

## TITLE: Malware Detection and Classification

TEAM NUMBER: 2.5

### TEAM MEMBERS

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#### 1. Vulnerability name: SQL injection

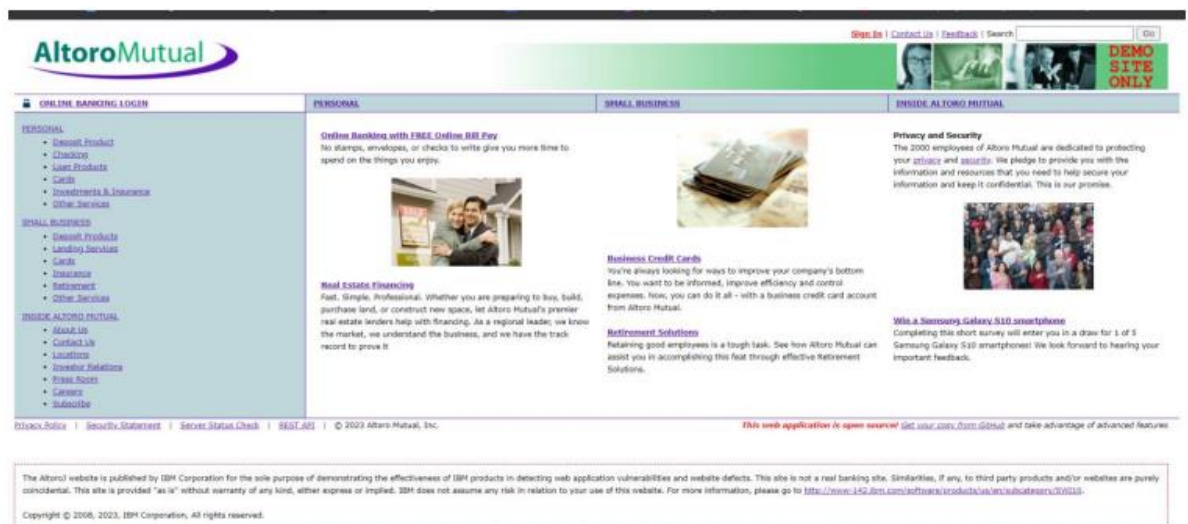
CWE: 89

**Description:** The product constructs all or part of an SQL command using externally-influenced input from an upstream component, but it does not neutralize or incorrectly neutralizes special elements that could modify the intended SQL command when it is sent to a downstream component. Business Impact: In summary, it is crucial to underscore that CWE-89, known as SQL Injection, can exert a profound and diverse business impact. This encompasses critical facets such as data breaches, financial setbacks, harm to reputation, legal ramifications, and operational turmoil. Hence, the imperative of preventing and remedying SQL injection vulnerabilities cannot be overstated, as it is indispensable for fortifying the security and continuity of an organization's applications and data.

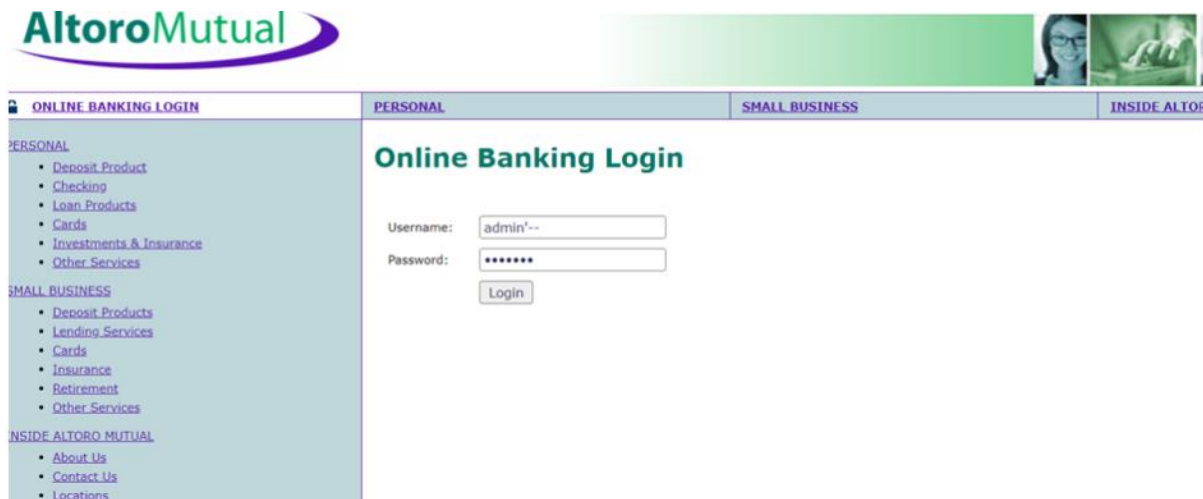
**Vulnerability path:** <http://testfire.net/>

#### Steps to Reproduce:

Access the URL



Now we will try to sign in to this website with admin privileges but using SQL injection



With this we can know that sql injection worked and we got the admin privileges

### Business Impact:

SQL injection attacks represent an extreme security danger to associations. A successful SQL injection assault can bring about confidential and important information being erased, edited or taken out for malicious uses. Other risks are sites being ruined, defaced or unapproved access to frameworks or accounts and, eventually, compromised machines or whole systems.

## 2. Vulnerability name: Brute Force Attack

### CWE-1391: Use of Weak Credentials

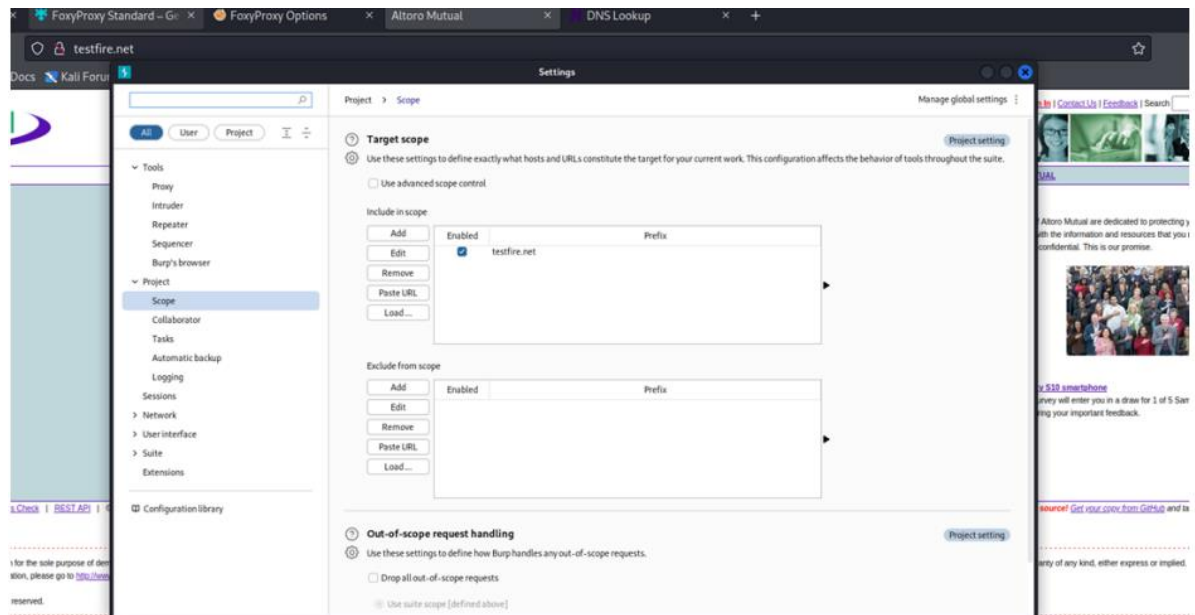
**Description:** The product uses weak credentials (such as a default key or hard-coded password) that can be calculated, derived, reused, or guessed by an attacker.

### CWE-307: Improper Restriction of Excessive Authentication Attempts

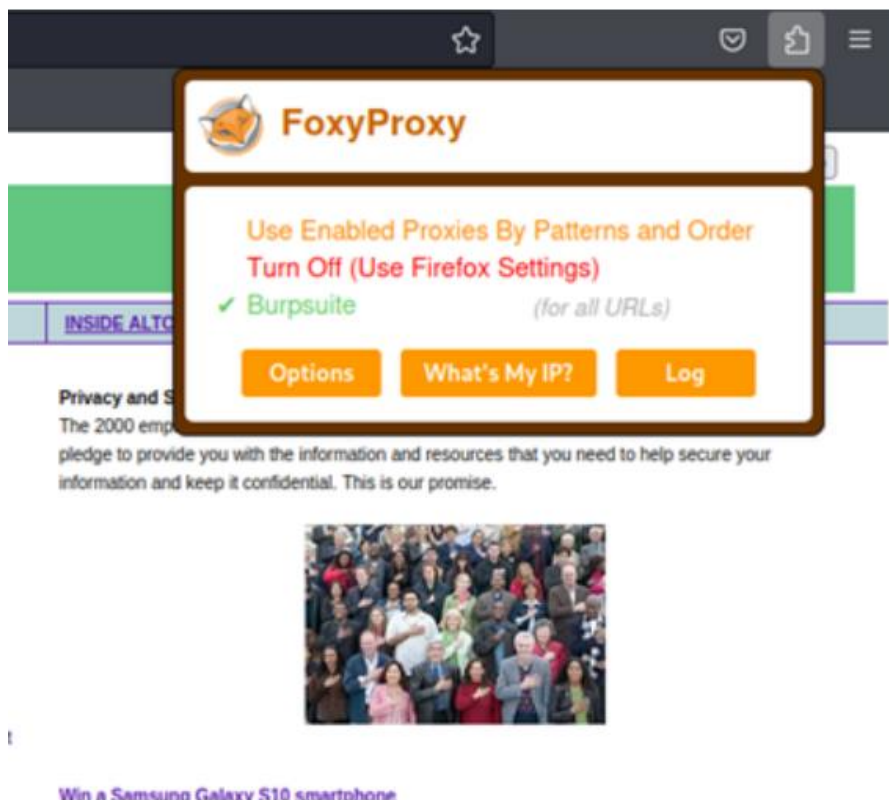
**Description:** The product does not implement sufficient measures to prevent multiple failed authentication attempts within a short time frame, making it more susceptible to brute force attacks.

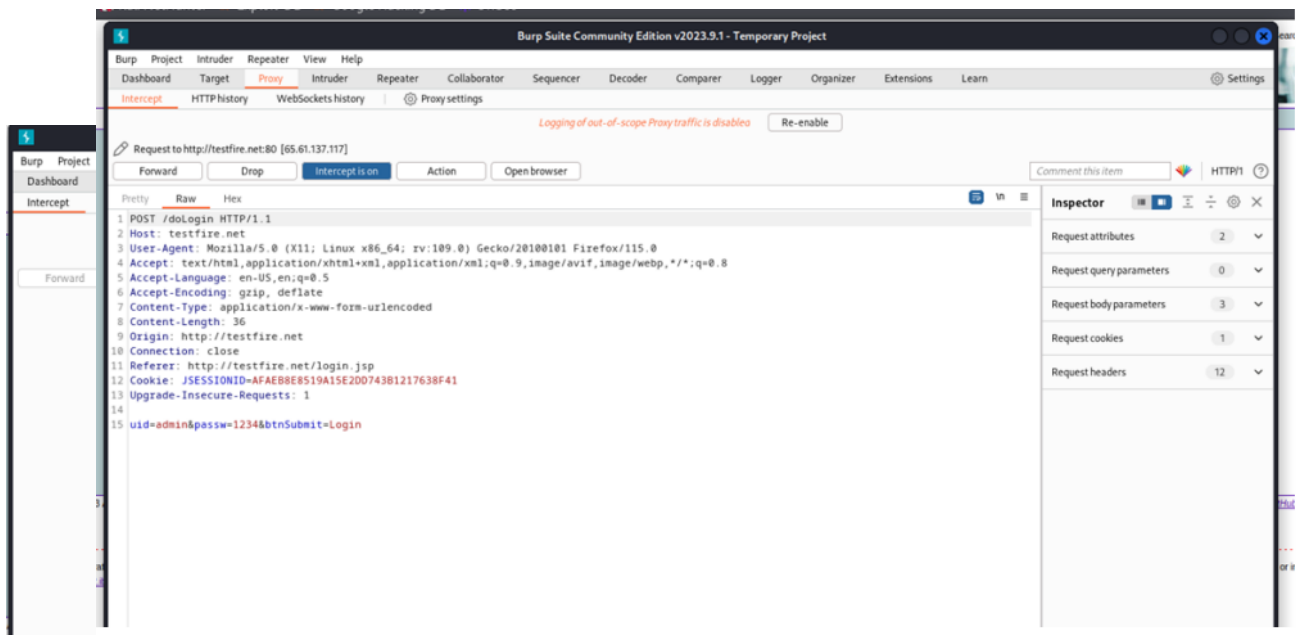
## Steps to reproduce

Add the website by going to target tab -> add

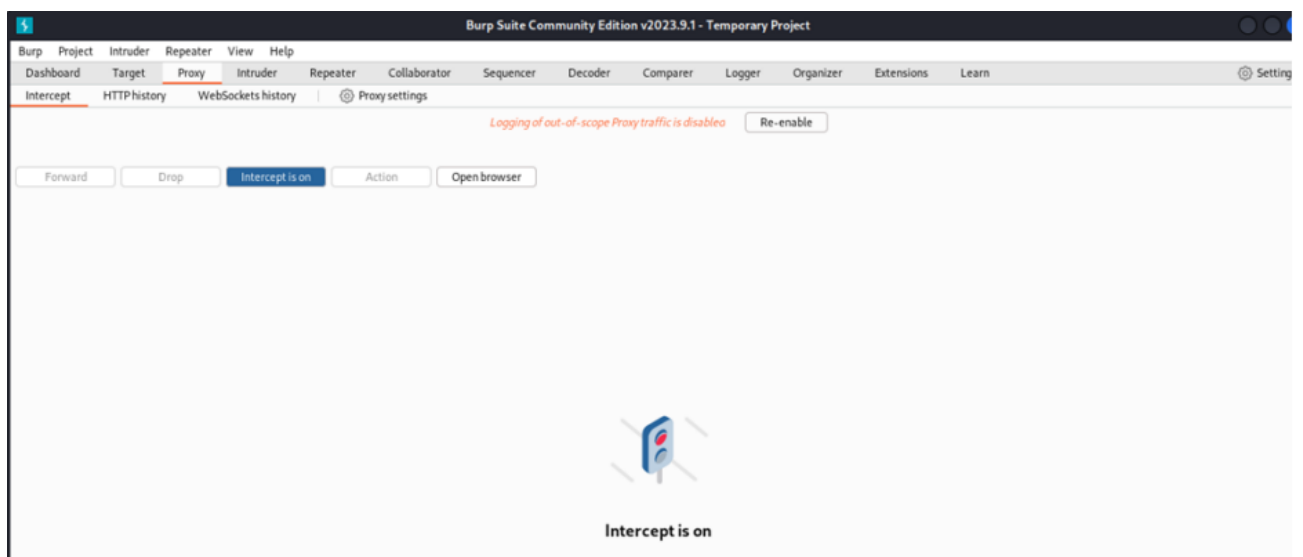


Choose burp as our default proxy on foxyproxy

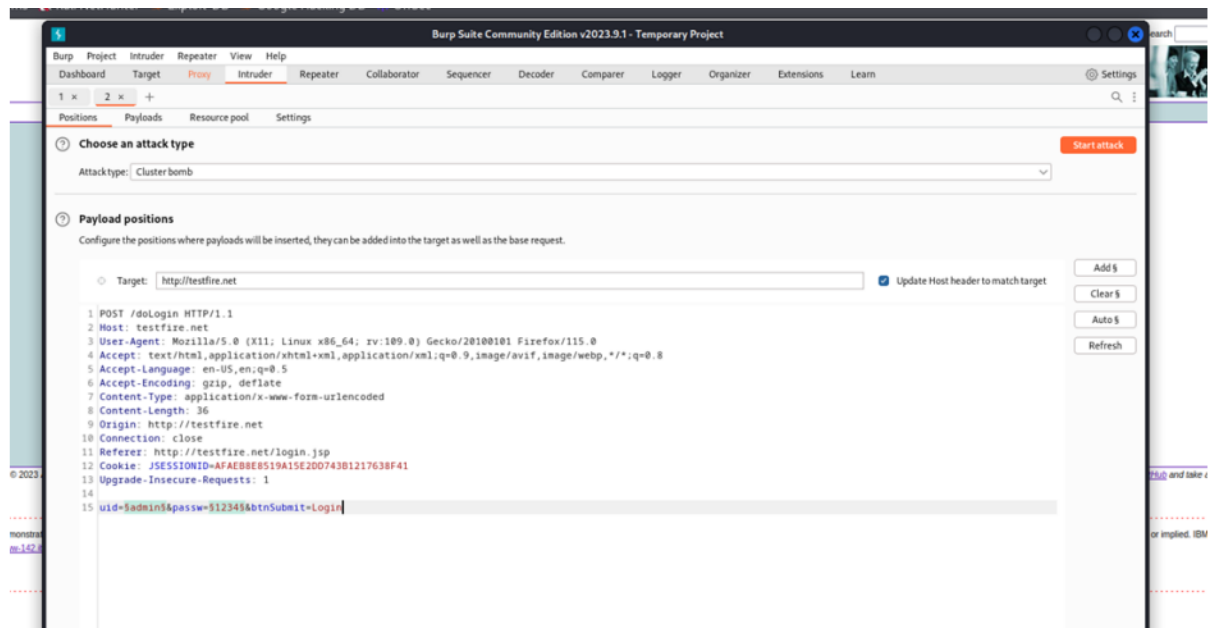
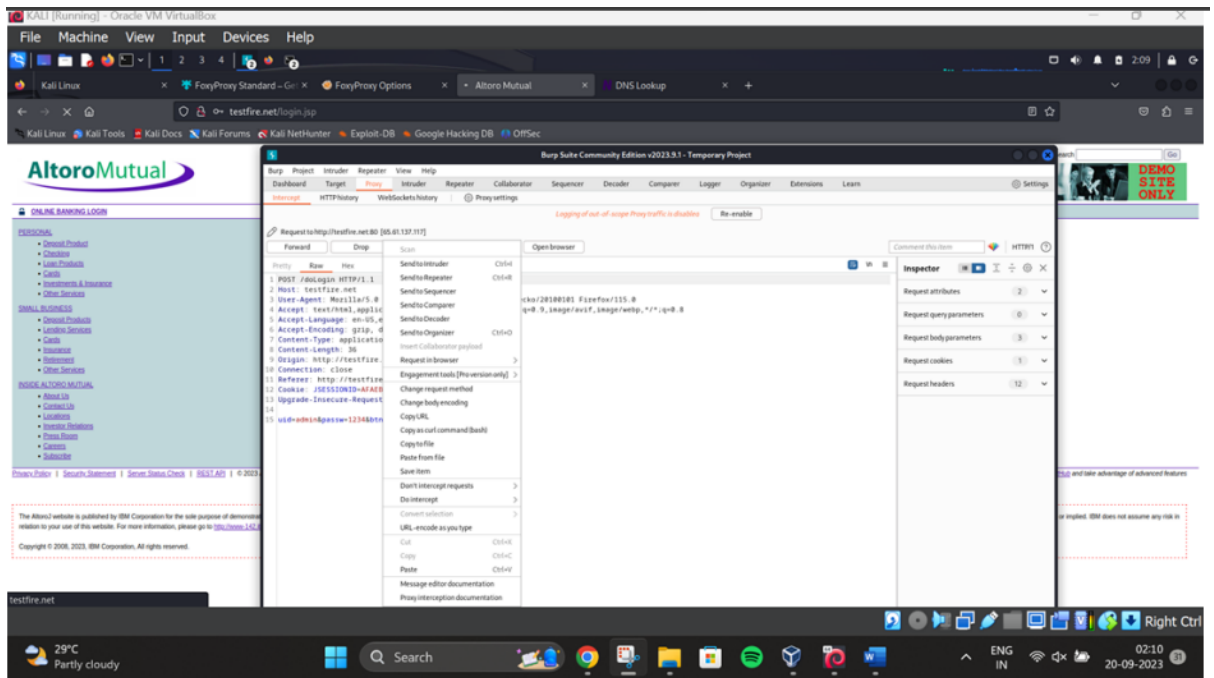




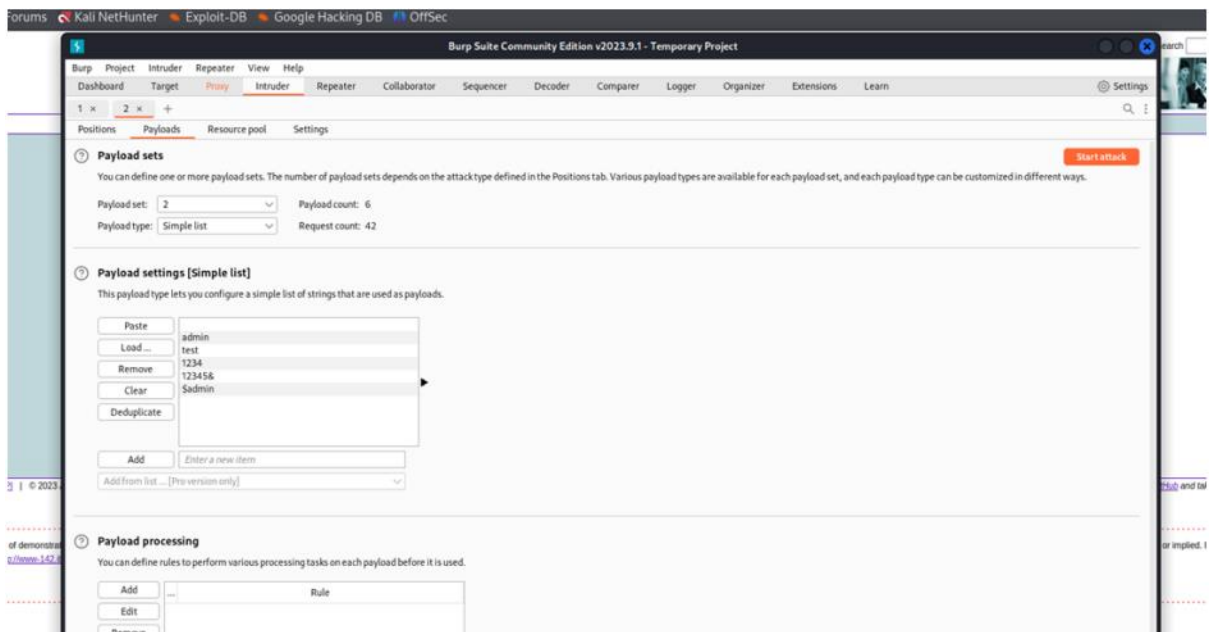
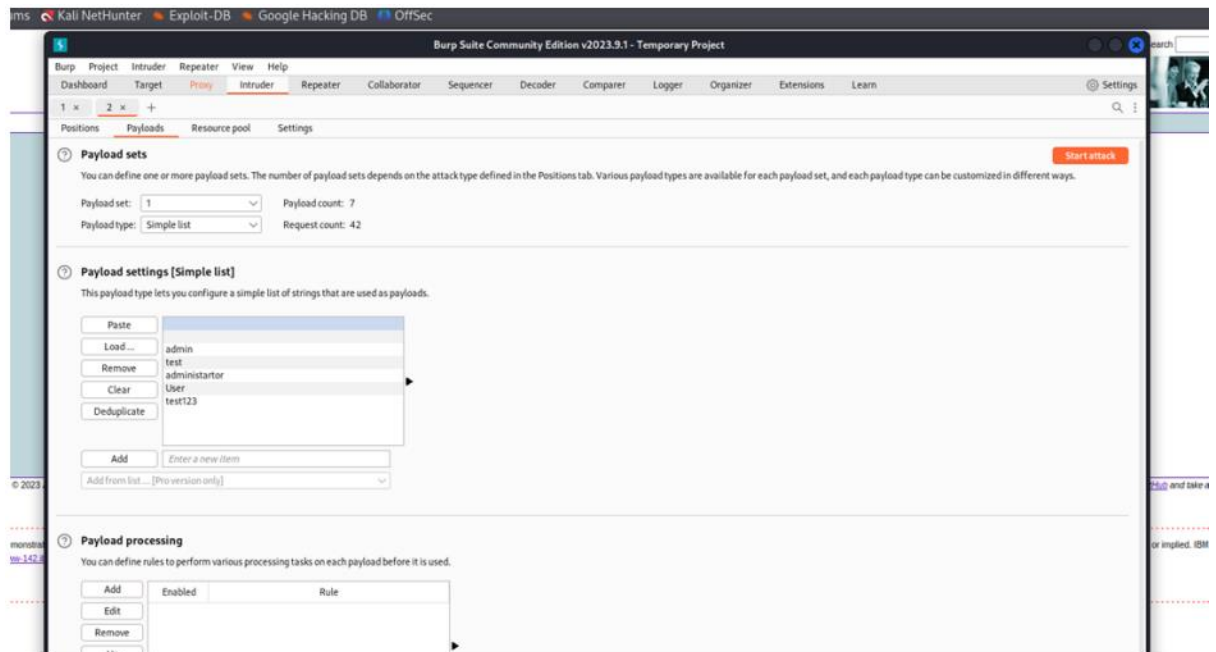
Go to proxy and turn on the intercept and then click on the login page of the website and give in random username and password.



Then we sent it to intruder and go to positions tab choose cluster bomb attack and select the given input of username as payload 1 and given input of password as payload 2 by clicking on add.



Then we go to the payloads tab and select payload 1 that is our username in this case and choose simple text and below give some random expected usernames. We can also upload a file here but since I do not have one I did it this way. We do the same for payload 2 which is our passwords and then start the attack.



After the attack is finished we can see that the highlighted admin admin has different length from the others. Thus it can be a probable solution. Upon checking Request and response we can assure that this is working.

2. Intruder attack of http://testfire.net - Temporary attack - Not saved to project file

Attack Save Columns

Results Positions Payloads Resource pool Settings

Filter: Showing all items

Request	Payload 1	Payload 2	Status code	Error	Timeout	Length	Comment
0			302	<input type="checkbox"/>	<input type="checkbox"/>	126	
1			302	<input type="checkbox"/>	<input type="checkbox"/>	126	
2			302	<input type="checkbox"/>	<input type="checkbox"/>	126	
3	admin		302	<input type="checkbox"/>	<input type="checkbox"/>	126	
4	test		302	<input type="checkbox"/>	<input type="checkbox"/>	126	
5	administartor		302	<input type="checkbox"/>	<input type="checkbox"/>	126	
6	User		302	<input type="checkbox"/>	<input type="checkbox"/>	126	
7	test123		302	<input type="checkbox"/>	<input type="checkbox"/>	126	
8		admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
9		admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
10	admin	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	264	
11	test	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
12	administartor	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
13	User	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
14	test123	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
15		test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
16		test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
17	admin	test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
18	test	test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
19	administartor	test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
20	User	test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
21	test123	test	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
22		1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
23		1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
24	admin	1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
25	test	1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
26	administartor	1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
27	User	1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
28	test123	1234	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
29		123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
30		123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
31	admin	123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
32	test	123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
33	administartor	123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
34	User	123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
35	test123	123456	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
36		Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
37		Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
38	admin	Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
39	test	Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
40	administartor	Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
41	User	Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	
42	test123	Sadmin	302	<input type="checkbox"/>	<input type="checkbox"/>	126	

Filter: Showing all items

Request	Payload 1	Payload 2	Status code	Error	Timeout	Length	Comment
---------	-----------	-----------	-------------	-------	---------	--------	---------

Request Response

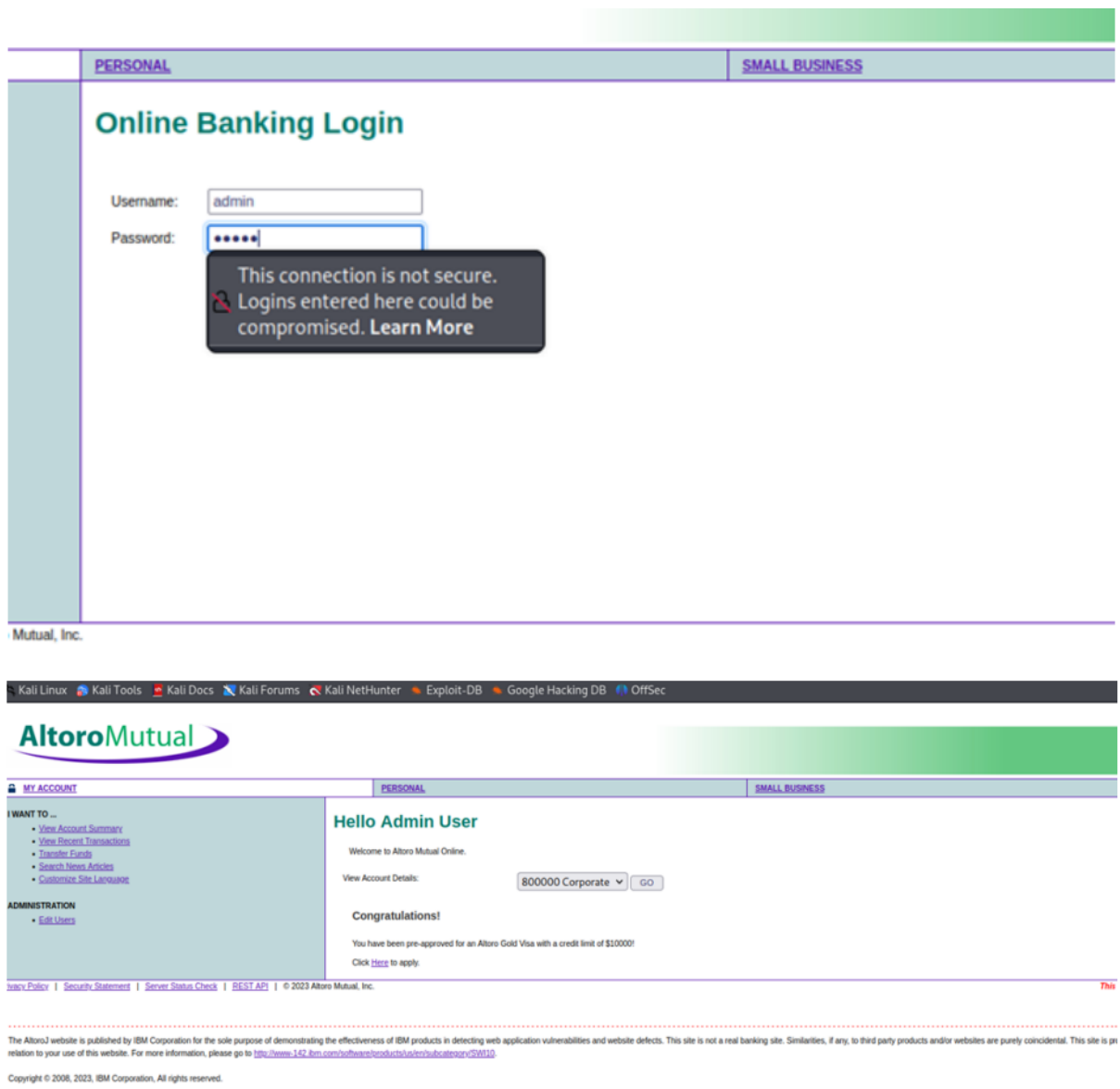
Pretty Raw Hex

```

1 POST /doLogin HTTP/1.1
2 Host: testfire.net
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/115.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 37
9 Origin: http://testfire.net
10 Connection: keep-alive
11 Referer: http://testfire.net/login.jsp
12 Cookie: JSESSIONID=AFAEB8E8519A15E2DD743B1217638F41
13 Upgrade-Insecure-Requests: 1
14
15 uid=admin&passw=admin&btnSubmit>Login

```

We then give the inputs in the login page and hence we are logged in



### Business Impact:

A successful brute force attack on a business can result in unauthorized access, data loss or theft, financial losses, reputational damage, legal consequences, operational disruptions, increased security costs, loss of competitive advantage, damage to trust with customers and partners, and compliance issues, depending on the industry.

### 3. Vulnerability name: Broken authentication

**CWE:** 285

**Description:** The system's authorization functionality does not prevent one user from gaining access to another user's data or record by modifying the key value identifying the data.



Steps to reproduce:

Access the URL

AltoroMutual

Sign In | Contact Us | Feedback | Search

DEMO SITE ONLY

ONLINE BANKING LOGIN 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
- Branch Sites
- Careers
- Subscribe

**Online Banking with FREE Online Bill Pay**  
No stamps, envelopes, or checks to write give you more time to spend on the things you enjoy.

**Real Estate Financing**  
Fast, Simple, Professional. Whether you are preparing to buy, build, purchase land, or construct new space, let Altoro Mutual's premier real estate lenders help with financing. As a regional leader, we know the market, we understand the business, and we have the track record to prove it.

**Business Credit Cards**  
You're always looking for ways to improve your company's bottom line. You want to be informed, improve efficiency and control expenses. Now, you can do it all - with a business credit card account from Altoro Mutual.

**Retirement Solutions**  
Retaining good employees is a tough task. See how Altoro Mutual can assist you in accomplishing this feat through effective Retirement Solutions.

**Privacy and Security**  
The 2000 employees of Altoro Mutual are dedicated to protecting your **privacy** and **security**. We pledge to provide you with the information and resources that you need to help secure your information and keep it confidential. This is our promise.

**Win a Samsung Galaxy S10 smartphone**  
Completing this short survey will enter you in a draw for 1 of 5 Samsung Galaxy S10 smartphones! We look forward to hearing your important feedback.

Privacy Policy | Security Statement | Service Status Check | BEST AD | © 2003 Altoro Mutual, Inc.

*This web application is open source! Get your copy from GitHub and take advantage of advanced features.*

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Now we will try to login using some different approach.

AltoroMutual

ONLINE BANKING LOGIN PERSONAL SMALL BUSINESS

**PERSONAL**

- Deposit Product
- Checking
- Loan Products
- Cards
- Investments & Insurance
- Other Services

**SMALL BUSINESS**

- Deposit Products
- Lending Services
- Cards

**Online Banking Login**

Username: Jsmith--

Password: [Masked]

Login

As we know which users are present in the database of this website by using the admin privileges. We can directly access a particular user by simply knowing their username; we will add some characters after his user name as a sql injection to simply bypass the password.



This leads us to the details of this person's account.

#### Business Impact:

To effectively mitigate the business impact of CWE-285, it is imperative that organizations place a strong emphasis on bolstering their authentication and session management practices. This should encompass the adoption of multi-factor authentication, the secure storage of credentials, meticulous session handling, and a commitment to conducting routine security assessments and testing. The rectification of these vulnerabilities stands as a critical imperative, safeguarding sensitive data, user identities, and the organization's overarching security stature and reputation.

4. **Vulnerability Name:** Improper Input Validation (The website allows user to transfer amount greater than the user has in their account)

**CWE** (Common Weakness Enumeration): CWE-132

**Description:** The product receives input or data, but it does not validate or incorrectly validates that the input has the properties that are required to process the data safely and correctly.

**Steps to reproduce:**

Wearing off the account 800002.

### Account History - 800002 Savings

Balance Detail	
800002 Savings <span>▼</span> <span>Select Account</span>	Amount
Ending balance as of 10/27/23 4:03 PM	\$998999999098100.00
Available balance	\$998999999098100.00

Amount to be debited to make the account balance empty is 998999999098100

### Account History - 800002 Savings

Balance Detail	
800002 Savings <span>▼</span> <span>Select Account</span>	Amount
Ending balance as of 10/27/23 5:34 PM	\$0.00
Available balance	\$0.00

Now trying to transfer amount even after the balance has worn out.

### Transfer Funds

From Account:

800002 Savings ▼

To Account:

800003 Checking ▼

Amount to Transfer:

100

Transfer Money

### Transfer Funds

From Account:

800002 Savings ▼

To Account:

800002 Savings ▼

Amount to Transfer:

Transfer Money

The transfer is successful as shown and the amount is credited in the respective account.

**Business Impact:**

- Financial losses: Unauthorized transfers could result in substantial financial losses for both the business and affected users.
- Reputation damage: Such a security flaw can erode user trust and damage the reputation of the company

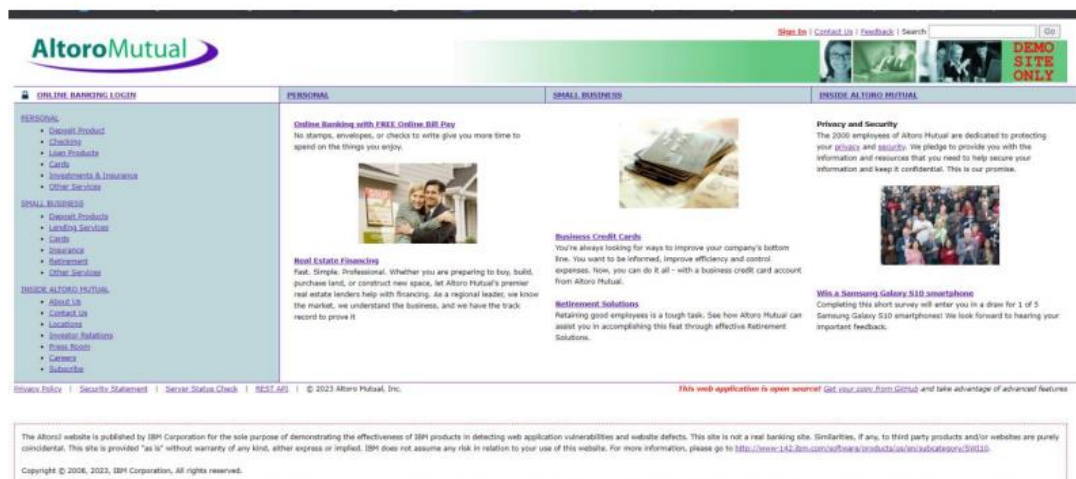
5. **Vulnerability name:** Web server allows password auto-completion

**CWE:** 310

**Description:** Weaknesses in this category are related to the design and implementation of data confidentiality and integrity. Frequently these deal with the use of encoding techniques, encryption libraries, and hashing algorithms. The weaknesses in this category could lead to a degradation of the quality data if they are not addressed.

**Steps to reproduce:**

Access the URL



## Online Banking Login

Username:

Password:

Login

' or 1=1--

admin

Jsmith'--

Jdoe'--

Username:

Password:

This connection is not secure.  
Logins entered here could be compromised. [Learn More](#)

admin  
From this website

[View Saved Logins](#)

From this image we can see the usernames and the passwords getting auto filled. This is a potential vulnerability as this can be a doorway for attackers.

### Business impact:

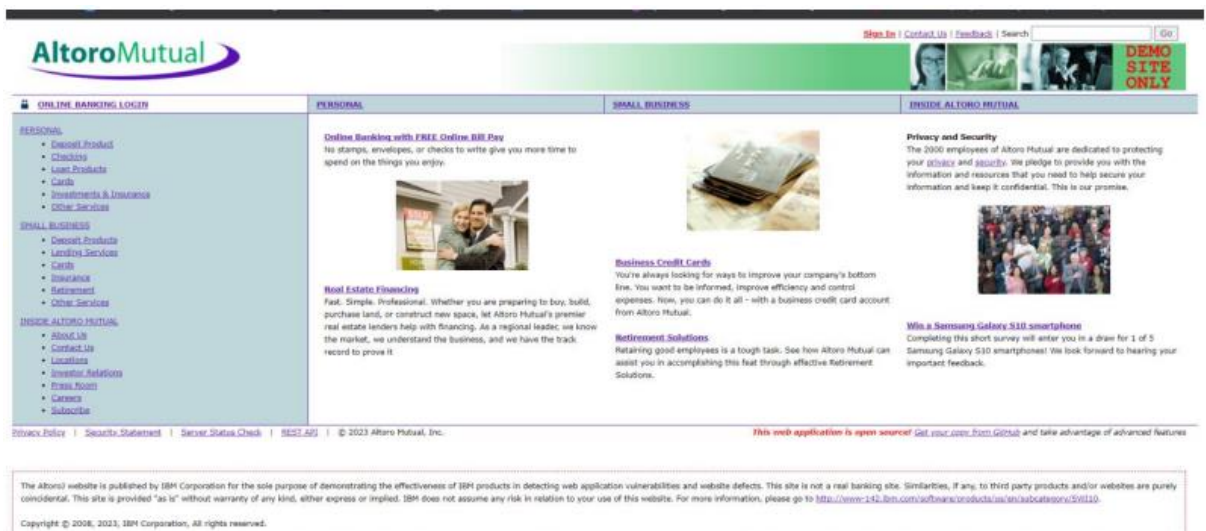
To effectively lessen the business consequences associated with CWE-310, organizations must prioritize the adoption of secure cryptographic practices. This entails ensuring proper password storage and robust encryption key management. Simultaneously, conducting routine security assessments and testing is pivotal in detecting and mitigating vulnerabilities related to cryptographic issues. Striving for compliance with pertinent data protection regulations and industry standards is equally essential. These actions are of paramount importance in the protection of sensitive data, the upholding of user trust, and the preservation of the organization's esteemed reputation.

### 6. Vulnerability name: Clickjacking

**CWE:** 1021

**Description:** The web application does not restrict or incorrectly restricts frame objects or UI layers that belong to another application or domain, which can lead to user confusion about which interface the user is interacting with

## Steps to reproduce:

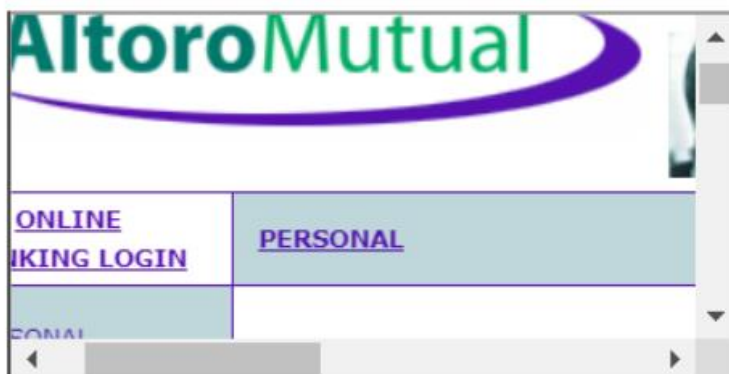


Then take the URL and use it for the html code we will be writing some html code to perform this vulnerability. We will be writing the code in vs code for better flexibility and functionality

```
1 <html>
2 <body>
3 <title>Click jacking vulnerability</title>
4 <h2>This website is vulnerable to clickjacking</h2>
5 <iframe src="http://testfire.net/"></iframe>
6 </body>
7 </html>
```

Executing the code in the browser

## This website is vulnerable to clickjacking



From this image we can see that the vulnerability has been found.

### Business Impact:

To effectively reduce the business consequences resulting from CWE-1021, organizations must prioritize the implementation of protective measures, such as frame-busting code.



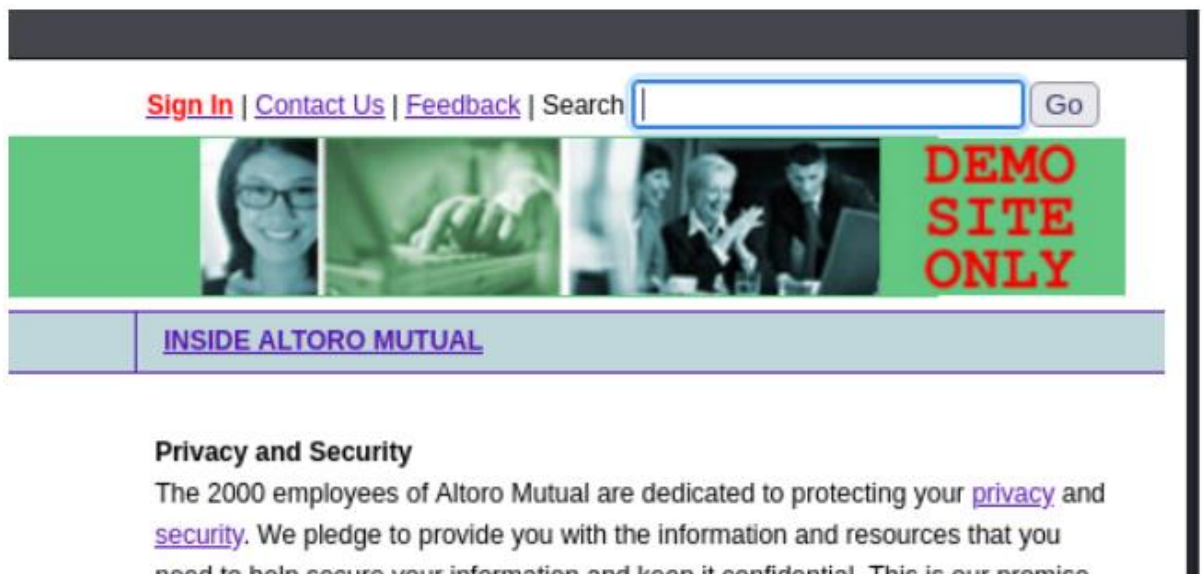
Simultaneously, educating users on safe browsing practices plays a crucial role in preventing clickjacking incidents. Additionally, routine security assessments and testing are pivotal for identifying and mitigating vulnerabilities associated with clickjacking. These actions are of paramount importance in upholding user trust, ensuring data protection, and safeguarding the organization's reputation.

## 7. Vulnerability Name: HTML injection attack

**CWE:** 601 (URL Redirection to untrusted site('Open Redirect'))

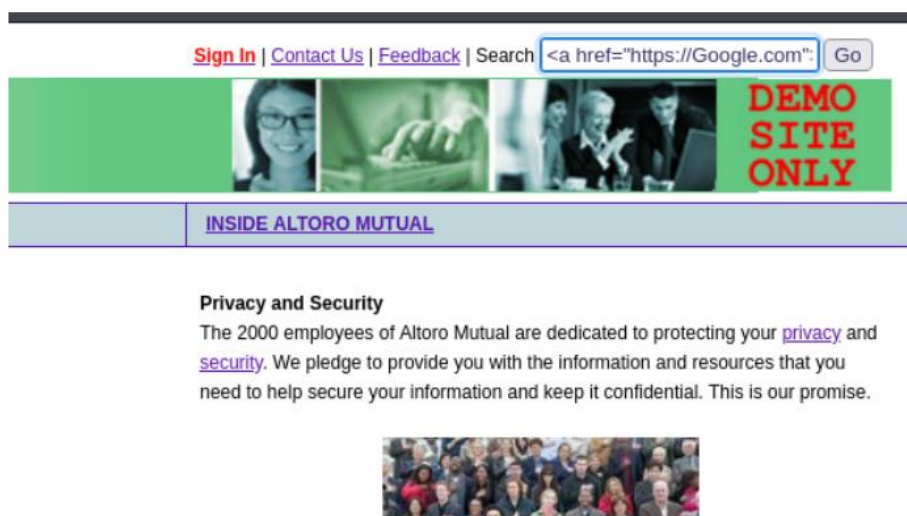
**Description:** A web application accepts a user-controlled input that specifies a link to an external site, and uses that link in a Redirect. This simplifies phishing attacks.

**Steps to reproduce:**



HTML payload: `<a href = https://Google.com>Click her to login</a>`

This payload's href link can be modified in certain way that it redirects to the malicious login page



Executing the payload gives the following result.

## Search Results

No results were found for the query:

[click here to login](#)

When the click here to login hyperlink is clicked, we are redirected to the website that is linked to it.

### Business Impact:

The impact of CWE-601 (Open Redirect) includes loss of trust, data breaches, financial loss, legal consequences, brand damage, and operational disruption. Here a combination of man in the middle attack and html injection can be used to inject an html payload that can return a link to a malicious copy of the login page of the legitimate website seeking the credentials from the user.

### 8. Vulnerability name: Cross site scripting (stored)

CWE: 79

OWASP category: A03:2021 -Injections

**Description:** It occurs when a malicious script is injected directly into a vulnerable web application. Reflected XSS involves the reflection of a malicious script of a web application, onto a user's browser.

### Steps to reproduce:

The screenshot shows the AltoroMutual website. At the top, there is a search bar with the text "Search Results" and "No results were found for the query: click here to login". Below the search bar, there is a navigation menu with links for "Online Banking Login", "PERSONAL", "SMALL BUSINESS", and "ENTERIC ALTORO MUTUAL". The main content area is divided into four columns, each featuring a different service offering: "Online Banking with FREE Online Bill Pay", "Business Credit Cards", "Business Financing", and "Business Solutions". The footer contains a disclaimer stating that the Altoro website is published by BPH Corporation for the sole purpose of demonstrating the effectiveness of BPH products in detecting web application vulnerabilities and website defects. It also includes a copyright notice for 2008, 2013, BPH Corporation, all rights reserved.

In the search box we will input some code to perform the vulnerability





The Script we will be inputting is `<script> alert('hacked')</script>`. This displays a harmless pop up alert box with the text saying 'hacked'



**Business Impact:**

The application stores dangerous data in a database, message forum, visitor log, or other trusted data store. Later, the dangerous data is subsequently read back into the application and included in dynamic content. From an attacker's perspective, the optimal place to inject malicious content is in an area that is displayed to either many users or particularly interesting users. Interesting users typically have elevated privileges in the application or interact with sensitive data that is valuable to the attacker. If one of these users executes malicious content, the attacker may be able to perform privileged operations on behalf of the user or gain access to sensitive data belonging to the user.

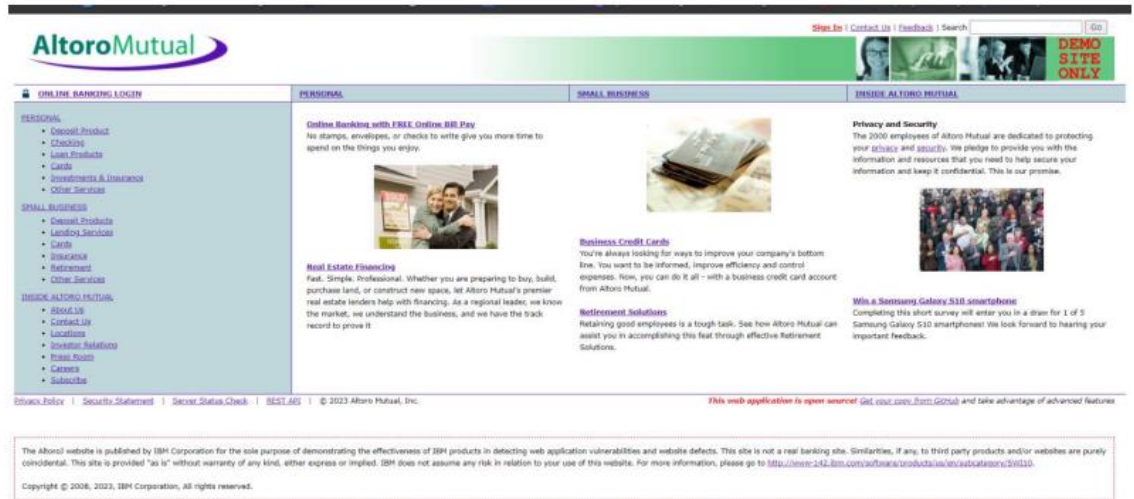
**9. Vulnerability name:** Cleartext Transmission of Sensitive Information

**CWE:** 319

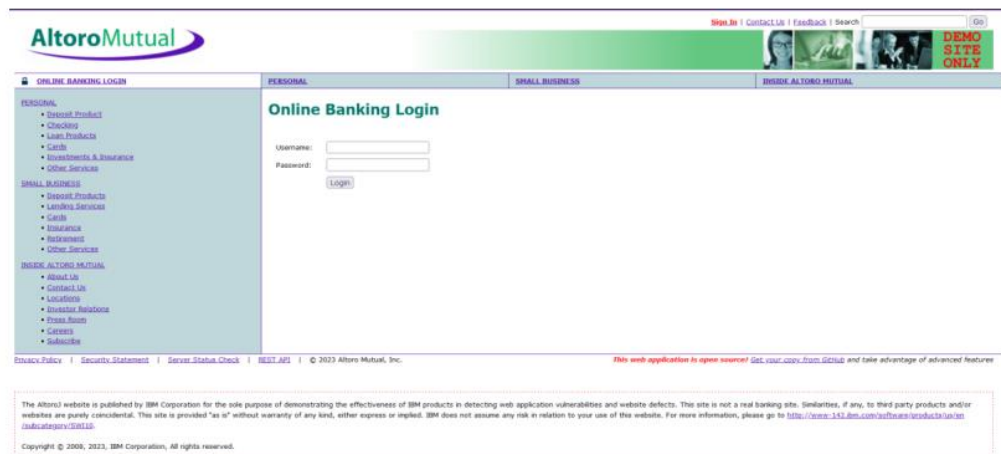
**Description:** The product transmits sensitive or security-critical data in cleartext in a communication channel that can be sniffed by unauthorized actors. Many communication channels can be "sniffed" (monitored) by adversaries during data transmission. For example, in networking, packets can traverse many intermediary nodes from the source to the destination, whether across the internet, an internal network, the cloud, etc. Some actors might have privileged access to a network interface or any link along the channel, such as a router, but they might not be authorized to collect the underlying data. As a result, network traffic could be sniffed by adversaries, spilling security-critical data.

## Steps to reproduce:

### Access the URL



### Now we will try to sign in to this website with admin privileges



Also, we will be using burp suite to get requests from the website and know additional information. We use 'admin' for the username and password.

This request has been received in the burp suite with the username and password as well in clear text.

```

Pretty Raw Hex
1 POST /doLogin HTTP/1.1
2 Host: testfire.net
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/117.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 37
9 Origin: http://testfire.net
10 Connection: close
11 Referer: http://testfire.net/login.jsp
12 Cookie: JSESSIONID=B6ADB36ACD5C83083787343A1F97F853; AltoroAccounts="0DAwMDAwIkHvcnBvcnF0ZDQ4LjQ3OTA1MTE2ZHUU34DgwMDAwMD5DaGVja2luZ34tNC4yMjc0NTZFN3w="
13 Upgrade-Insecure-Requests: 1
14
15 uid=admin&passw=admin&btnSubmit=Login

```

Now we click on forward request in the burp suite and then we will be redirected to the admin user details. Here in the burp suite, we can clearly see the login details in clear text. this is the clear indication of the vulnerability which can lead to data breach, monitored, and manipulated as well.

### Business Impact:

To effectively reduce the business consequences associated with CWE-319, organizations must prioritize the adoption of secure data transmission practices. This includes the utilization of encryption and robust, secure protocols. The routine conduct of security assessments and testing is pivotal in pinpointing and remedying vulnerabilities linked to data transmission. Furthermore, the education of users on secure data handling practices plays a vital role in proactively preventing data exposure incidents. These actions are of paramount importance in the protection of sensitive data and in preserving the trust of both customers and partners.

## 10. Vulnerability Name: Insecure Direct object Reference

**CWE:** 639

**OWASP Category:** A01: Broken Access Control

**Description:** Insecure Direct Object Reference (IDOR) is a vulnerability that arises when attackers can access or modify objects by manipulating identifiers used in a web application's URLs or parameters. It occurs due to missing access control checks, which fail to verify whether a user should be allowed to access specific data.

## Steps to reproduce:

Sign Off | Contact Us | Feedback | Search  Go

**AltoroMutual**

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

**ADMINISTRATION**

- Edit Users

**Hello Admin User**

Welcome to Altoro Mutual Online.

View Account Details:

**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 | © 2023 Altoro Mutual, Inc. This web application is open source! Get your copy from [GitHub](#) and take advantage of advanced features

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Open "Transfer Money" on the left side and fill in the details. On the intercept and click transfer

Sign Off | Contact Us | Feedback | Search  Go

**AltoroMutual**

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

**ADMINISTRATION**

- Edit Users

**Transfer Funds**

From Account:

To Account:

Amount to Transfer:

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Open burp and notice the change

```
1 POST /bank/doTransfer HTTP/1.1
2 Host: testfire.net
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/119.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 78
9 Origin: http://testfire.net
10 Connection: close
11 Referer: http://testfire.net/bank/transfer.jsp
12 Cookie: JSESSIONID=17BC438BBB750A14D265616C76C3BB0; AltoroAccounts=
13 "QDAvMDAvtkNvcnBvcnFOZXk4LjYsNTczNTMlNjMlODc0NkUyOXMwMDAwMDZlQ2h1YTZtcphad+LTkufjMlNzU2MzU4NzQ0RTI6fA=="
14 Upgrade-Insecure-Requests: 1
15 fromAccount=800000&toAccount=800001&transferAmount=100&transfer=Transfer+Money
```

In the 15th line change the amount from 100 to 1000 and click forward

```
fromAccount=800000&toAccount=800001&transferAmount=100&transfer=Transfer+Money

fromAccount=800000&toAccount=800001&transferAmount=1000&transfer=Transfer+Money

FET /v1/tiles HTTP/1.1
Host: contile.services.mozilla.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/119.0
Accept: */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate, br
Te: trailers
Connection: close
```

Look at the site, we can notice the msg that shows the transfer of 1000



Off the Intercept and open “View Recent Transactions”.

I WANT TO ... <ul style="list-style-type: none"><li>View Account Summary</li><li>View Recent Transactions</li><li>Transfer Funds</li><li>Search News Articles</li><li>Customize Site Language</li></ul>	Recent Transactions				
	After	Before	Submit		
ADMINISTRATION <ul style="list-style-type: none"><li>Edit Users</li></ul>	Transaction ID	Transaction Time	Account ID	Action	Amount
	9016	2023-10-16 06:28	800001	Deposit	\$1000.00
	9015	2023-10-16 06:28	800000	Withdrawal	-\$1000.00
	8920	2023-10-16 04:46	800001	Deposit	\$23345.00
	8919	2023-10-16 04:46	800000	Withdrawal	-\$23345.00
	8916	2023-10-16 04:44	800001	Deposit	\$23345.00
	8915	2023-10-16 04:44	800000	Withdrawal	-\$23345.00
	8894	2023-10-16 04:40	800001	Deposit	\$23345.00
	8893	2023-10-16 04:40	800000	Withdrawal	-\$23345.00
	8892	2023-10-16 04:40	800001	Deposit	\$23345.00
	8891	2023-10-16 04:40	800000	Withdrawal	-\$23345.00
	7565	2023-10-16 04:17	800000	Withdrawal	-\$10.00
	7228	2023-10-16 04:14	800000	Deposit	\$1000.00
	6802	2023-10-16 04:09	800001	Deposit	\$10000000000000.00
	6801	2023-10-16 04:09	800000	Withdrawal	-\$10000000000000.00
	5388	2023-10-16 03:58	800000	Deposit	\$100000000000.00
	4628	2023-10-16 03:36	800001	Deposit	\$20190.00
	4627	2023-10-16 03:36	800000	Withdrawal	-\$20190.00
	4626	2023-10-16 03:35	800001	Deposit	\$20190.00
	4625	2023-10-16 03:35	800000	Withdrawal	-\$20190.00
	4624	2023-10-16 03:35	800001	Deposit	\$600.00
	4623	2023-10-16 03:35	800000	Withdrawal	-\$600.00
	4616	2023-10-16 03:10	800000	Deposit	\$87446.00
	4615	2023-10-16 03:10	800001	Withdrawal	-\$87446.00

## Business Impact:

To effectively mitigate the business impact of CWE-639, organizations must make it a top priority to fortify their access control and authorization mechanisms. This entails the implementation of robust security measures, the regular conduct of comprehensive security assessments, and the deployment of intrusion detection systems to promptly identify and counter unauthorized access attempts. These measures stand as absolutely critical in the defense of sensitive data, the overall security of systems, and the preservation of the organization's esteemed reputation