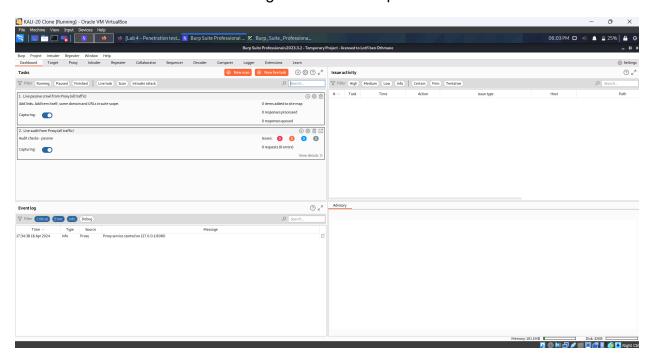
Lab 4: Penetration Testing

Team Members:

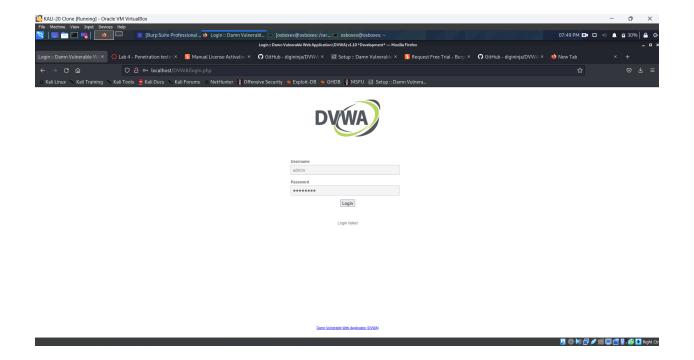
Nife Teye Sowmya Reddy Tukakula

April 9, 2024

Q1: Attach the screenshot of the login screen of BurpSuite Professional



Q2. Attach the screenshot of login page of DVWA



Q3: Attach the file output.html report to your submission.

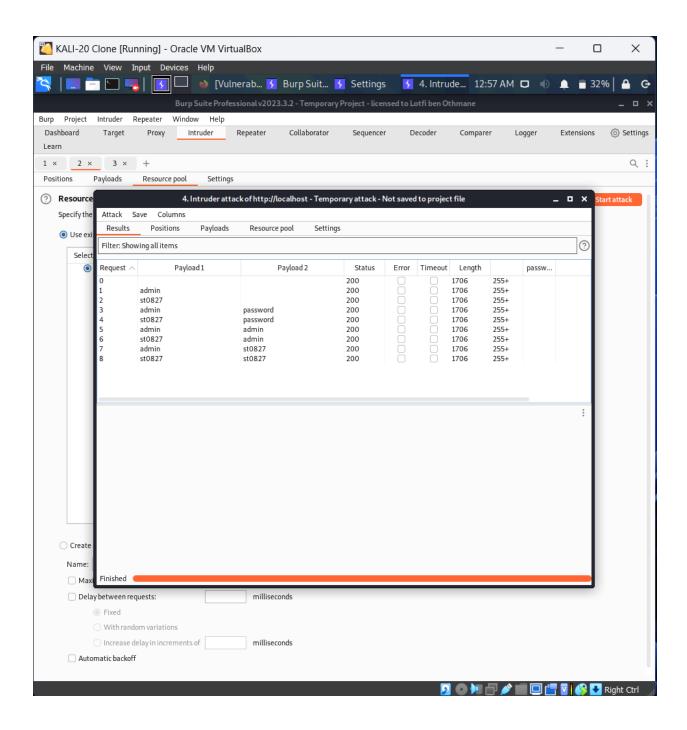
Attached the file

Q4 Reflect on the content of the report and provide your observations in one or two paragraphs.

The Burp Scanner Report provides a summary of identified security issues, categorized by severity and confidence level. The document outlines one high-severity issue with certain confidence related to the cleartext submission of passwords, which is a critical vulnerability as it can allow attackers to easily intercept passwords. Furthermore, there are other vulnerabilities identified, including one low-severity issue with certain confidence and multiple informational issues with varying degrees of confidence. This mixture of issues highlights the importance of a comprehensive approach to security, where even seemingly minor vulnerabilities should not be overlooked.

The detailed issues include unencrypted communications and path-relative stylesheet import attacks, indicating potential areas for improvement in securing data transmission and code integrity. It's also worth noting the inclusion of a potential clickjacking issue, which, while only informational, should be taken seriously. This report serves as a stark reminder of the multifaceted nature of web application security and the need for diligent, continuous testing and improvement to mitigate the risks of data breaches and unauthorized access.

Q5: Please attach the screenshot as above.



Q6: Reflect on your experience and describe your observations in two paragraphs.

This Lab is showing how cybersecurity issues and solutions work in the real world. By using Burp Suite, a tool for testing website security, learners get a hands-on chance to see how data requests can be intercepted, changed, and analyzed. The tasks of setting up a security scan and

trying out different hacking techniques like brute force attacks help illustrate the complex interactions between a website's weaknesses and the strategies security experts use to test or secure them. This practical use of what's usually learned in theory helps bridge the gap between studying and applying knowledge, highlighting the need for strong security measures on websites.

The lab also underlines the importance of understanding both the tools and the thought processes of potential attackers. Setting up the testing environment, adjusting the proxy settings, and carrying out various attacks not only improve technical skills but also develop a strategic way of thinking about security. It's about thinking critically and solving problems, where you need to predict potential security gaps and act ahead of time to address them. The step-by-step nature of the lab ensures that learners can grasp why each security step or attack method is used, which helps build a deeper understanding of how to find, exploit, and fix security weaknesses. Seeing both the attacker's and defender's points of view gives a full picture of cybersecurity, which is essential for anyone looking to work in this area.