

Peer Response in Collaborative Discussion 1

My peer response to Helen Oi Lam Siu

by [George Koridze](#) - Sunday, 3 November 2024, 6:28 PM

Thank you for your insightful breakdown of the website login vulnerabilities in your activity diagram. You've highlighted key weaknesses, particularly around unrestricted login attempts, the absence of multi-factor authentication (MFA), and insecure session management—all critical points in OWASP's recommendations (OWASP, 2021). Activity Diagram was a great choice, as it clearly outlines each step in the user journey and highlights specific vulnerabilities in the workflow.

In terms of strengthening these areas, incorporating multi-factor authentication (MFA) action from the list to also in the diagram would be a great addition since it provides additional layer of account security, even when passwords are compromised. Given the rise in automated attacks like credential stuffing, MFA can be considered as a crucial extra layer that verifies user identity (Zviran & Erlich, 2006).

Adding logging and alert systems that notify administrators of suspicious activities, such as repeated login attempts or password reset requests could be another addition to the list of vulnerabilities (OWASP Top 10, 2021).

Your activity diagram is clear and accessible for both technical and non-technical audiences, making it an excellent visualisation for demonstrating security weaknesses and preventions in the login process.

References:

OWASP (2021) OWASP Top 10. OWASP. Available from: <https://owasp.org/www-project-top-ten/> [Accessed 3 November 2024]

OWASP Top 10. (2021) A07:2021 – Identification and Authentication Failures.

Available from: https://owasp.org/Top10/A07_2021-

[Identification and Authentication Failures/](https://owasp.org/Top10/A07_2021-) [Accessed 3 November 2024]

Zviran, M., & Erlich, Z. (2006) Identification and Authentication: Technology and Implementation Issues. *Communications of the Association for Information Systems* 17. DOI: <https://doi.org/10.17705/1CAIS.01704>