

3-1 Lab Worksheet

Andree Salvo

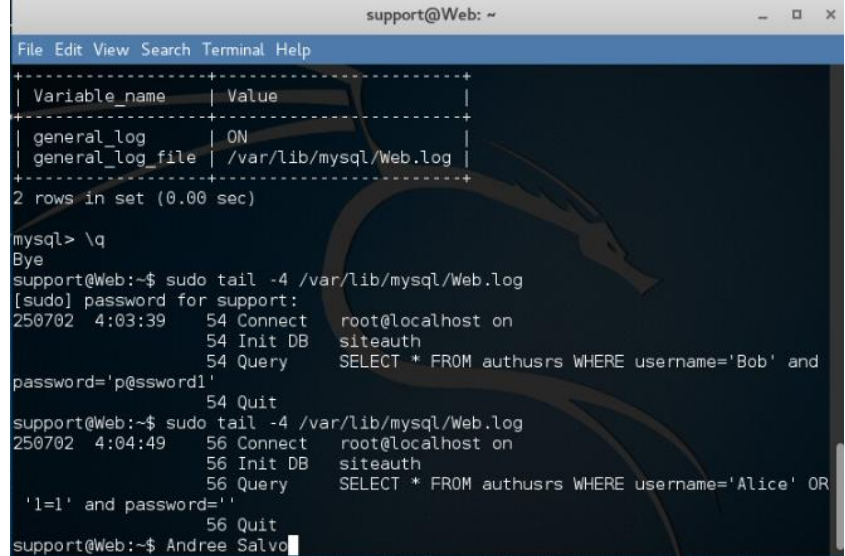
Southern New Hampshire University

CYB 240-13711

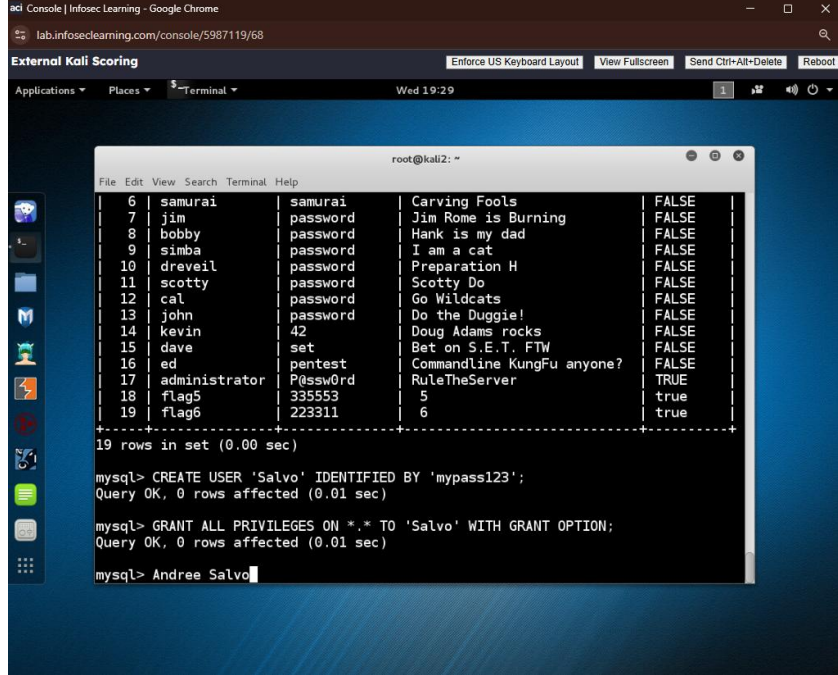
Instructor: Brian Remson

CYB 240 Module Three Lab Worksheet

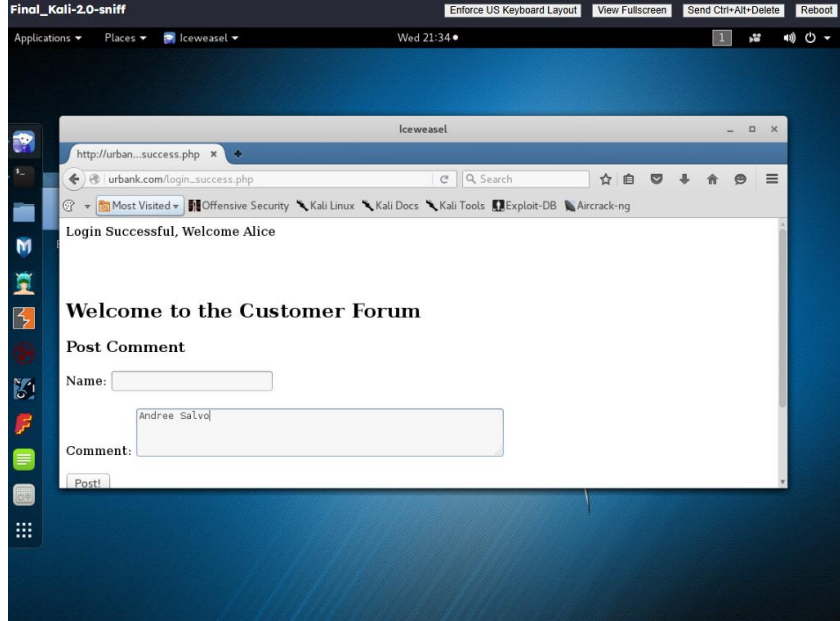
Lab: SQL Injections (SQLi)

Prompt	Response
<p>In the lab section “Analysis of the Vulnerability,” Step 20, insert your name at the command line below the output and include it in your screenshot.</p>	 <pre> support@Web: ~ File Edit View Search Terminal Help +-----+-----+ Variable_name Value +-----+-----+ general_log ON general_log_file /var/lib/mysql/Web.log +-----+-----+ 2 rows in set (0.00 sec) mysql> \q Bye support@Web:~\$ sudo tail -4 /var/lib/mysql/Web.log [sudo] password for support: 250702 4:03:39 54 Connect root@localhost on 54 Init DB siteauth 54 Query SELECT * FROM authsrs WHERE username='Bob' and password='p@ssword1' 54 Quit support@Web:~\$ sudo tail -4 /var/lib/mysql/Web.log 250702 4:04:49 56 Connect root@localhost on 56 Init DB siteauth 56 Query SELECT * FROM authsrs WHERE username='Alice' OR '1=1' and password='' 56 Quit support@Web:~\$ Andree Salvo </pre>
<p>In the lab, we demonstrated the dangers of unsecured input and how it can lead to SQLi. The lab also demonstrated how escaping can be used to mitigate an SQLi password bypass attack. Explain the steps of escaping and why it was successful in mitigating the SQL injection attack.</p>	<p>Escaping worked because it stopped the input from messing with the SQL query. It treated the special characters like normal text so that the injection couldn't go through.</p>

Lab: Performing SQL Injection to Manipulate Tables in a Database

Prompt	Response
In the lab section “Stealing Data and Creating a Backdoor,” Step 7 , insert your last name as the user that is created. Also use the name in Step 8. Take a screenshot after Step 8.	 <p>The screenshot shows a terminal window titled 'root@kali2: ~' with a MySQL database query result and subsequent SQL commands. The query result shows 19 rows in a set, with columns for user ID, username, password, a comment, and a boolean flag. The comments are humorous and include the user's name. The SQL commands create a new user 'Salvo' and grant all privileges to it.</p> <pre> 6 samurai samurai Carving Fools FALSE 7 jim password Jim Rome is Burning FALSE 8 bobby password Hank is my dad FALSE 9 simba password I am a cat FALSE 10 dreveil password Preparation H FALSE 11 scotty password Scotty Do FALSE 12 cal password Go Wildcats FALSE 13 john password Do the Duggie! FALSE 14 kevin 42 Doug Adams rocks FALSE 15 dave set Bet on S.E.T. FTW FALSE 16 ed pentest CommandLine KungFu anyone? FALSE 17 administrator P@ssw0rd RuleTheServer TRUE 18 flag5 335553 5 true 19 flag6 223311 6 true 19 rows in set (0.00 sec) mysql> CREATE USER 'Salvo' IDENTIFIED BY 'mypass123'; Query OK, 0 rows affected (0.01 sec) mysql> GRANT ALL PRIVILEGES ON *.* TO 'Salvo' WITH GRANT OPTION; Query OK, 0 rows affected (0.01 sec) mysql> Andree Salvo </pre>
Metasploit is an open source free tool that is shipped with Kali Linux. The tool can also be added to other distributions of Linux. How can this tool be used by security analysts to help secure computer systems that they are responsible for maintaining?	Metasploit is a pen-test tool security analysts use to simulate real-world attacks on the systems they manage. It helps them identify and address any weak spots before a real attacker can exploit them. It's a go-to tool when they need to tighten up system security.

Lab: Session Stealing (Stored XSS)

Prompt	Response
<p>In the lab section “Alice Gets Owned,” Step 12, insert your name in the comment field and then take a screenshot of the dialog.</p>	 <p>The screenshot shows a web browser window titled 'Iceweasel' with the address bar displaying 'http://urban...success.php'. The page content includes a message 'Login Successful, Welcome Alice' and a section titled 'Welcome to the Customer Forum'. Below this is a 'Post Comment' form with a 'Name:' label and a text input field containing 'Andree Salvø', and a 'Comment:' label with a larger text input field. A 'Post!' button is visible at the bottom of the form. The browser's address bar also shows 'urbank.com/login_success.php'.</p>
<p>In the lab, you learn to exploit stored XSS. What steps can be taken on a form that would prevent the ability of a stored XSS to execute, and how should they be implemented?</p>	<p>To prevent stored XSS, validate and sanitize user input, escape output, and use a Content Security Policy (CSP).</p>