Version Disclosure		
SEVERITY	low	
STATUS	OPEN	
CVSS SCORE		
CWE-ID		
OWASP CATEGORY		

Version disclosure, in the context of software or web applications, refers to the unintended exposure of information about the specific version or release of the software that is running. This disclosure can happen through various means, and it might expose details about the software's vulnerabilities, which can be exploited by attackers.

- Unintentional Exposure
- Security Implications
- Attack Surface Awareness

IMPACT

- 1. Security Risks: One of the primary concerns is the increased risk of security breaches. Disclosing the specific version of software makes it easier for attackers to identify known vulnerabilities associated with that version. If the software is not up to date with the latest security patches, it becomes more susceptible to exploitation.
- 2. Targeted Exploitation: Attackers may leverage version information to launch targeted attacks. By knowing the exact software version and its associated vulnerabilities, malicious actors can craft attacks specifically tailored to exploit weaknesses in that version.
- 3. Unauthorized Access: If a software version is outdated and known to have vulnerabilities, attackers might attempt to exploit these weaknesses to gain unauthorized access to systems or sensitive data

System Compromise: Successful exploitation of version-specific vulnerabilities could lead to a complete compromise of the system. This might involve unauthorized access, data manipulation, or disruption of services.

AFFECTED URL

https://...../account/login

REFERENCE URL FOR MITIGATION

N/A

RECOMMENDATIONS

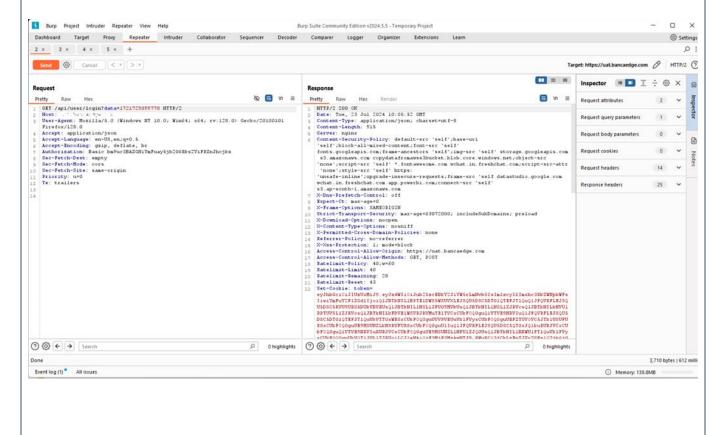
Mitigation Strategies: To mitigate version disclosure, it's important to implement security best practices, such as:

- 1. Remove or Control Error Messages: Ensure that error messages displayed to users do not reveal unnecessary information about the software version.
- 2. Disable Server Signature: Disable or limit the information provided by server signatures in web server configurations.

STEPS TO REPRODUCE / PROOF OF CONCEPT

Step: open this url: https://uat.bancaedge.com/account/login

Step: capture the request and forward in repeater



	Server Side Validations are not in Place
SEVERITY	low
STATUS	OPEN
CVSS SCORE	
CWE-ID	
OWASP CATEGORY	

Server-side validations are critical to ensuring the integrity, security, and reliability of web applications. They involve validating data on the server after it is submitted by the user but before it is processed or stored. Without server-side validations, applications can be vulnerable to various security risks and data integrity issues.

IMPACT

Server side validations play a crucial role in maintaining the security, integrity, and reliability of web applications. If these validations are not in place, several negative impacts can arise:

1. Security Vulnerabilities:

- o **SQL Injection**: Without validation, malicious users can manipulate input to execute arbitrary SQL commands, potentially accessing, modifying, or deleting data.
- o Cross-Site Scripting (XSS): Attackers can inject malicious scripts into web pages viewed by other users, leading to data theft or session hijacking.
- o Cross-Site Request Forgery (CSRF): Attackers can trick users into performing actions they did not intend, such as changing account details or making purchases.

2. Data Integrity Issues:

- o **Invalid Data Entry**: Without validation, users can enter incorrect or malformed data, leading to database inconsistencies and errors.
- **Data Corruption**: Invalid data can corrupt the database, making it difficult to retrieve or use data correctly.

3. Performance Degradation:

- Database Load: Processing invalid or excessive data can increase the load on the database, slowing down the entire system.
- o **Resource Exhaustion**: Lack of input validation can lead to resource exhaustion attacks, where an attacker overloads the system with requests, causing denial of service.

4. Poor User Experience:

- o **Unfriendly Error Messages**: Users may encounter cryptic or technical error messages if invalid data is processed without proper validation.
- Inconsistent Data: Users may see inconsistent or incorrect data, leading to confusion and mistrust in the application.

5. Compliance Issues:

 Regulatory Non-compliance: Many industries have regulations requiring proper data validation and security measures. Failure to implement these can result in legal consequences and fines.

AFFECTED URL REFERENCE URL FOR MITIGATION

N/A

RECOMMENDATIONS

If server-side validations are not in place, it's crucial to address this issue promptly to protect your application from security vulnerabilities, data integrity issues, and other potential problems. Here are some recommendations:

1. Identify and Prioritize Areas for Validation

- **Audit Existing Code**: Conduct a thorough audit of your current codebase to identify areas where validations are missing or insufficient.
- **Prioritize Critical Points**: Focus on critical areas first, such as user authentication, data input forms, and any functionality that interacts with the database.

2. Implement Input Validation

- Sanitize Inputs: Ensure that all inputs are sanitized to remove potentially harmful characters or code.
- Validation Rules: Define and enforce validation rules for all input fields, such as allowed characters, length limits, format, and data type.
- Use Regular Expressions: Utilize regular expressions to enforce specific input patterns where applicable.

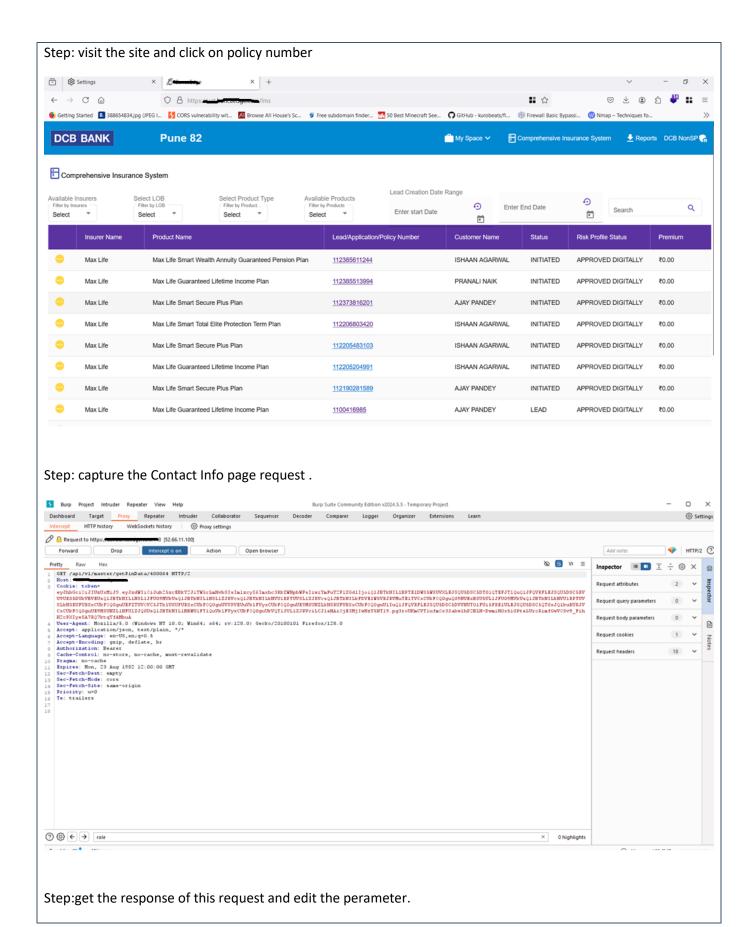
3. Utilize Frameworks and Libraries

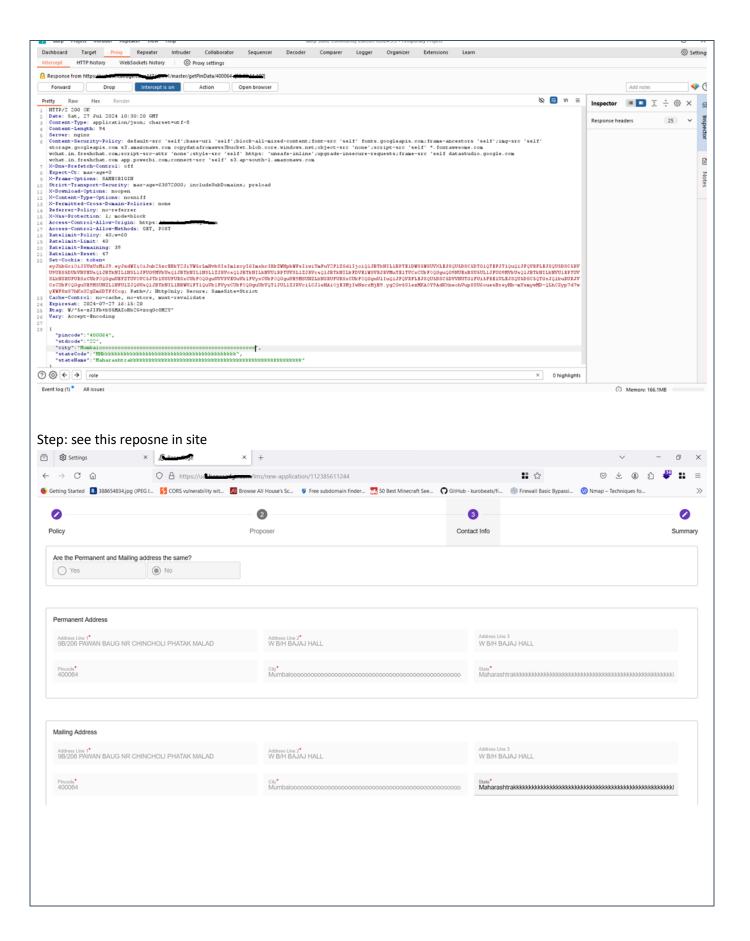
- Leverage Existing Solutions: Use well-established frameworks and libraries that offer built-in validation features. For example, frameworks like Django, Ruby on Rails, or Spring provide robust validation mechanisms.
- **Stay Updated**: Regularly update these frameworks and libraries to ensure you have the latest security patches and features.

4. Implement Authentication and Authorization

- **Strong Authentication**: Ensure strong authentication mechanisms are in place, including multifactor authentication (MFA) if possible.
- Role-Based Access Control (RBAC): Implement RBAC to ensure users can only access resources and perform actions that they are authorized to.

STEPS TO REPRODUCE / PROOF OF CONCEPT





ider	
SEVERITY	high
STATUS	OPEN
CVSS SCORE	
CWE-ID	
OWASP CATEGORY	

Insecure direct object references (IDOR) is a web application security vulnerability that occurs when an application exposes internal object identifiers, such as database keys or file paths, to users without proper access controls.

IMPACT

The impact of an IDOR (Insecure Direct Object Reference) vulnerability can vary depending on the context of the application and the sensitivity of the exposed resources or data. Here are some potential impacts:

- Unauthorized Data Access
- Data Leakage
- Privacy Violations
- Financial Loss
- Reputation Damage

Regulatory Penalties

AFFECTED URL

REFERENCE URL FOR MITIGATION

N/A

RECOMMENDATIONS

To mitigate IDOR (Insecure Direct Object Reference) vulnerabilities and protect your application from exploitation, consider implementing the following recommendations

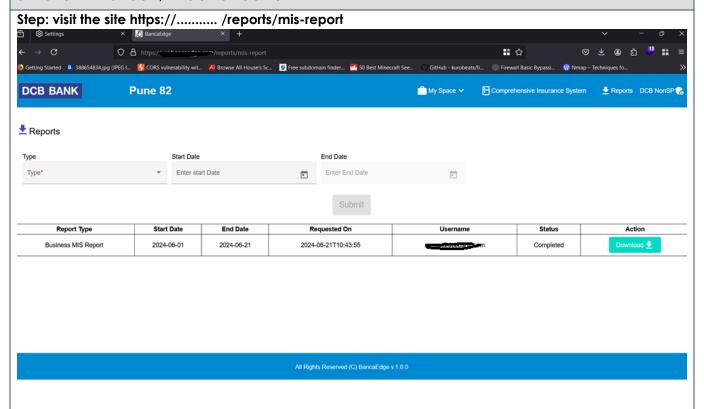
- Use Indirect Object References
- Implement Proper Access Controls
- Validate User Permissions
- Avoid Predictable Object References
- Implement Role-Based Access Control (RBAC)
- Limit Exposure of Sensitive Information

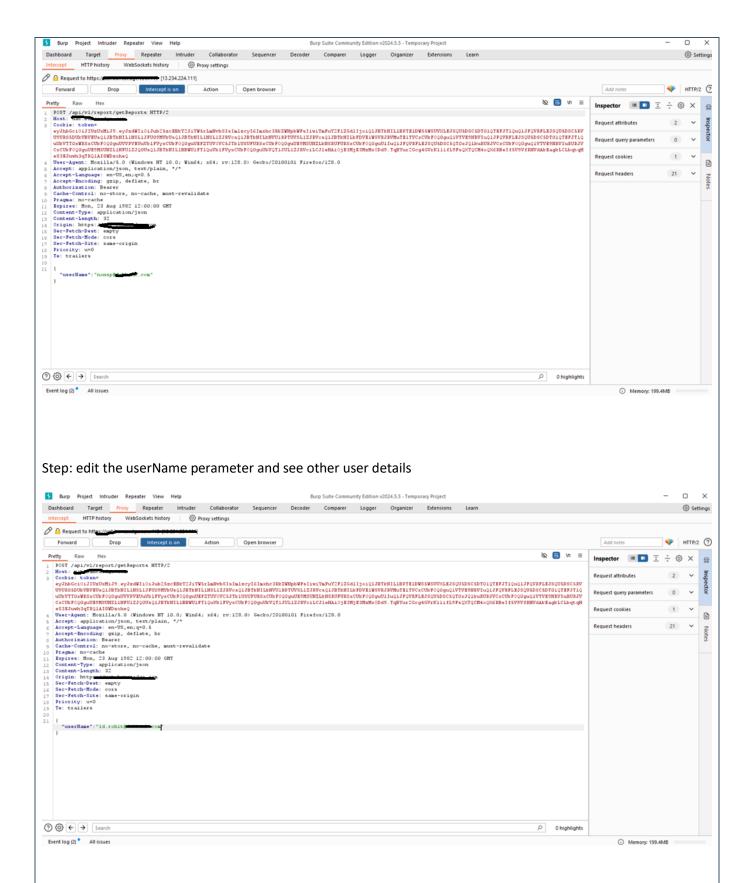
- Encrypt and Secure Data in Transit and at Rest
- Regular Security Audits and Testing
- Educate Developers and Users

Stay Updated with Security Patches and Fixes

STEPS TO REPRODUCE / PROOF OF CONCEPT

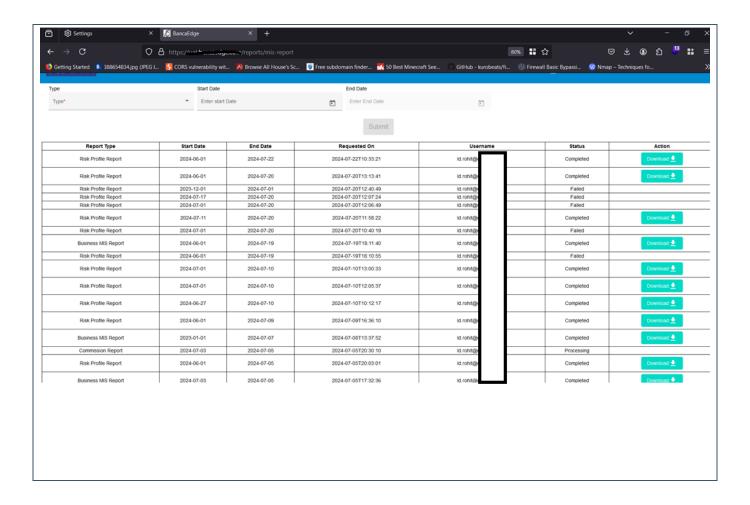
Step: reload the page than capture with intercept





Step: and forward the request.

Step: then show the other user details



Sensitive Information Disclosed		
SEVERITY	low	
STATUS	OPEN	
CVSS SCORE		
CWE-ID		
OWASP CATEGORY		
DESCRIPTION		

Sensitive Information Disclosure refers to the unauthorized access, exposure, or sharing of confidential or personal information. This can happen intentionally or unintentionally and may involve any data that should remain private, such as financial information, personal identifiers, proprietary business information, or health records.

IMPACT

Information disclosure can harm a business by leaking trade secrets or other sensitive information, which can lead to loss of sales or reputational damage. It can also lead to legal liabilities, such as fines or lawsuits.

AFFECTED URL

REFERENCE URL FOR MITIGATION

N/A

RECOMMENDATIONS

Data Encryption

- Use Strong Encryption Methods: Encrypt sensitive data both at rest and in transit using robust encryption standards (e.g., AES-256).
- Encrypt Emails and Attachments: Utilize email encryption solutions to secure messages containing sensitive information.

Access Controls

- Implement Role-Based Access Control (RBAC): Ensure users have access only to the information necessary for their roles.
- Use Multi-Factor Authentication (MFA): Add an extra layer of security to sensitive systems and data by requiring multiple forms of verification.

Data Classification and Handling

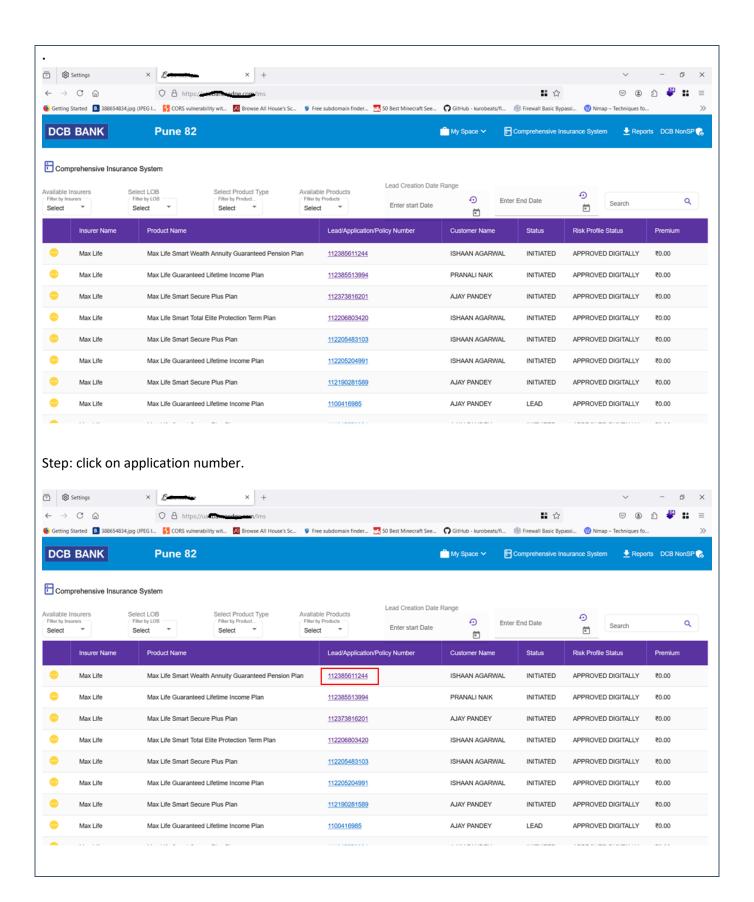
- Classify Data Sensitivity Levels: Define and label data based on sensitivity (e.g., public, confidential, restricted).
- Set Clear Data Handling Policies: Establish guidelines for storing, sharing, and disposing of sensitive data.

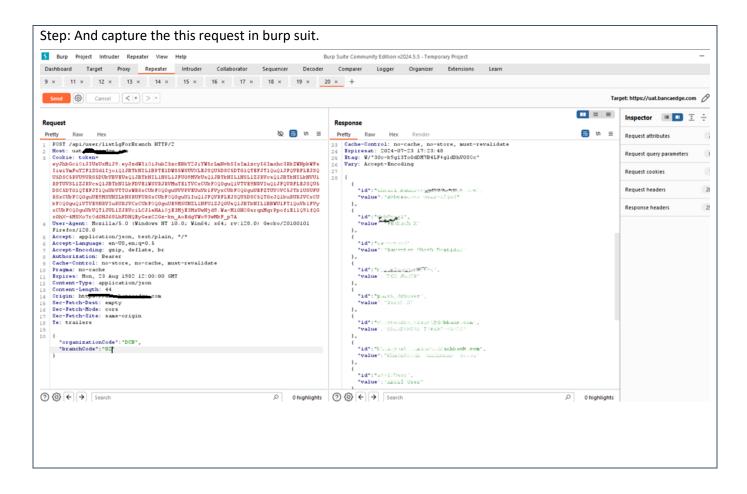
• Regular Security Training

- Educate Employees: Conduct regular security awareness training to help employees recognize phishing attempts, social engineering, and other threats.
- **Update Training Materials:** Keep training content current to address emerging threats and technologies.

STEPS TO REPRODUCE / PROOF OF CONCEPT

Step: visit the site and Ionin.





Improper Error Handling		
SEVERITY	low	
STATUS	OPEN	
CVSS SCORE		
CWE-ID		
OWASP CATEGORY		

Improper error handling refers to the inadequate or flawed methods employed by software applications to manage and respond to unexpected errors or exceptions during execution. Errors can occur for various reasons, such as invalid user input, system malfunctions, or unexpected conditions. When errors are not handled properly, it can lead to security vulnerabilities, degrade the user experience, and compromise the stability and reliability of the software.

IMPACT

Improper error handling in a software application can have various negative impacts on both the security and user experience. Here are some potential consequences of improper error handling:

- 1. Security Risks:
- Information Disclosure
- Security Bypass
- 2. User Experience Issues:
- Confusing User Interface
- Frustration
- 3. Data Integrity Concerns:
- O Data Corruption
- 4. System Stability Issues:
- O Application Crashes
- O Resource Leaks
- 5. Operational Challenges:
- O Difficult Debugging
- O Increased Support Burden
- 6. Compliance and Regulatory Violations:
- Legal Consequences

AFFECTED URL

REFERENCE URL FOR MITIGATION

N/A

RECOMMENDATIONS

To improve error handling and mitigate the impact of improper error handling in software applications, consider implementing the following recommendations:

1. Use Descriptive Error Messages:

o Provide clear and user-friendly error messages that convey meaningful information about the issue. Avoid exposing sensitive details but provide enough context for users to understand what went wrong.

2. Implement Logging:

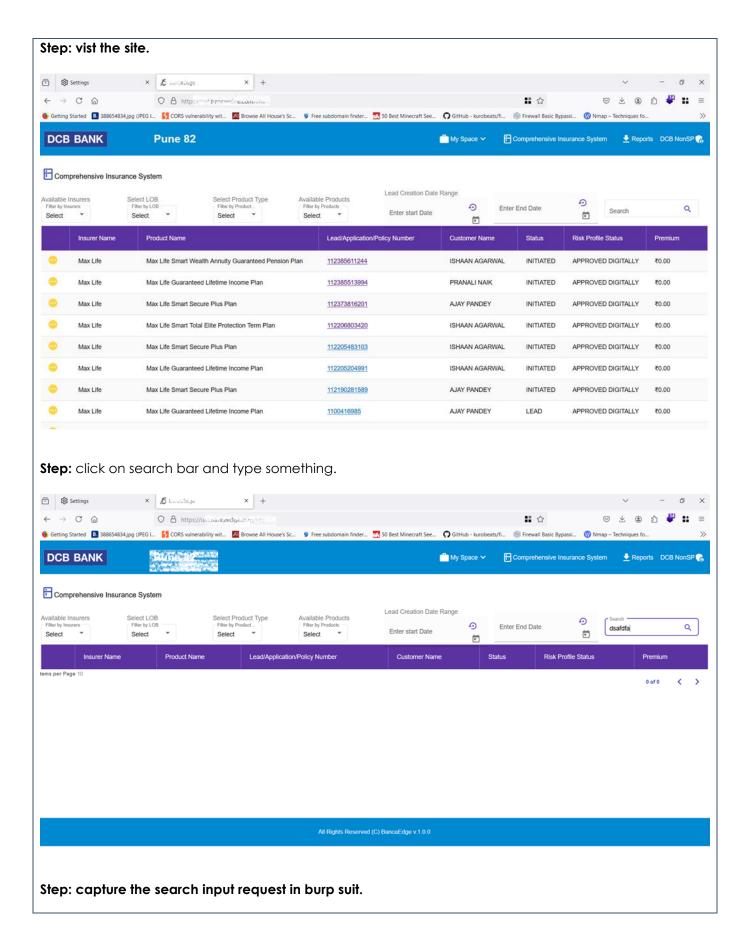
O Log errors, exceptions, and relevant details for debugging purposes. Ensure that logs do not expose sensitive information and regularly review logs to identify and address issues.

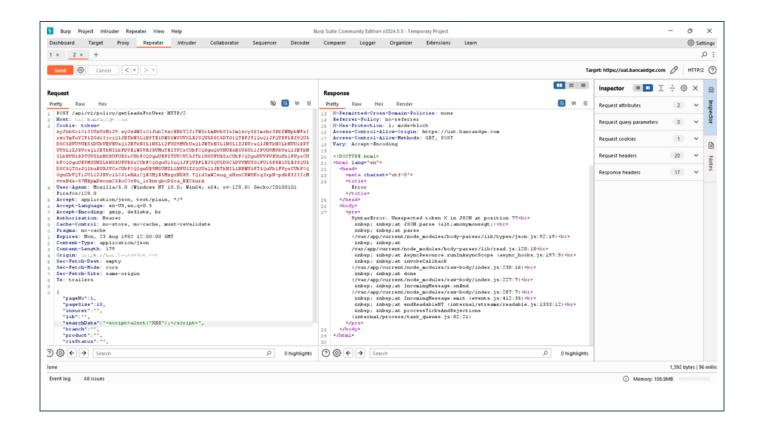
3. Catch and Handle Exceptions:

O Use try-catch blocks to catch and handle exceptions gracefully. Handle errors at appropriate levels, and provide fallback mechanisms to ensure

the application can recover from unexpected situations.

STEPS TO REPRODUCE / PROOF OF CONCEPT





09: Compression-Based Attacks		
SEVERITY		
STATUS	OPEN	
CVSS SCORE	5.00	
CWE-ID	CVE-2013-3587	
OWASP CATEGORY	Security Misconfiguration	
DESCRIPTION		

The application supports the "Accept-Encoding: gzip, deflate, br" header in HTTP requests, which indicates support for gzip, deflate, and Brotli compression algorithms. While compression enhances network efficiency by reducing data size during transmission, it can introduce vulnerabilities when used improperly. Compression-Based Attacks leverage this feature to infer sensitive information from encrypted responses.

IMPACT

Data Leakage: Attackers may exploit compression to deduce sensitive data, such as CSRF tokens or session identifiers, from compressed responses.

Security Risks: Vulnerable configurations can lead to compromises in data confidentiality, integrity, and availability.

Attack Vector: Exploitation typically involves manipulating payloads and analyzing resulting sizes to deduce encrypted content, potentially leading to unauthorized access or information disclosure.

AFFECTED URL

RECOMMENDATIONS

Disable Compression for Sensitive Responses: Configure servers to disable compression for responses containing sensitive data.

Implement Secure Design Practices: Adopt secure coding practices to prevent information leakage through compression side-channel attacks.

Regular Security Assessments: Conduct regular security assessments and penetration testing to identify and mitigate vulnerabilities associated with compression algorithms.

REFERENCE URL FOR MITIGATION

https://www.acunetix.com/blog/articles/breach-attack/NIST SP 800-53

https://www.acunetix.com/blog/articles/breach-attack/

PROOF OF CONCEPT

steps 1: Open website and reload then capture request in burpsuite

