

TryHackMe | SQL Injection Learning Path – Hands-On Experience

Recently, I completed the SQL Injection (SQLi) machine on TryHackMe, which provided a practical and in-depth understanding of one of the most critical web application vulnerabilities.

What I worked on:-

- 1) Understanding how SQL Injection vulnerabilities occur due to improper input validation
- 2) Performing manual SQL injection techniques to identify vulnerable parameters
- 3) Extracting database information such as:-
 - Database names
 - Tables and columns
 - Sensitive records
- 4) Learning how attackers bypass authentication mechanisms using SQLi
- 5) Exploring error-based and union-based SQL injection methods
- 6) Gaining insight into real-world exploitation scenarios

Key Takeaways:-

- 1) Importance of secure coding practices and input validation
- 2) How SQL Injection ranks in the OWASP Top 10 and its real-world impact
- 3) Defensive measures such as:-
 - Prepared statements
 - Parameterized queries
 - Proper error handling

💡 This hands-on lab strengthened my understanding of offensive testing techniques and the defensive mindset required to secure modern web applications.

📌 Platform: TryHackMe

📖 Topic: Web Application Security – SQL Injection

