONCEPT
Go to the Affected URL..



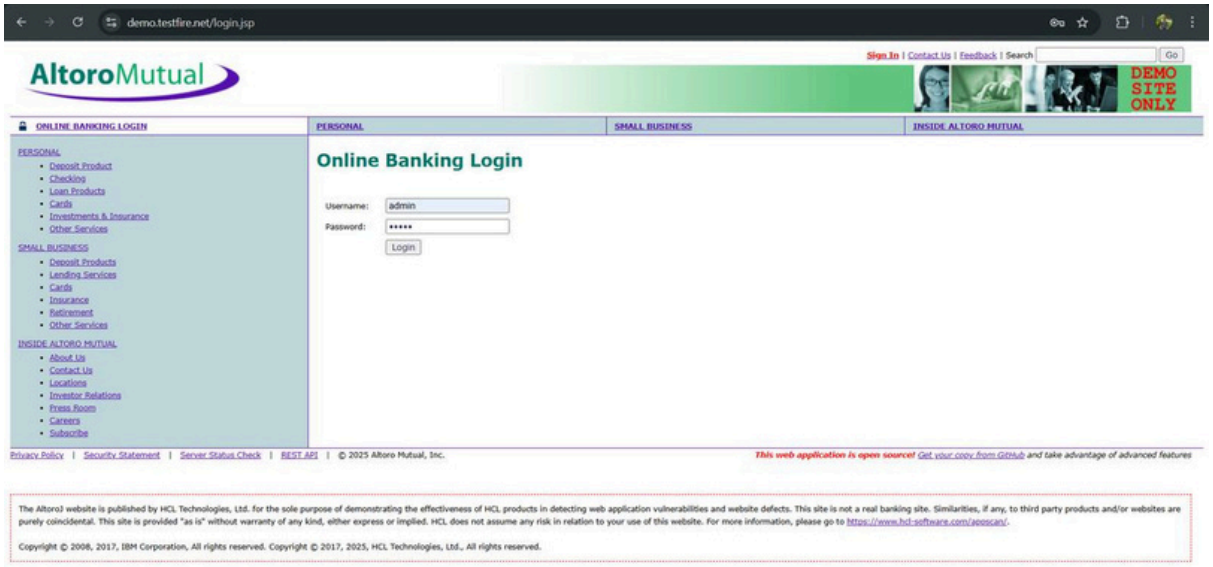
Then change the listAccounts id 800003 to 800004



1.4 Default Credentials

Default Credentials High	
SEVERITY	
STATUS	OPEN
CVSS SCORE	9
CWE-ID	CWE-1391
OWASP CATEGORY	Authentication Failures
DESCRIPTION	

IMPACT
Factory-set credentials allow immediate system access. Often found in IoT devices and admin interfaces. Brute-force attacks succeed quickly against known defaults.
AFFECTED URL
https://demo.testfire.net/login.jsp
REFERENCE URL FOR MITIGATION
https://owasp.org/www-project-secure-coding-practices/ https://cheatsheetseries.owasp.org/cheatsheets/Default_Password_Cheat_Sheet.html
RECOMMENDATIONS
Change all default credentials during setup. Implement password policies. Disable default admin accounts if possible. Regular credential audits.Enforce password changes after installation, disable default accounts, monitor for common credentials
STEPS TO REPRODUCE / PROOF OF CONCEPT
Go to the Affected URL and enter username or password (admin/admin)

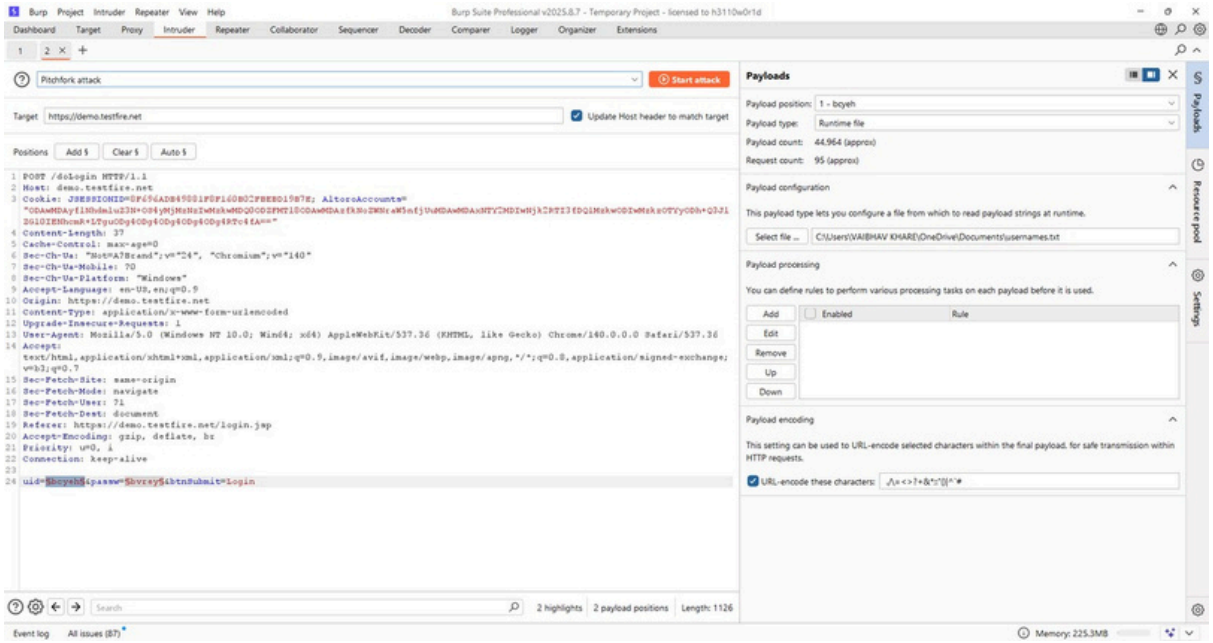


1.5 Login Brute-Force

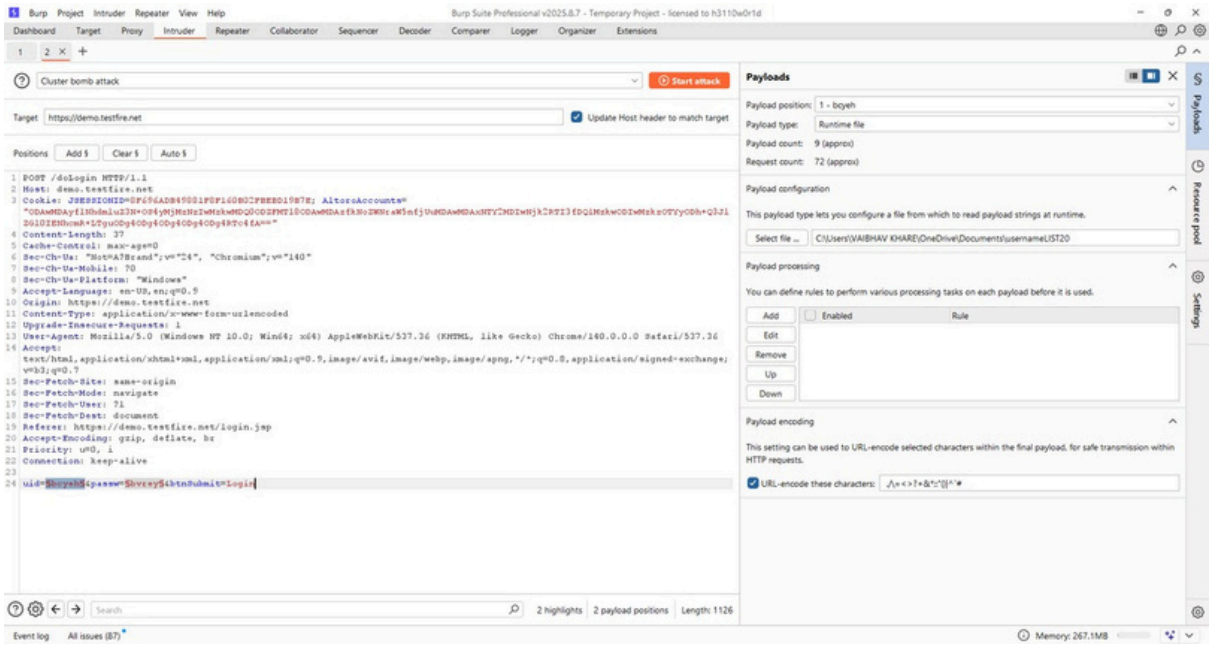
Login Brute-Force	
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	8.2
CWE-ID	CWE-307
OWASP CATEGORY	Broken Authentication
DESCRIPTION	
Attackers can perform automated guessing (brute-force), password-spraying, or credential-stuffing attacks to gain account access. This includes abuse via APIs and	

automated tools that may try large lists of username/password pairs or bypass naive rate limits.
IMPACT
Account takeover (including administrative accounts) leading to data theft, fraud, or unauthorized actions.
AFFECTED URL
https://demo.testfire.net/login.jsp
REFERENCE URL FOR MITIGATION
CWE-307 — Improper Restriction of Excessive Authentication Attempts. cwe.mitre.org OWASP Authentication Cheat Sheet (rate-limiting, lockout, MFA, secure recovery). cheatsheetseries.owasp.org
RECOMMENDATIONS
Rate limit + per-account and per-IP throttling,Require MFA for privileged and high-risk accounts.,
STEPS TO REPRODUCE / PROOF OF CONCEPT
Go to the affected url..

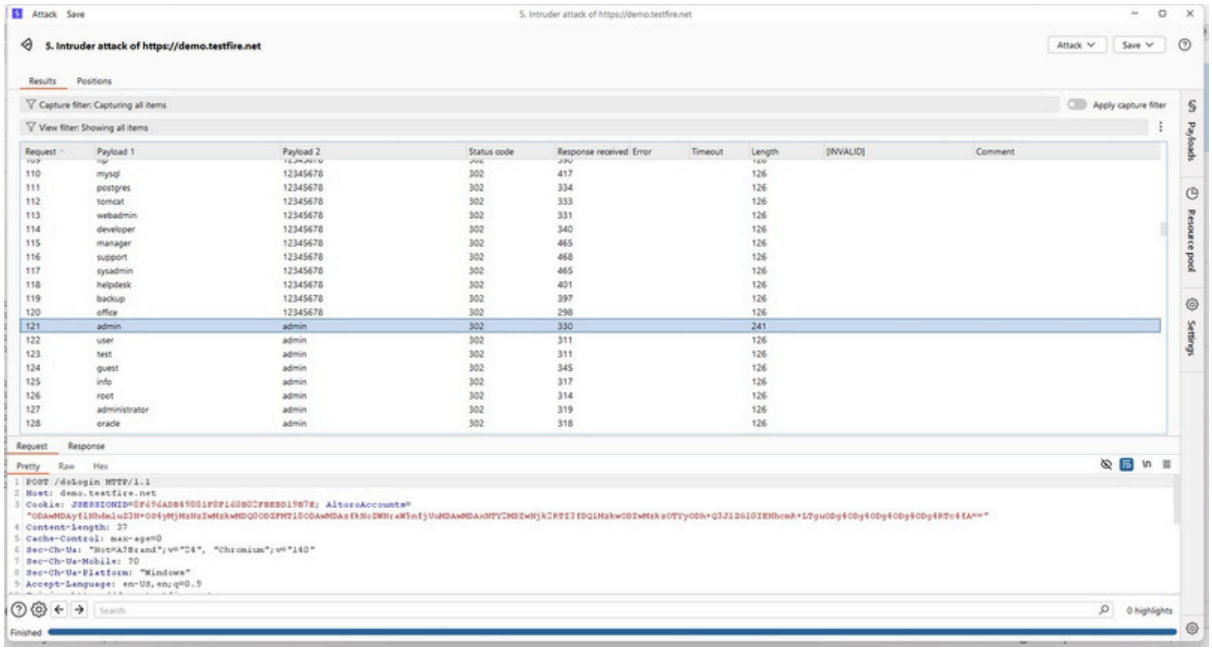
Using Burp Intruder with *Pitchfork* and *Cluster Bomb* modes, username and password lists were loaded to automate login attempts on the target (https://demo.testfire.net/login.jsp).



Multiple combinations of usernames and passwords were sent in parallel HTTP POST requests to identify valid login credentials by comparing response length, status code, and redirect behavior.



The response for the pair admin:admin had a different status/length, indicating successful login — confirming that the application is vulnerable to brute-force attacks due to missing rate-limiting or account lockout mechanisms.

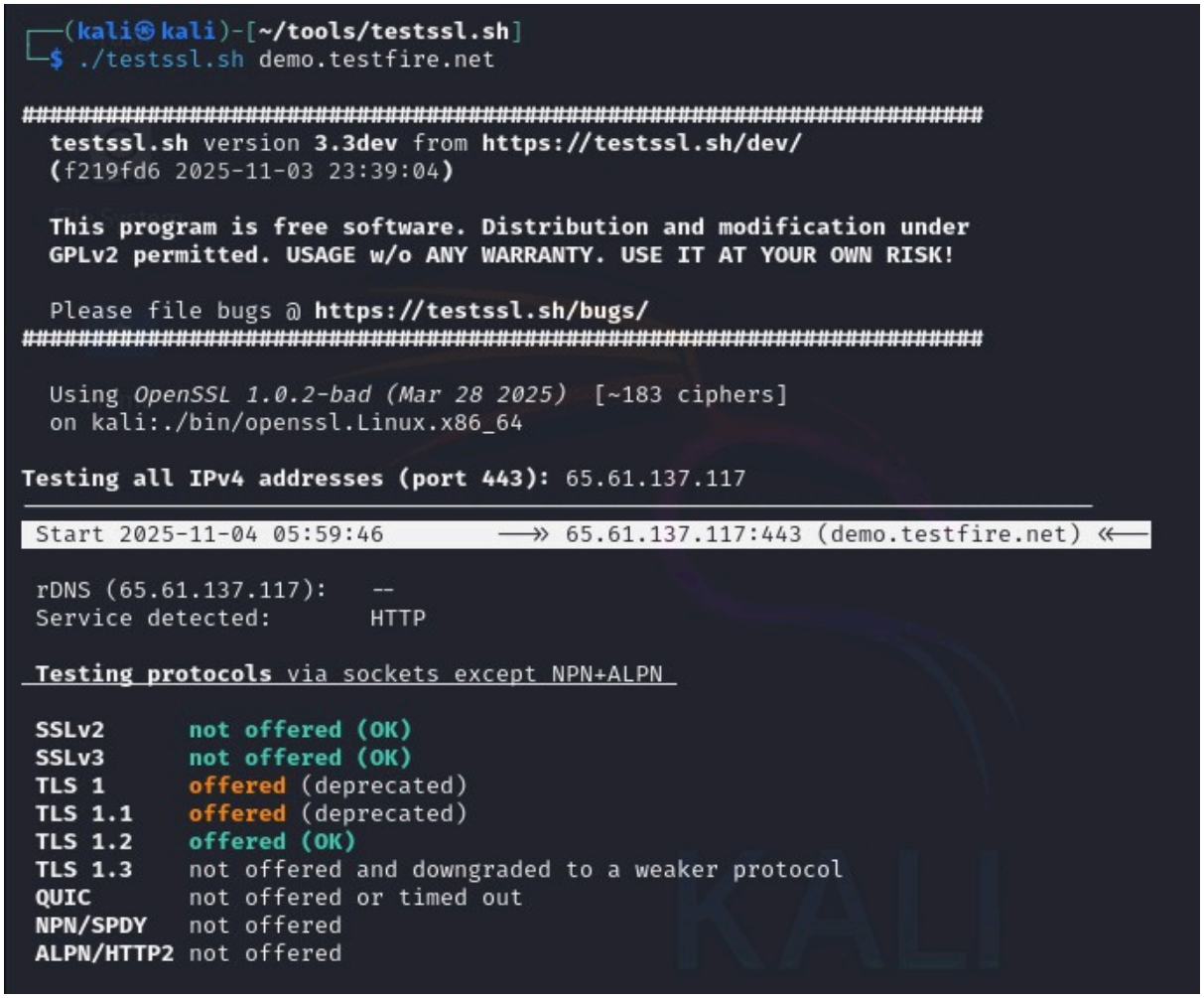


1.6 TLS 1.0/1.1 Protocol Detection

TLS 1.0/1.1 Protocol Detection	
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	7.5
CWE-ID	CWE-327
OWASP CATEGORY	Cryptographic Faliures
DESCRIPTION	
TLS 1.0 and/or **TLS 1.1**. These versions are known to have cryptographic weaknesses and lack modern protections found in TLS 1.2 and TLS 1.3. Supporting older versions allows attackers to attempt downgrade attacks or exploit weak cipher suites, putting the confidentiality and integrity of data at risk.	

IMPACT
Vulnerable to chosen-plaintext attacks (BEAST). No longer meets PCI compliance standards. Provides inadequate encryption for modern security needs. Lacks modern cipher suites and vulnerable to downgrade attacks. Considered obsolete by most security standards.
AFFECTED URL
https://demo.testfire.net
REFERENCE URL FOR MITIGATION
SSL Labs (server testing) — use to validate TLS versions & cipher suites. https://www.ssllabs.com/ssltest/
RECOMMENDATIONS
Disable TLS 1.0 in server configurations. Enforce TLS 1.2+ with AEAD ciphers. Update all client libraries.Disable TLS 1.0; enforce TLS 1.2 or higher; update libraries and configurations Disable TLS 1.1 in all server configurations. Enforce TLS 1.2+ with strong ciphers. Monitor for protocol negotiation attempts.
STEPS TO REPRODUCE / PROOF OF CONCEPT
Open kali terminal and go to ./testssl.sh demo.testfire.net

Itgive TLS 1.0/1.1 offered (deprecated)

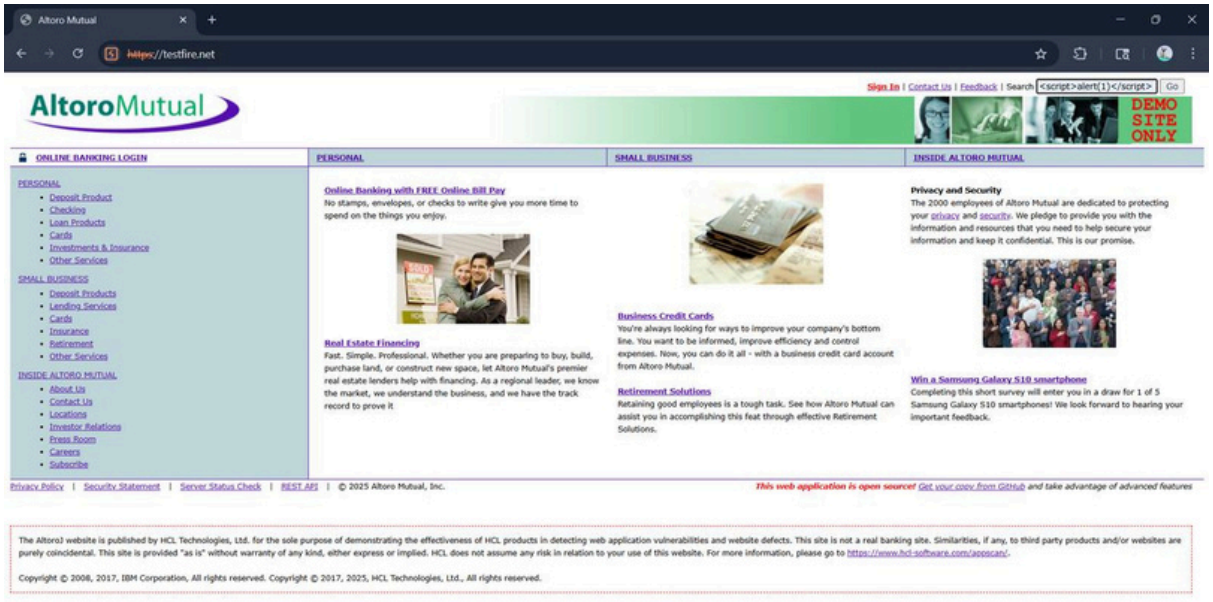

(kali㉿kali)-[~/tools/testssl.sh]
$ ./testssl.sh demo.testfire.net
testssl.sh version 3.3dev from https://testssl.sh/dev/
(f219fd6 2025-11-03 23:39:04)
This program is free software. Distribution and modification under
GPLv2 permitted. USAGE w/o ANY WARRANTY. USE IT AT YOUR OWN RISK!
Please file bugs @ https://testssl.sh/bugs/
Using OpenSSL 1.0.2-bad (Mar 28 2025) [~183 ciphers]
on kali:./bin/openssl.Linux.x86_64
Testing all IPv4 addresses (port 443): 65.61.137.117
Start 2025-11-04 05:59:46 -->> 65.61.137.117:443 (demo.testfire.net) <<--
rDNS (65.61.137.117): --
Service detected: HTTP
Testing protocols via sockets except NPN+ALPN
SSLv2 not offered (OK)
SSLv3 not offered (OK)
TLS 1 offered (deprecated)
TLS 1.1 offered (deprecated)
TLS 1.2 offered (OK)
TLS 1.3 not offered and downgraded to a weaker protocol
QUIC not offered or timed out
NPN/SPDY not offered
ALPN/HTTP2 not offered

1.7 Cross-Site Scripting (XSS)

Cross-Site Scripting (xss)	
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	8
CWE-ID	CWE-79
OWASP CATEGORY	Cross-Site Scripting (XSS)
DESCRIPTION	
Reflected XSS occurs when untrusted input from an HTTP request (query string, headers, form fields) is immediately included in an HTTP response without proper validation or context-aware encoding, allowing an attacker to craft a link or URL that, when visited by a victim, executes attacker-controlled script in the victim's browser.	
IMPACT	
Attackers execute arbitrary JavaScript in victim's browser session. Can steal cookies, modify page content, or redirect to phishing sites. Persistent XSS stored in databases affects multiple users.	
AFFECTED URL	
https://demo.testfire.net/search.jsp?query=	
REFERENCE URL FOR MITIGATION	
OWASP Web Security Testing Guide — XSS testing — testing approaches. https://owasp.org/www-project-web-security-testing-guide/ (search "XSS")	

CWE-79 (MITRE) — definition and examples. https://cwe.mitre.org/data/definitions/79.html
RECOMMENDATIONS
Validate and properly encode all user-supplied input before rendering it in web pages. Implement context-aware output encoding, use frameworks with built-in XSS protection, and enforce a strong Content Security Policy (CSP) to prevent script execution.
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1 : Go to the affected url

Step 2 : Type the payload on seach bar <script>alert(1)</script>



1.8 No Rate Limiting

No Rate Limiting

SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	8.8
CWE-ID	CWE-770
OWASP CATEGORY	Identification and Authentication Failures

DESCRIPTION

The application does not throttle or limit repeated requests (login attempts, password resets, API calls, etc.) from the same user/IP or client. This enables attackers to run automated attacks (brute force, credential stuffing, enumeration, amplification) without meaningful slowdown or blocking.

IMPACT

Unlimited requests overwhelm systems or bypass security controls. API endpoints particularly vulnerable.

AFFECTED URL

https://demo.testfire.net/login.jsp

REFERENCE URL FOR MITIGATION

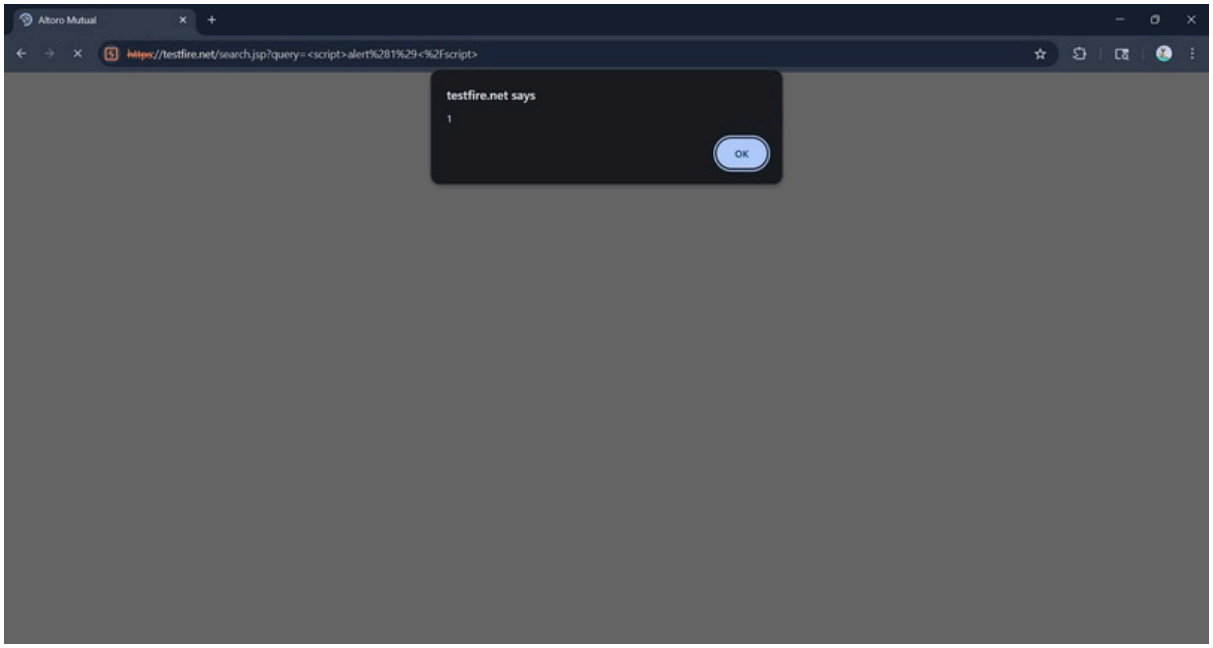
OWASP Rate Limiting Recommendations (OWASP Top 10: A6 Security Misconfiguration)
https://owasp.org/Top10/A05_2021-Security_Misconfiguration/

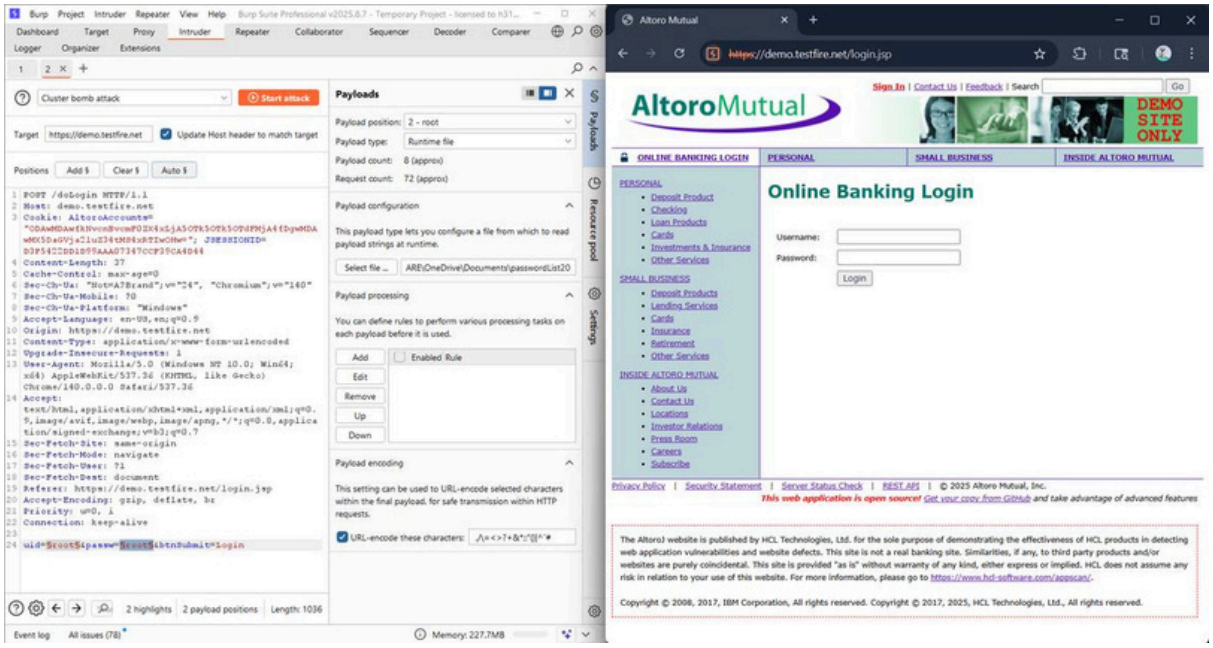
OWASP Cheat Sheet: Blocking Brute Force Attacks Cheat Sheet

https://cheatsheetseries.owasp.org/cheatsheets/Blocking_Brute_Force_Attacks_Cheat_Sheet.html

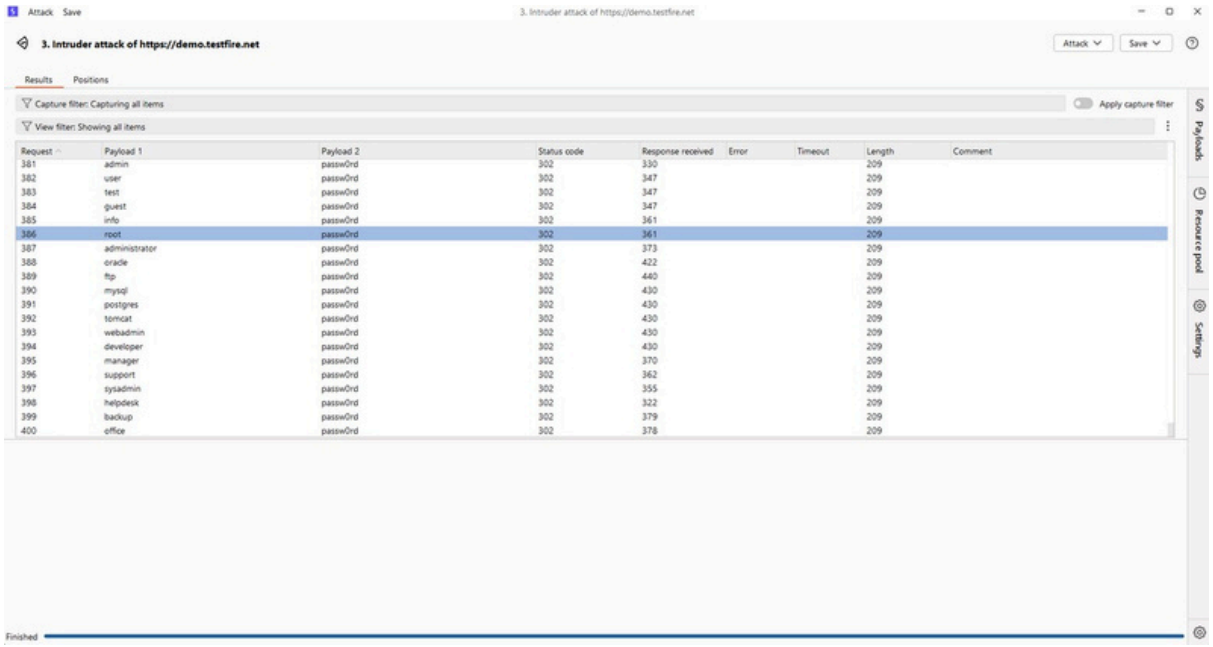
RECOMMENDATIONS

Implement sliding window rate limiting (e.g., 100 requests/minute). Use Redis for distributed systems.Implement rate limiting, IP-based throttling, CAPTCHA, and account lockout after threshold of failed attempts
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1 : Enter random username & password and capture their request /dologin in burpsuite then send this request to intruder and set target or select cluster bomb attack then set payload runtime or add wordlist or username and password then start the attack they will try 72request count..





Step 2 : Their is no rate limiting that's way we request 400 times.



1.9 Improper Input Validation

Improper Input Validation	
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	8
CWE-ID	CWE-20
OWASP CATEGORY	injection
DESCRIPTION	
The application does not properly validate user-supplied input before processing it. This can allow attackers to inject unexpected data or exploit business logic flaws, leading to potential SQL Injection, XSS, or command execution vulnerabilities.	
IMPACT	
Unvalidated inputs enable injection attacks (SQLi, XSS, RCE). Failure to sanitize allows attackers to bypass client-side checks.	
AFFECTED URL	
https://demo.testfire.net/bank/transfer.jsp	
REFERENCE URL FOR MITIGATION	
OWASP Input Validation Cheat Sheet: https://cheatsheetseries.owasp.org/cheatsheets/Input_Validation_Cheat_Sheet.html CWE-20: Improper Input Validation: https://cwe.mitre.org/data/definitions/20.html	
RECOMMENDATIONS	

Whitelist input patterns. Use parameterized queries. Implement library-based sanitization (e.g., OWASP ESAPI). Test with fuzz vectors.Apply strict input validation on server-side, use whitelisting, sanitize and encode input, avoid relying solely on client-side validation
STEPS TO REPRODUCE / PROOF OF CONCEPT
Image 1: Setting Up the Attack • Attacker enters a legitimate small transferof **10,000** from account 800002 to 800003 • Burp Suite intercepts the HTTP request • At the bottom (line 24), you can see the request parameters ready to be manipulated

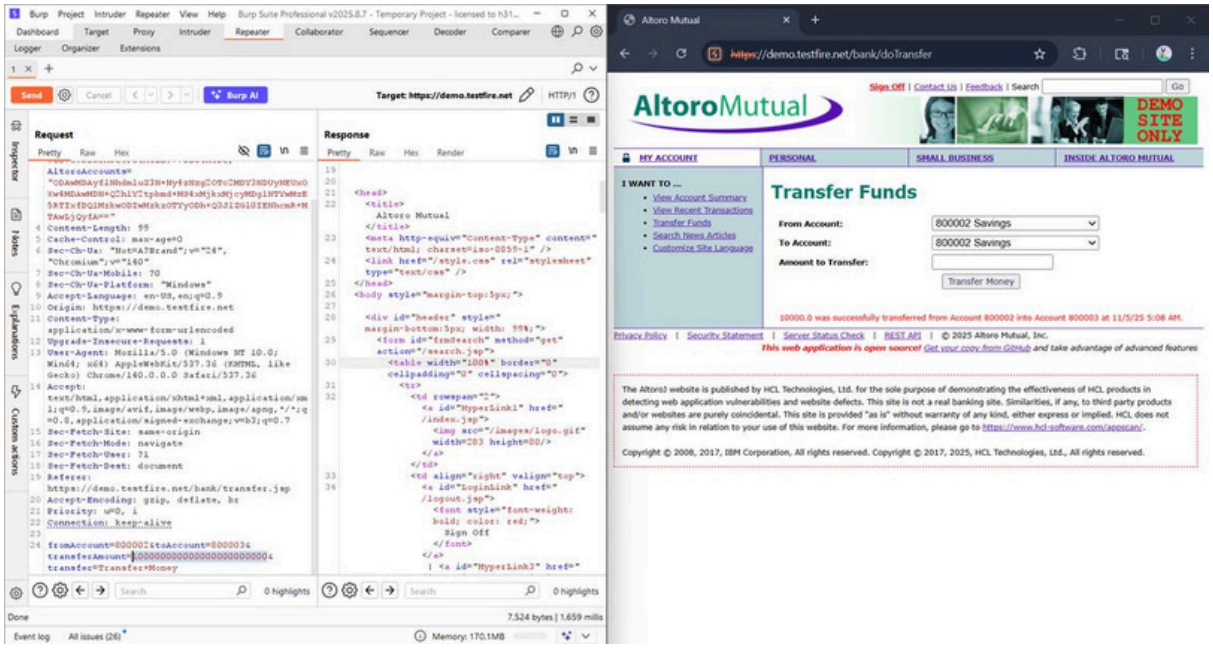
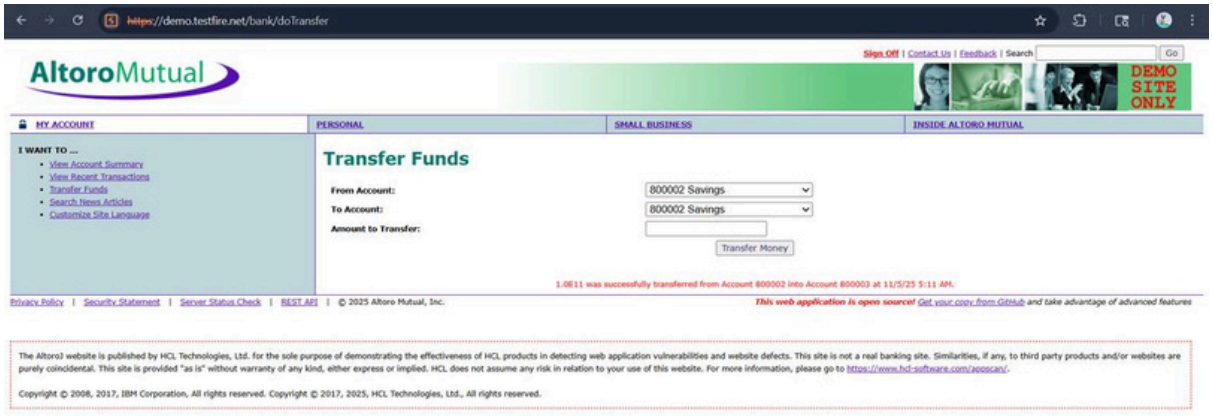


Image 2: Manipulating the Request

- In Burp Suite's Proxy tab, the attacker modifies the intercepted request
- Changes transferAmount=10000 to transferAmount=**10000000000** (10 billion!)
- The request shows: fromAccount=800002&toAccount=800003&transferAmount=10000000000
- Attacker then forwards this modified request to the server



Successful Exploitation

- The server accepts the manipulated request without proper validation
- Success message appears: "1.0E11 was successfully transferred from Account 800002 into Account 800003"
- 1.0E11 = 100,000,000,000 (100 billion in scientific notation)
- The attacker successfully transferred a massive amount despite only entering $10 initially

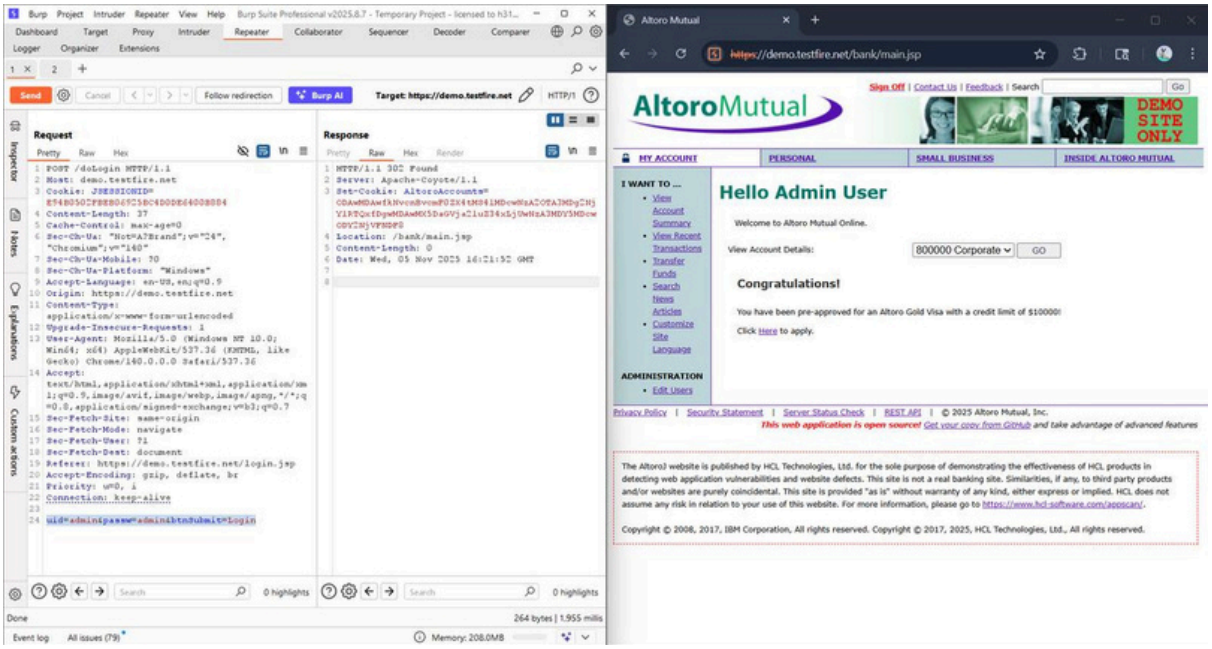
1.10 Plaintext Credentials

	Plaintext Credentials
SEVERITY	**High**
STATUS	**OPEN**
CVSS SCORE	9.1
CWE-ID	CWE-319
OWASP CATEGORY	Cryptographic Failures

DESCRIPTION
The application transmits user credentials in **plaintext** without encryption. If an attacker intercepts the communication or gains access to the storage, they can directly read usernames and passwords.
IMPACT
Credentials transmitted without encryption can be intercepted via MITM attacks. Network sniffing reveals passwords in transit. Violates PCI DSS and other compliance standards.
AFFECTED URL
https://demo.testfire.net/login.jsp
REFERENCE URL FOR MITIGATION
OWASP Password Storage Cheat Sheet https://cheatsheetseries.owasp.org/cheatsheets/Password_Storage_Cheat_Sheet.html CWE-312 – Cleartext Storage of Sensitive Information https://cwe.mitre.org/data/definitions/312.html
RECOMMENDATIONS
Enforce HTTPS with HSTS header. Redirect all HTTP to HTTPS. Use secure cookies with 'Secure' flag. Implement certificate pinning for critical applications.Use HTTPS for all communications, store passwords using strong hashing (bcrypt/argon2), avoid hardcoding credentials
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1:Go to affected URL and open burpsuite then capture /doLogin request fill the Credentials and login in to the website..

Step 2: Username and password are sent **unencrypted** in the POST body. Even though it's HTTPS, the parameter names reveal sensitive data structure.

uid=admin&passw=admin&btnSubmit=Login

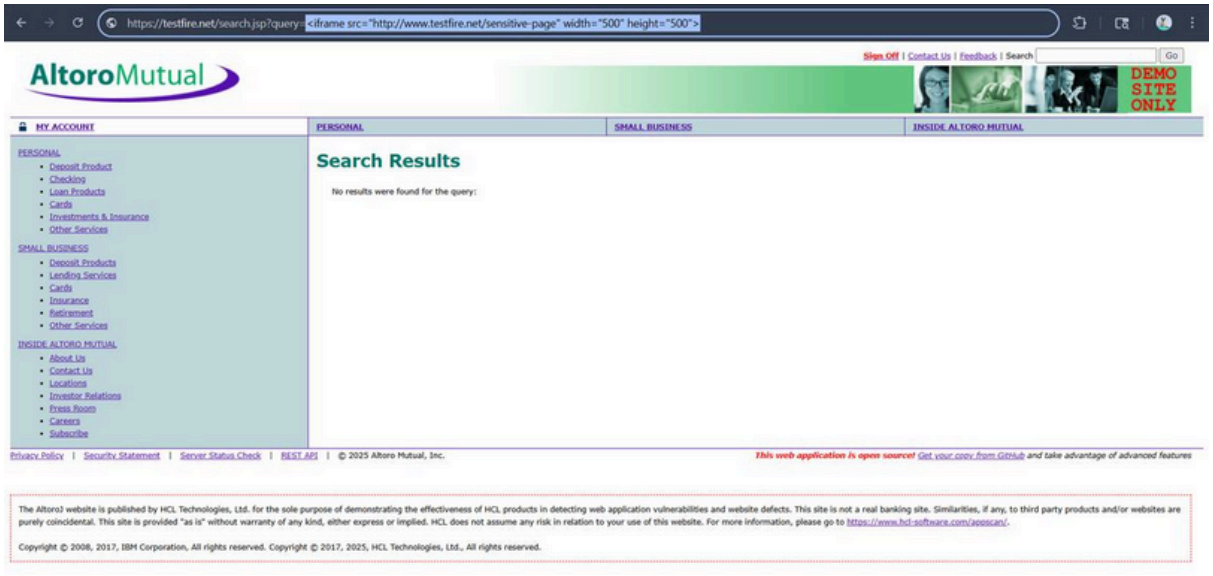


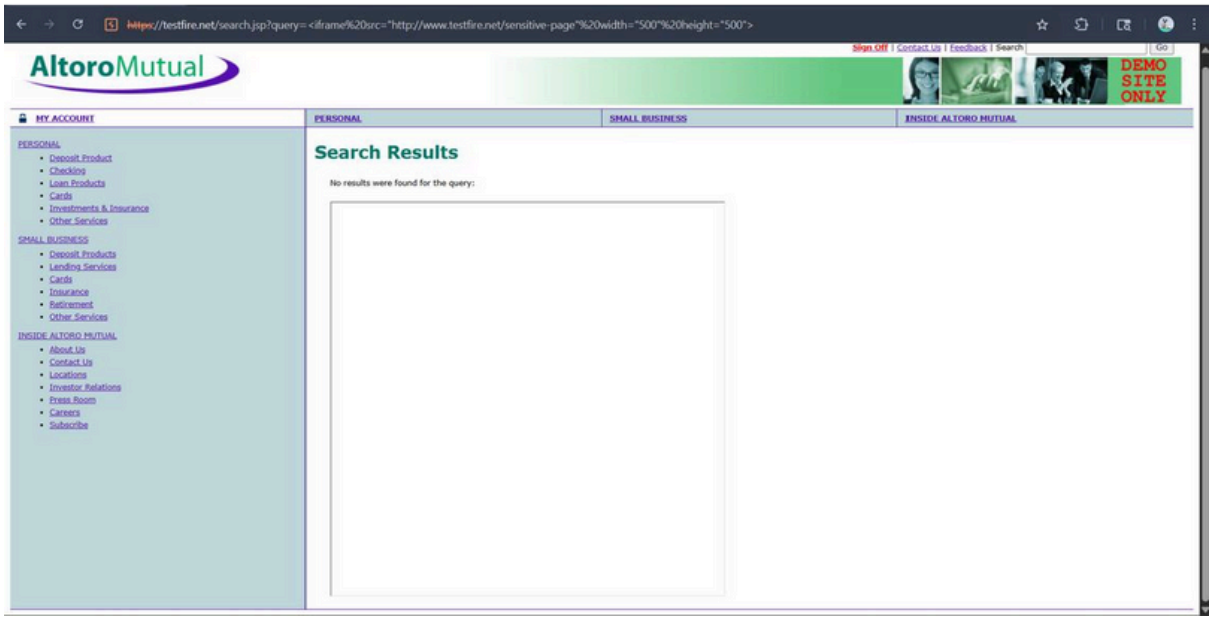
1.11 Click-Jacking

Click-Jacking	
SEVERITY	Medium
STATUS	**OPEN**
CVSS SCORE	6.1
CWE-ID	CWE-451
OWASP CATEGORY	Insecure Design
DESCRIPTION	

Clickjacking (UI redressing) occurs when an attacker embeds a target page inside a transparent or hidden frame on an attacker-controlled site, and tricks a victim into interacting with UI elements on the framed page (buttons/links/forms) by presenting decoy content on top. The application fails to restrict or control whether it may be framed by other origins, enabling these attacks
IMPACT
Attackers create invisible frames forcing users to click hidden UI elements. Victims unknowingly perform actions like funds transfer or changing account settings. This exploits user trust in the visible website content.
AFFECTED URL
https://demo.testfire.net/search.jsp?query=
REFERENCE URL FOR MITIGATION
OWASP Clickjacking Defense Cheat Sheet. cheatsheetseries.owasp.org OWASP Web Security Testing Guide — Testing for Clickjacking. owasp.org MDN / X-Frame-Options and CSP frame-ancestors guidance. MDN Web Docs+1
RECOMMENDATIONS
Implement X-Frame-Options: DENY header. Use Content Security Policy with frame-ancestors directive. Consider JavaScript frame-busting scripts for legacy browsers. Visual cues for sensitive actions.
STEPS TO REPRODUCE / PROOF OF CONCEPT
go to the Affected URL...

Add iframe on query= <iframe src="http://www.testfire.net/sensitive-page" width="500" height="500">





1.12AccessibleByIPAddress

Accessible by IP address	
SEVERIT Y	**Medium**
STATUS	**OPEN**
CVSS SCORE	5.5
CWE-ID	CWE-200
OWASP CATEGORY	Security Misconfiguration

DESCRIPTION

The web application or service is reachable directly via its IP address (for example http://1.2.3.4) rather than only by an expected hostname. This can allow attackers or scanners to: discover services that were intended to be hidden, bypass host-based routing or virtual-host name checks, encounter default or management pages, cause TLS certificate name mismatches (leading to user confusion or ignoring warnings), or probe for internal/legacy interfaces.

IMPACT

Bypasses WAF/DNS policies, exposing admin interfaces or APIs. Attackers scan IP ranges to find unprotected endpoints.

AFFECTED URL

http://demo.testfire.net

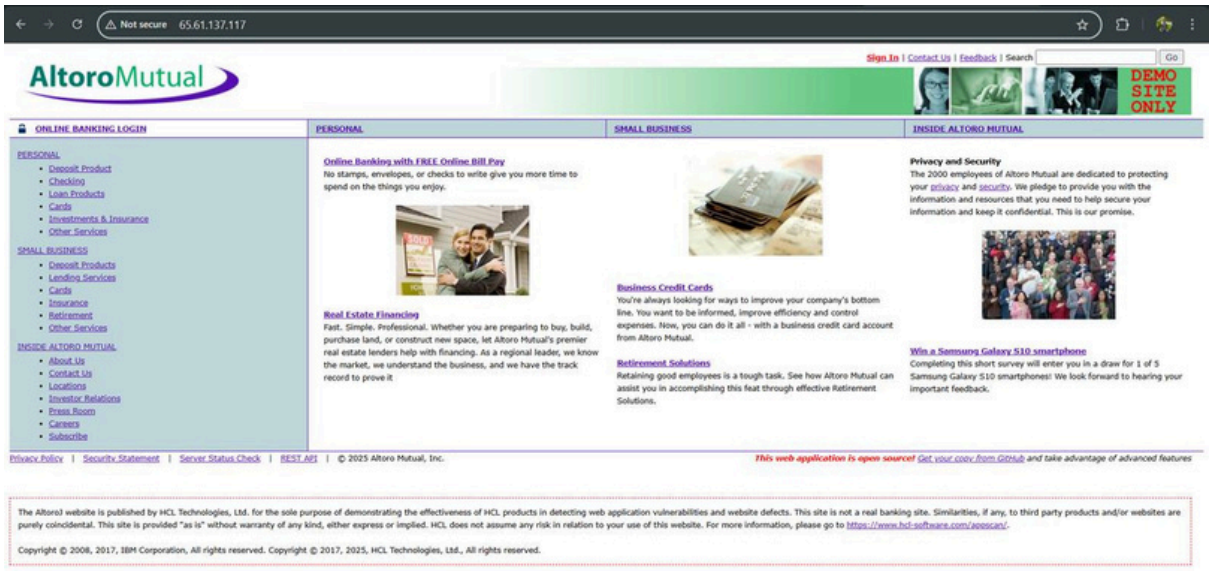
REFERENCE URL FOR MITIGATION

OWASP — Security Misconfiguration (Top 10) — guidance on avoiding misconfigurations. https://owasp.org/www-project-top-ten/ (see *A05:2021 — Security Misconfiguration*)

OWASP Host header / Host-based logic — validate Host headers and avoid trusting client-supplied hostnames for access control. https://cheatsheetseries.owasp.org/cheatsheets/Host_Header_Attacks_Prevention_Cheat_Sheet.html

RECOMMENDATIONS

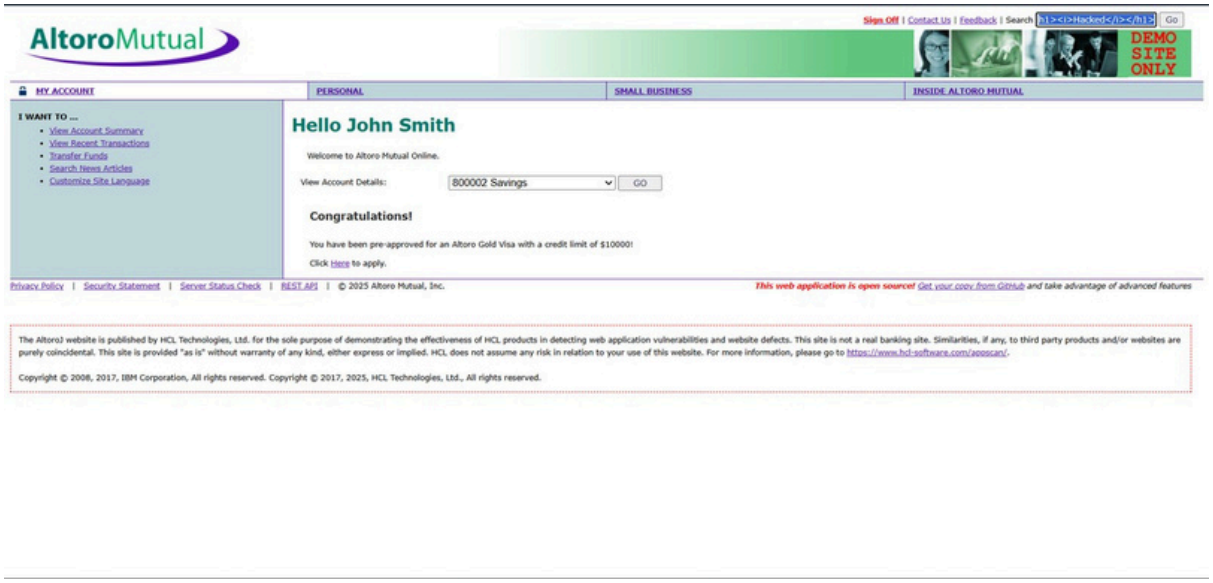
Restrict access to whitelisted domains. Disable IP-based access. Use Host header validation. Configure load balancers to filter IP requests. Restrict access to application via domain name only; configure firewall to block direct IP access
STEPS TO REPRODUCE / PROOF OF CONCEPT
Try toaccess using this url : http://65.61.137.117



1.13 HTML Injection

HTML Injection	
SEVERITY	Medium
STATUS	OPEN
CVSS SCORE	6.4
CWE-ID	CWE-80

OWASP CATEGORY	Identification and Authentication Failures
DESCRIPTION	
HTML injection occurs when an application includes untrusted input in HTML pages without proper validation or output encoding, allowing an attacker to inject arbitrary HTML (and often JavaScript) that is rendered in other users' browsers	
IMPACT	
Unescaped HTML alters page structure, creates fake UI elements, or delivers phishing content. Often precursor to XSS.	
AFFECTED URL	
https://demo.testfire.net/search.jsp?query=	
REFERENCE URL FOR MITIGATION	
OWASP Web Security Testing Guide — Testing for HTML Injection / XSS. owasp.org PortSwigger — Injecting into direct HTML & XSS resources. portswigger.net+1	
RECOMMENDATIONS	
Implement output encoding. Use CSP to restrict inline HTML. Sanitize with libraries like DOMPurify.Sanitize and encode all user inputs; use security libraries to handle HTML content safely.	
STEPS TO REPRODUCE / PROOF OF CONCEPT	
Go to affected url and type is payload HACKED	


AltoroMutual
Sign Off | Contact Us | Feedback | Search
DEMO SITE ONLY
MY ACCOUNT
PERSONAL
SMALL BUSINESS
INSIDE ALTORO MUTUAL
I WANT TO ...
View Account Summary
View Recent Transactions
Transfer Funds
Search News Articles
Customize Site Language
Hello John Smith
Welcome to Altoro Mutual Online.
View Account Details:
800002 Savings
GO
Congratulations!
You have been pre-approved for an Altoro Gold Visa with a credit limit of $10000!
Click Here to apply.
Privacy Policy | Security Statement | Server Status Check | REST API | © 2025 Altoro Mutual, Inc.
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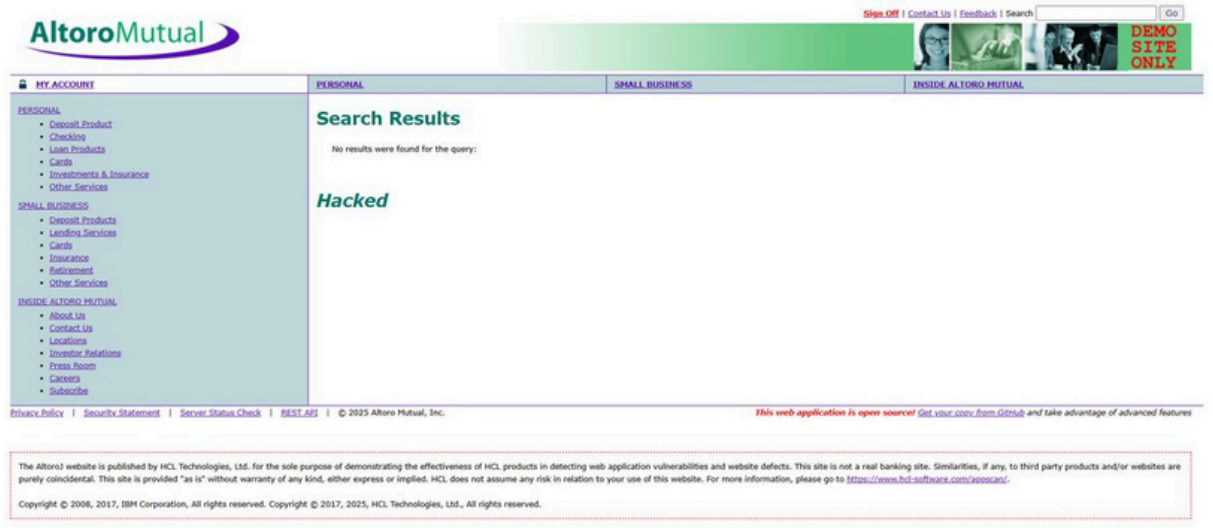
AltoroMutual
Sign Off | Contact Us | Feedback | Search
DEMO SITE ONLY
MY ACCOUNT
PERSONAL
SMALL BUSINESS
INSIDE ALTORO MUTUAL
PERSONAL
Deposit Product
Checking
Loan Products
Cards
Investments & Insurance
Other Services
SMALL BUSINESS
Deposit Products
Lending Services
Cards
Insurance
Retirement
Other Services
INSIDE ALTORO MUTUAL
About Us
Contact Us
Locations
Investor Relations
Press Room
Careers
Subscribe
Search Results
No results were found for the query:
Hacked
Privacy Policy | Security Statement | Server Status Check | REST API | © 2025 Altoro Mutual, Inc.
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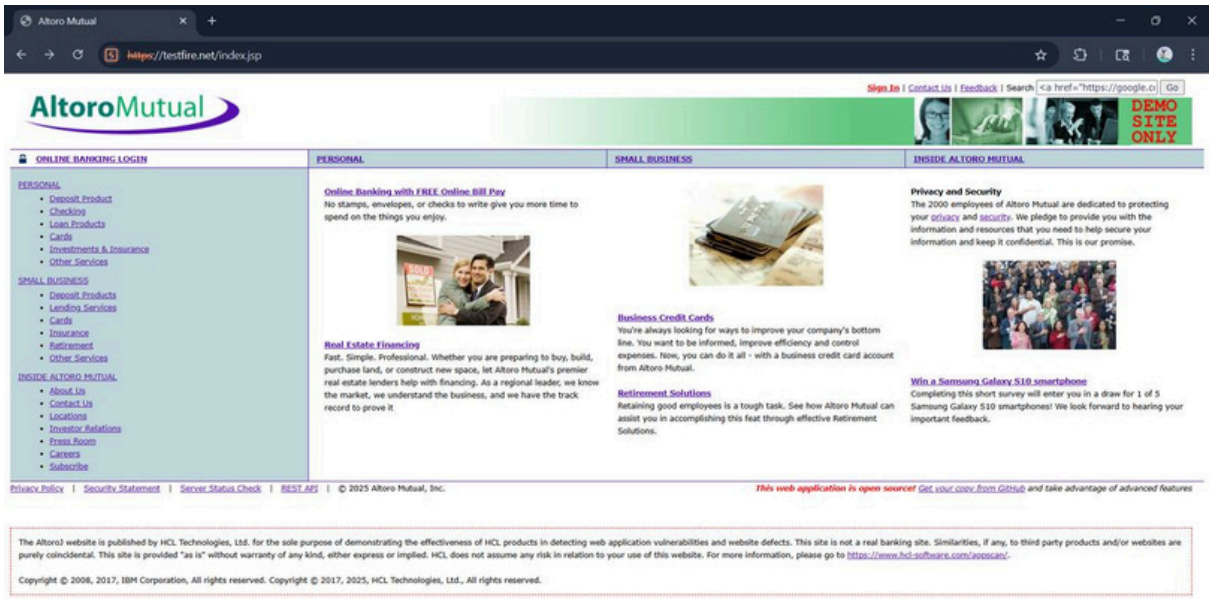
1.14 Unvalidated URL Redirection

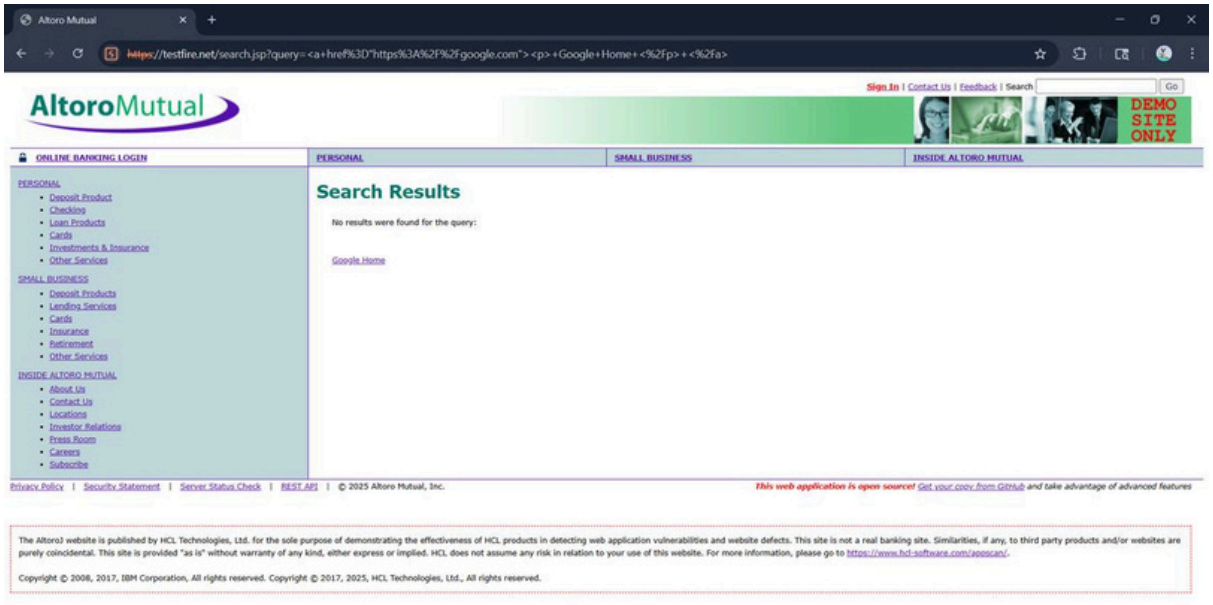
Unvalidated URL Redirection	
SEVERITY	Medium
STATUS	**OPEN**
CVSS SCORE	5.0
CWE-ID	CWE-601
OWASP CATEGORY	Security Misconfiguration
DESCRIPTION	
The application allows redirection to external URLs without validation, enabling attackers to craft malicious links that redirect users to untrusted websites.	
IMPACT	
Attackers can trick users into visiting malicious websites by exploiting unvalidated redirects, leading to phishing, credential theft, or malware distribution.	
AFFECTED URL	
https://demo.testfire.net/search.jsp?query=	
REFERENCE URL FOR MITIGATION	
CWE-601 — URL Redirection to Untrusted Site. https://cwe.mitre.org/data/definitions/601.html	

OWASP — Unvalidated Redirects and Forwards. https://owasp.org/www-community/attacks/Unvalidated_Redirects_and_Forwards
RECOMMENDATIONS
Validate and restrict redirect URLs to a trusted allowlist or internal paths only, and avoid using user-controlled input directly for redirection.
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1 : go to the affected url

Step 2 : type the paylod on the url

payload : Google Home

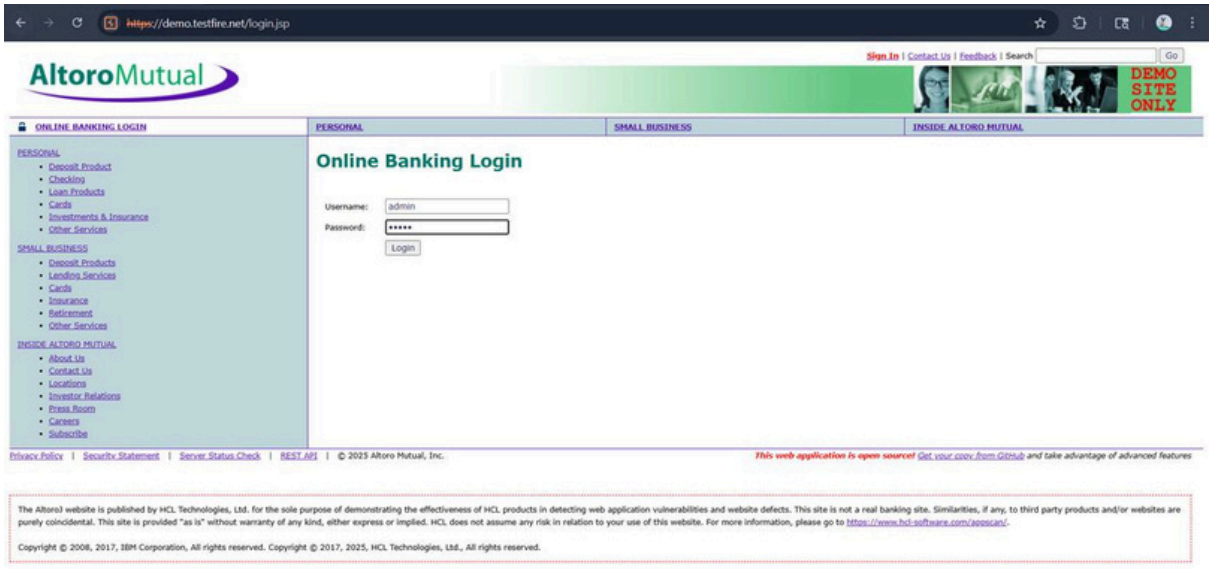




1.15 2FA Not Implemented

2FA Not Implemented	
SEVERITY	**Medium**
STATUS	**OPEN**
CVSS SCORE	6.8
CWE-ID	CWE-307
OWASP CATEGORY	Identification and Authentication Failures
DESCRIPTION	
The application relies solely on single-factor authentication (username and password) and does not implement **Two-Factor Authentication (2FA)** or **Multi-Factor Authentication (MFA)**. Without a second verification factor, compromised	

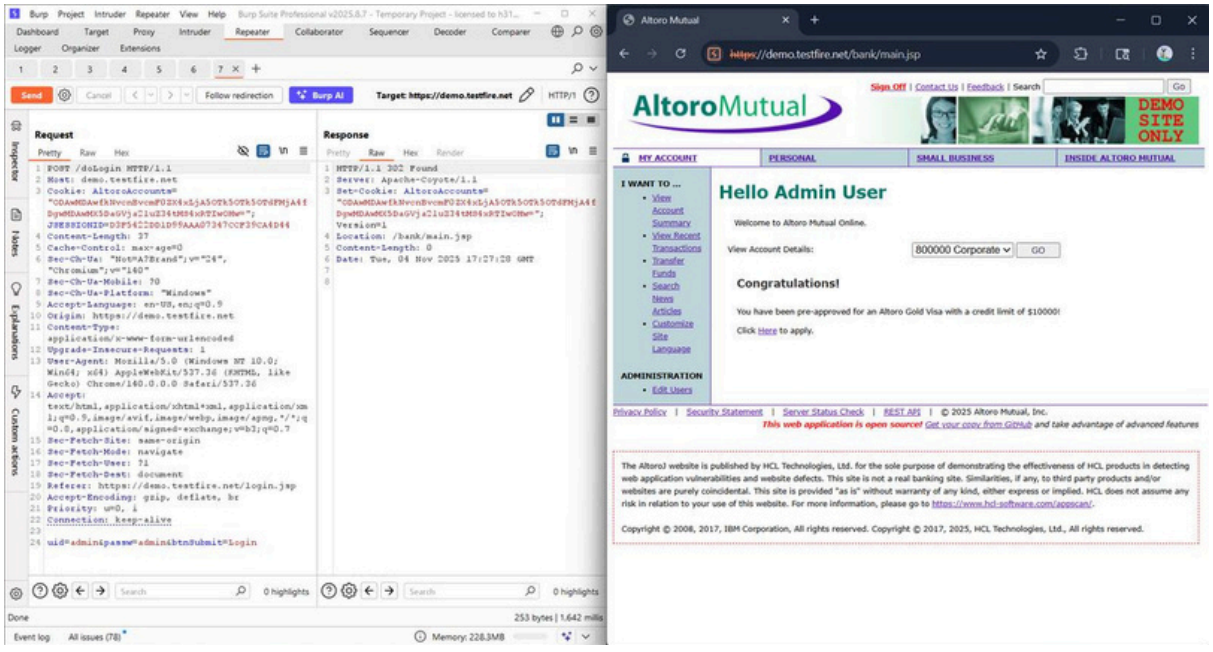
credentials (through phishing, brute force, or credential stuffing) can directly grant attackers access to user accounts or administrative interfaces.
IMPACT
Accounts vulnerable to credential stuffing. No defense against password reuse or phishing.
AFFECTED URL
https://demo.testfire.net/login.jsp
REFERENCE URL FOR MITIGATION
OWASP Authentication Cheat Sheet – https://cheatsheetseries.owasp.org/cheatsheets/Authentication_Cheat_Sheet.html CWE-287: Improper Authentication – https://cwe.mitre.org/data/definitions/287.html
RECOMMENDATIONS
Implement TOTP (Google Authenticator) or WebAuthn. Provide backup codes. Educate users.Implement two-factor authentication (2FA) for all sensitive user accounts and critical functionality
STEPS TO REPRODUCE / PROOF OF CONCEPT
step 1: Go to the affected url Enter valid credentials (e.g., admin:admin) and capture the request using **Burp Suite Repeater**.



step 2 :

Access Granted:

User is successfully logged in as **Admin** and redirected to /bank/main.jsp, confirming that no multi-factor authentication mechanism is implemented.



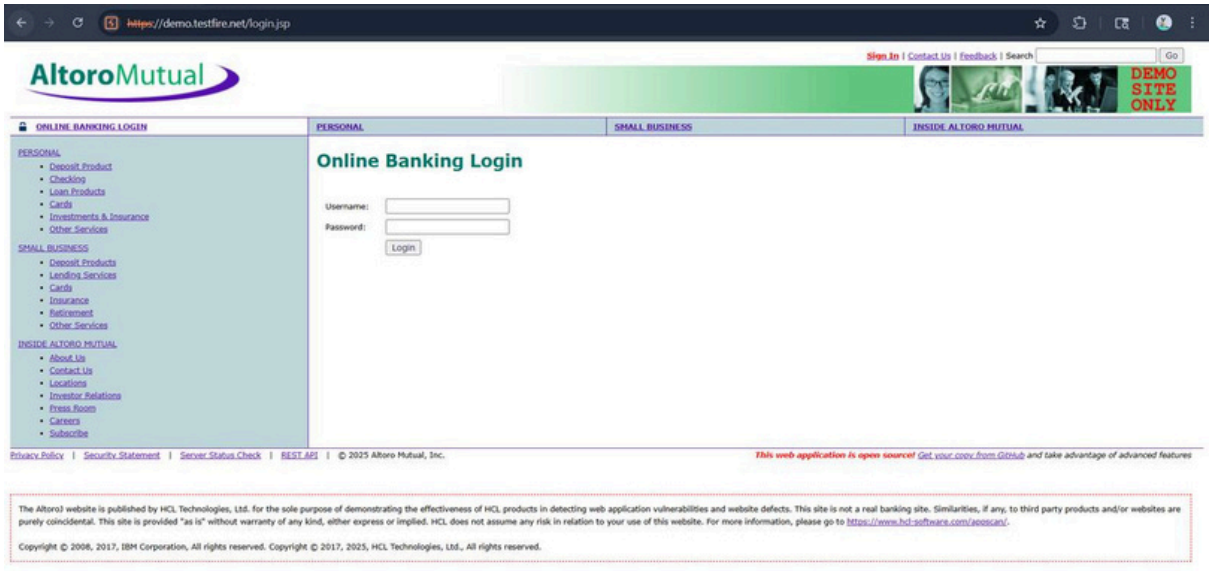
Observation:

The system authenticates users using **only usernameandpassword** , without verifying user identity through **2FA methods** like email OTP, SMS token, or authenticator app.

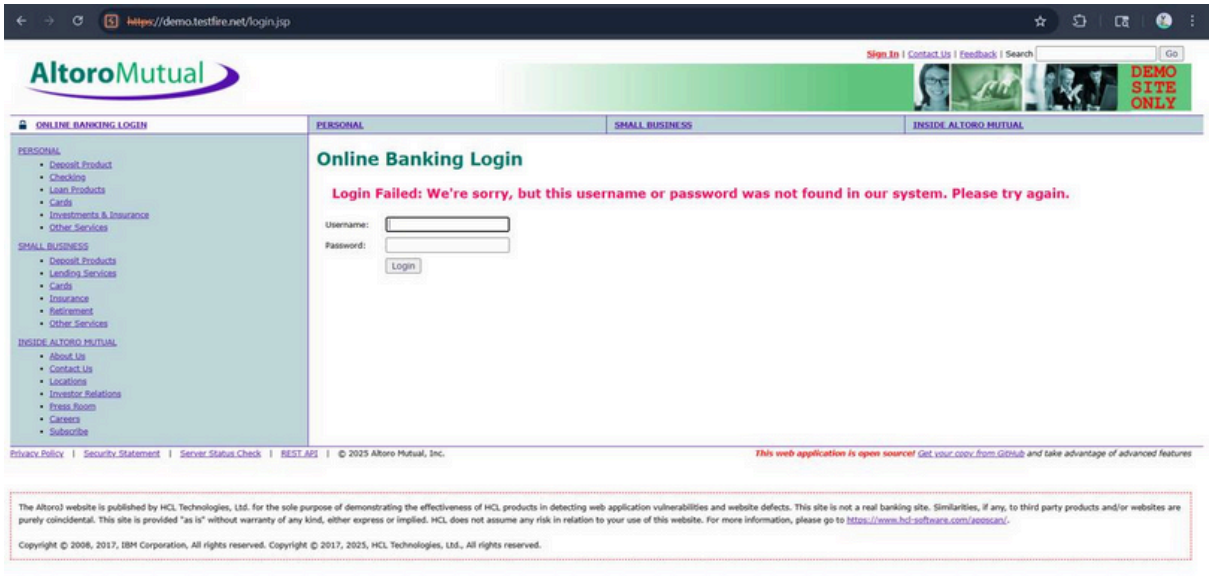
1.16 CAPTCHA Not Found

CAPTCHA Not Found	
SEVERITY	Medium
STATUS	OPEN
CVSS SCORE	6.5
CWE-ID	CWE-799
OWASP CATEGORY	Identification and Authentication Failures
DESCRIPTION	
The application's login, registration, or password reset page does not implement a CAPTCHA mechanism. Without CAPTCHA, attackers can automate requests such as brute-force login attempts, credential stuffing, or spam submissions using bots, leading to account compromise or service disruption.	
IMPACT	
Login/registration forms without CAPTCHA allow unlimited automated attempts. Enables credential stuffing attacks.	
AFFECTED URL	
https://demo.testfire.net/login.jsp	
REFERENCE URL FOR MITIGATION	
Google reCAPTCHA Documentation https://developers.google.com/recaptcha	

OWASP Authentication Cheat Sheet https://cheatsheetseries.owasp.org/cheatsheets/Authentication_Cheat_Sheet.html
RECOMMENDATIONS
Implement reCAPTCHA v3 or hCAPTCHA. Monitor for abnormal traffic patterns. Combine with rate limiting.Implement CAPTCHA or reCAPTCHA to prevent automated bots from abusing authentication and input forms
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1: Navigate to the login page (https://demo.testfire.net/login.jsp) and observe that no CAPTCHA or verification mechanism is present on the login form.



Step2 : Attempt multiple login submissions with different credentials — the application allows repeated requests without any CAPTCHA challenge or rate limiting.


https://demo.testfire.net/login.jsp
AltoroMutual
Sign In | Contact Us | Feedback | Search
DEMO SITE ONLY
ONLINE BANKING LOGIN
PERSONAL
SMALL BUSINESS
INSIDE ALTORO MUTUAL
Online Banking Login
Login Failed: We're sorry, but this username or password was not found in our system. Please try again.
Username:
Password:
Login
Privacy Policy | Security Statement | Server Status Check | REST API | © 2025 Altoro Mutual, Inc.
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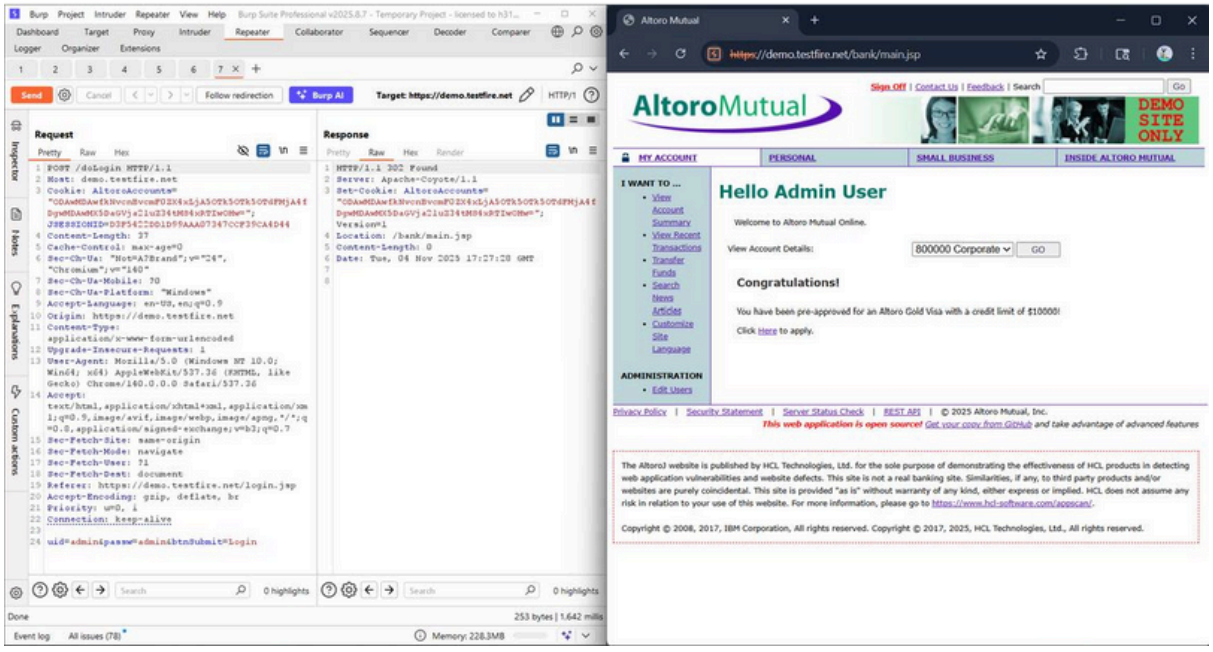
Burp Project Intruder Repeater View Help
Request
Response
Target: https://demo.testfire.net
Altoro Mutual
https://demo.testfire.net/bank/main.jsp
AltoroMutual
Sign Off | Contact Us | Feedback | Search
DEMO SITE ONLY
MY ACCOUNT
PERSONAL
SMALL BUSINESS
INSIDE ALTORO MUTUAL
I WANT TO ...
Hello Admin User
Welcome to Altoro Mutual Online.
View Account Details:
800000 Corporate
GO
Congratulations!
You have been pre-approved for an Altoro Gold Visa with a credit limit of $10000!
Click Here to apply.
ADMINISTRATION
Edit Users
Privacy Policy | Security Statement | Server Status Check | REST API | © 2025 Altoro Mutual, Inc.
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1.17 Missing X-Frame-Option Header

Missing X-Frame-Options Header	
SEVERITY	Medium
STATUS	OPEN
CVSS SCORE	5.8
CWE-ID	CWE-1021
OWASP CATEGORY	Security Misconfiguration
DESCRIPTION	
The X-Frame-Options HTTP response header is used to control whether a web page can be embedded into a <frame>, <iframe>, or <object> tag on another site. If this header is missing, attackers can load your web page within a malicious site using an iframe and perform clickjacking attacks, tricking users into clicking hidden elements like “Transfer” or “Delete Account” buttons without realizing it.	
IMPACT	
Pages can be embedded in malicious frames to trick users into unwanted actions. Particularly dangerous for authentication pages.	
AFFECTED URL	
https://demo.testfire.net	
REFERENCE URL FOR MITIGATION	
OWASP Clickjacking Defense Cheat Sheet: https://cheatsheetseries.owasp.org/cheatsheets/Clickjacking_Defense_Cheat_Sheet.html	

MDN Web Docs – X-Frame-Options: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
RECOMMENDATIONS
Set X-Frame-Options: DENY or SAMEORIGIN. Combine with CSP frame-ancestors for modern browsers.Add X-Frame-Options: DENY or SAMEORIGIN to prevent framing by unauthorized sources
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1 : Open kali terminal and type this command : nikto -h https://demo.testfire.net It give The X-content-Type-Option header is not set...

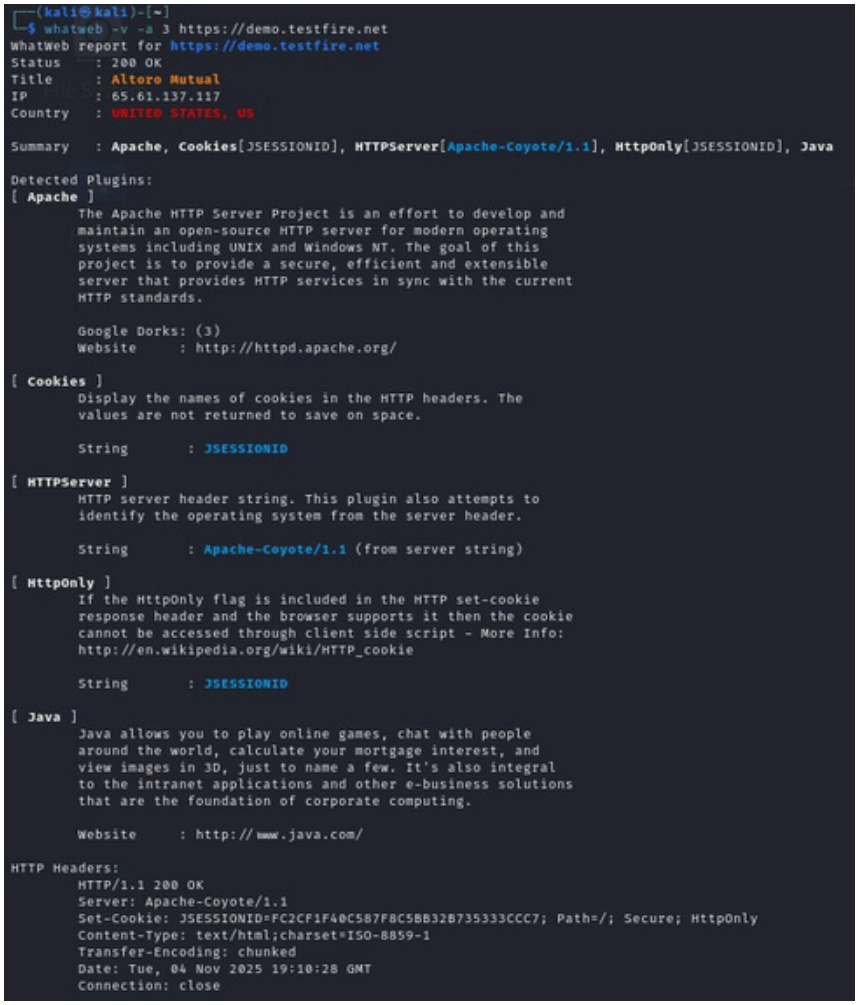
1.18 Hardcoded Version Disclosure

Hardcoded Version Disclosure	
SEVERITY	Medium
STATUS	OPEN
CVSS SCORE	6.1
CWE-ID	CWE-200
OWASP CATEGORY	Vulnerable and Outdated Components
DESCRIPTION	
The application or server reveals **software version details** (e.g., Apache, Nginx, PHP, or framework versions) within HTTP response headers, error messages, or HTML comments. This information can help attackers identify **specific versions** and exploit known vulnerabilities associated with them.	
IMPACT	
Exact software versions allow attackers to search for known CVEs. Patch timelines become predictable. Common in HTTP headers and error pages.	
AFFECTED URL	
https://demo.testfire.net	
REFERENCE URL FOR MITIGATION	
OWASP – Information Leakage Cheat Sheet: https://cheatsheetseries.owasp.org/cheatsheets/Information_Leakage_Cheat_Sheet.html	

Apache Server Hardening Guide: https://httpd.apache.org/docs/2.4/misc/security_tips.html
RECOMMENDATIONS
Disable Server/X-Powered-By headers. Obfuscate version info in responses. Patch promptly when updates are available.Remove version banners, headers, and comments; avoid exposing software version info in responses
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1: Open kali terminal.

Step 2: Using Curl tool to get information about the server or other information about the website..

Step 3: Step 2: Using Whatweb tool to get information about the server or other information about the website.



1.19 Missing X-Content-Type-Options Header

Missing X-Content-Type-Options Header	
SEVERITY	Low
STATUS	OPEN
CVSS SCORE	3.7

CWE-ID	CWE-16
OWASP CATEGORY	Security Misconfiguration
DESCRIPTION	
The HTTP security header X-Content-Type-Options prevents browsers from MIME-sniffing a response away from the declared Content-Type. If this header is missing, browsers may try to guess the content type, allowing attackers to trick browsers into executing malicious files (e.g., a script disguised as an image or text file).	
IMPACT	
Browsers may interpret files as executable content even when served with incorrect MIME types. Can lead to XSS via uploaded files.	
AFFECTED URL	
https://demo.testfire.net	
REFERENCE URL FOR MITIGATION	
OWASP Secure Headers Project: https://owasp.org/www-project-secure-headers/ MDN Web Docs – X-Content-Type-Options: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options	
RECOMMENDATIONS	
Set X-Content-Type-Options: nosniff for all responses. Validate Content-Type headers match file content.Add X-Content-Type-Options: nosniff header to all responses serving content like scripts, styles, etc.	
STEPS TO REPRODUCE / PROOF OF CONCEPT	

Step 1: Go to the kali terminal

Step 2: Use Nikto tool to find information about the header or other technology used by the website..

1.20 Missing Permissions-Policy Header

Missing Permissions-Policy Header	
SEVERITY	Low
STATUS	OPEN
CVSS SCORE	3.2
CWE-ID	CWE-16
OWASP CATEGORY	Security Misconfiguration
DESCRIPTION	
The Permissions-Policy HTTP header (formerly *Feature-Policy*) allows websites to control which browser features and APIs (like camera, microphone, geolocation, fullscreen, etc.) can be used by the site or embedded content.	

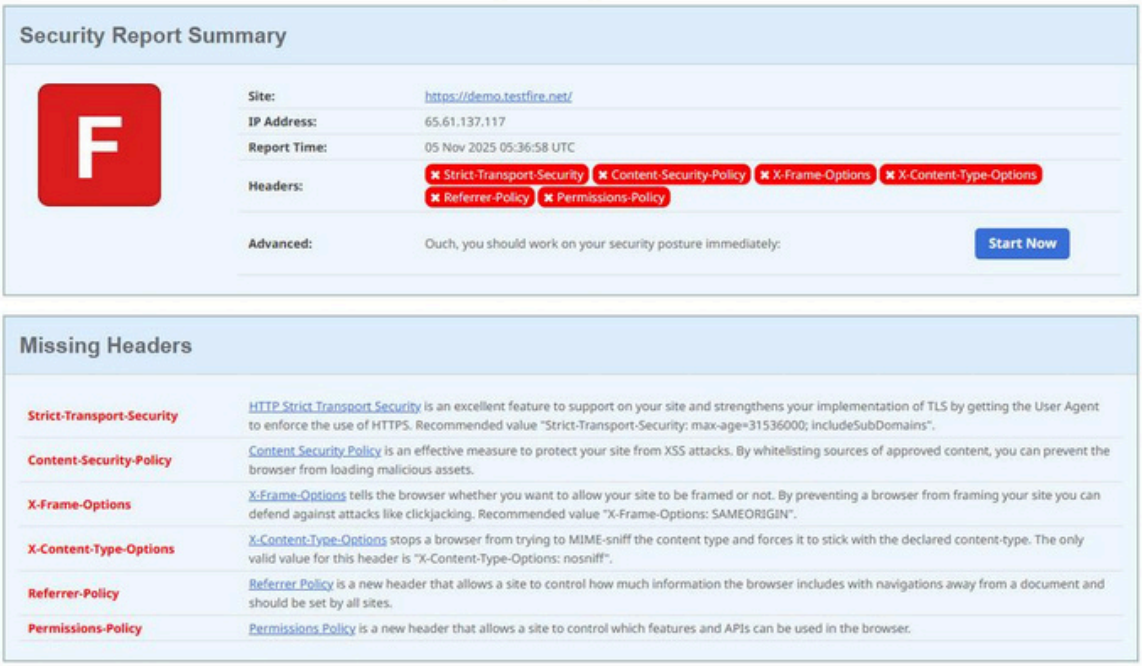
If this header is missing, attackers may exploit embedded frames or injected scripts to abuse sensitive browser features without the site owner's control.
IMPACT
Allows unrestricted access to camera, mic, geolocation without user consent. Privacy violations possible.
AFFECTED URL
https://demo.testfire.net
REFERENCE URL FOR MITIGATION
OWASP Secure Headers Project: https://owasp.org/www-project-secure-headers/ MDN Web Docs – Permissions-Policy Header: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Permissions-Policy
RECOMMENDATIONS
Implement Permissions-Policy with strict directives (e.g., geolocation=(), camera=()). Disable unused features.Add a proper Permissions-Policy header to restrict access to sensitive browser features
STEPS TO REPRODUCE / PROOF OF CONCEPT
Step 1: Open kali terminal and run command: curl -I -s https://demo.testfire.net | egrep -i 'Permissions-Policy|Feature-Policy|X-Frame-Options|Content-Security-Policy' || echo 'permissions-Policy: <missing>"

- Output showed: Permissions-Policy: <missing>
- Verified via scan — header not found in HTTP response.
- Confirms site doesn't restrict browser features like camera, mic, or geolocation.

Steps 2 :

• Go to **https://securityheaders.com**.

- Enter the target URL — https://demo.testfire.net/ — and click **Scan**.
- This confirms the **Permissions-Policy header is missing** from the server response.



1. Checklist (Test Cases Performed)

Sr. No.	Vulnerability Name	Vulnerable (Yes/No)
1	Account Lockout Policy Not Implemented	No
2	An application sent Sensitive data in URL (GET)	No
3	Anti-CSRF Token Missing	No
4	Application Accepts Arbitrary Methods	No
5	Application does not display Last Login Date and Time	No

6	Application is accessible by IP address	yes
7	Application is Vulnerable to BEAST Attack	No
8	Application is Vulnerable to BREACH Attack	No
9	Application is Vulnerable to LOGJAM Attack	No
10	Application is Vulnerable to LUCKY13 Attack	No
11	Application is vulnerable to Non-HTML page accessible	No
12	Application is Vulnerable to POODLE Attack	No
13	Application is Vulnerable to RC4 Attack	No
14	Application is Vulnerable to ROBOT Attack	No
15	Application is Vulnerable to Secure Renegotiation	No
16	Application is Vulnerable to SWEET32 Attack	No
17	Application is Vulnerable to TLS_FALLBACK_SCSV Attack	No
18	ASP.NET Debugging Enabled	No
19	Authentication Bypass (Blind SQL Injection)	No
20	Authentication Bypass by Response Manipulation	No
21	Auto-complete is Enabled	No
22	Back Button Policy Enabled (Browser Back Refresh Attack)	No
23	Banner Grabbing	No
24	Broken Access Control (Improper Authorization)	No
25	Broken Authentication (Forced Browsing)	No

26	Broken Authentication (Improper Session Management)	No
27	Broken Links	No
28	Buffer Overflow	No
29	Business Logic Error (Business Logic Flaw)	No
30	CAPTCHA Bypass	No
31	Click-Jacking Attack	yes
32	Content Spooking Attack	No
33	CORS Misconfiguration	No
34	Credentials Transmitted to Server in Plain Text	No
35	Cross Site Scripting (XSS)	yes
36	CSRF (Cross-Site Request Forgery)	yes
37	Database Dump using sqlmap	No
38	Database is Unencrypted	No
39	Default Credentials been Used	yes
40	Directory Listing	No
41	Directory Traversal	No
42	Documentation File Found	No
43	Email Harvesting	No
44	File Upload - Content-Type Restriction Bypass	No
45	File Upload - Double Extension File Upload Vulnerability	No

46	File Upload - Magic Number File Upload	No
47	File Upload - Malicious File Upload	No
48	File Upload - No Size Restriction	No
49	File Upload - Null Byte Extension	No
50	File Upload - Unrestricted File Upload	No
51	Functionality Issue	No
52	Hardcoded Secret	No
53	HTTP Parameter Pollution	No
54	HTTP Request Smuggling	No
55	IDOR	yes
56	Improper Error Handling	No
57	Improper Input Validation	No
58	Information Disclosure	No
59	Information Disclosure (Hardcoded Version)	yes
60	Information Exposure through Query Strings in URL	No
61	Injection - CSS Injection	No
62	Injection - CSV Injection	No
63	Injection - Host Header Injection	No
64	Injection - HTML Injection	yes
65	Injection - iFrame Injection	No

66	Injection - Link Injection	No
67	Injection - OS Command Injection	No
68	Injection - Server-side Template Injection (SSTI)	No
69	Injection - XML Injection	No
70	Insecure Change Password Functionality	No
71	Insecure Communication (SSL is Not Implemented)	No
72	Internal Full Path Disclosure	No
73	Internal IP Disclosure	No
74	Local File Inclusion (LFI)	No
75	Method Interchange Attack (POST to GET)	No
76	Missing Cache-Control Header	No
77	Missing Content Security Policy (CSP) Header	No
78	Missing Expires Header	No
79	Missing HTTP Strict-Transport-Security (HSTS) Header	No
80	Missing Permissions-Policy Header	yes
81	Missing Pragma Header	No
82	Missing Referrer-Policy Header	No
83	Missing X-Content-Type-Options Header	yes
84	Missing X-Frame-Options Header	yes
85	Missing X-Permitted-Cross-Domain-Policies	No

86	Missing X-XSS-Protection Header	No
87	OTP can be Brute Force	No
88	Out-Of-Date Component Version	No
89	Parameter Tampering	No
90	Password Revealed in Response	No
91	Possible Brute Force Attack – CAPTCHA Not Found	No
92	Privilege Escalation	No
93	Race Condition	No
94	Rate Limit is Not Implemented	yes
95	Remote Code Execution (RCE)	No
96	Remote File Inclusion (RFI)	No
97	Second Factor Authentication (2FA) Not Implemented	No
98	Security Misconfiguration	No
99	Sensitive Files Disclosure	No
100	Sensitive Information Disclosed in Response	No
101	Sensitive Page Disclosure	No
102	Server Returns 403 Forbidden Response or Error	No
103	Server-Side Validations are not in Place	No
104	Session Cookie HttpOnly Attribute Not Set	No
105	Session Cookie SameSite Attribute Not Set	No

106	Session Cookie Secure Attribute Not Set	No
107	Session Fixation	No
108	Session ID remains constant before login and after logout	No
109	Session Timeout is High or Not Implemented	No
110	Simultaneous Login Enabled (Concurrent Login Allowed)	No
111	SQL Injection (Boolean-based Blind SQL Injection)	No
112	SQL Injection (Error Based SQL Injection)	No
113	SQL Injection (Time-based Blind SQL Injection)	No
114	SQL Injection (Union Based SQL Injection)	No
115	SQL Wildcard Attack	No
116	SSL Version 2.0 Protocol Detection	No
117	SSL Version 3.0 Protocol Detection	No
118	SSRF	No
119	Stack Trace Error	No
120	Test Script Page Available on Server	No
121	TLS Version 1.0 Protocol Detection	yes
122	TLS Version 1.1 Protocol Detection	yes
123	Unrestricted Field Length	No
124	Unwanted HTTP Methods Enabled	No
125	User can set New Password as Old Password	No

126	User Enumeration	No
127	Version Disclosure	No
128	Vulnerable Component Used	No
129	Weak Ciphers Enabled	No
130	Weak Encoding is Used	No
131	Weak Password Policy	No
132	XML External Entity (XXE)	No
133	XMLRPC.php File Found	No

Table 4

1. General References

Application Security Standard –

https://owasp.org/Top10/

https://www.sans.org/top25-software-errors/

https://cert-in.org.in/

Hardening of Servers –

https://geekflare.com/apache-web-server-hardening-security/

https://geekflare.com/apache-tomcat-hardening-and-security-guide/

https://geekflare.com/nginx-webserver-security-hardening-guide/

https://geekflare.com/ibm-http-server-security-guide/

1. Appendices

THE END OF DOCUMENT