Description

This reflective piece for the module Network Security is based on Gibbs reflective cycle (Mindtools, 2018) that aims to develop learning by reflection. The situation I will reflect over is the latest assignment, that required me to conduct a penetration test on a chosen website. Halfway through the assignment the website host was down, I could not access the URL and any requests on its IP address failed. After several days of reconfiguration, reinstalment etc I found myself in a predicament.

Feelings

Initially this problem caused me performance anxiety as I would not be able to complete the assignment to a satisfactory standard, nor would I achieve the personal goals I set out prior to the assignment. I felt defeated, unknowledgeable, and isolated as no attempts to rectify the issue worked.

Evaluation

The silver lining of this situation that I had a decision to make – either retake the module because of late hand in or find another way to resolve my technical difficulties. The negative aspect of this situation was that I would not produce quality output I expect from myself.

I researched other methods of penetration testing and found I could use automatic website scanners available online that did not require configurations set ups on my personal computer. Instead of an active penetration test, I resorted to perform a surface vulnerability assessment within the limitations of the website scanners.

Newfound understanding of General Data Protection Regulation

Despite surface level scanning, I did learn about web application vulnerabilities, how non-compliance relates to the General Data Protection Regulation but most importantly I learned what the Regulation requires of the protection of data, and that card transactions require protection (Wright 2011).

Prevent feelings of isolation

To prevent feelings of isolation, I should have reached out for support at an earlier stage. Feelings of isolation in the learning process may have negative consequences, and hinder motivation to progress and learn in general but in particular on a university course (Croft et al, 2010). Alsop (2013) argues that lifelong learners need support from seniors or peers to allow students to develop and prevent feelings of isolation.

Problem solving skills

Problem solving skills is identified in the dictionary as "the process or act of finding a solution to the problem" (Merriam-Webster, 2022). Problem solving skills can only be developed by solving problems (Engel, 1998).

To solve complex problems, Chevallier (2016) suggests six core steps, four of which are relevant for this assignment:



Source: asq.org

To this point, I have identified a problem, thought of ideas, and taken the decision to complete a surface website vulnerability scan on the web application to the best of available ability. It is my opinion that it was an innovative and creative solution to the problem at hand in an uncertain situation. Titchen and Higgs (2001) argues that creativity is necessary in the contemporary workplace practice as it operates in degrees of uncertainty. Creative solutions are required in such context as it fosters new knowledge, finds effective solutions, and develops change (Aslop, 2013).

Resilience

It can be argued that failure promotes learning (Anderson et al 2018) and I argue that failure builds resilience, which constitutes the process of an individuals' healthy functioning in response to adversary (Masten, and Narayan, 2013). Resilient employees in the workplace reduce absenteeism, counterproductive work behaviour and general stress related issues (Vanhove, 2016) and provide generally healthy persons.

Conclusions

Despite the assignment not been complete to my personal standard, I am content with my ability to try different paths. Problem solving skills and resilience are important factors in a complex work market where resilience provides a healthier work force. I am happy with my decision to submit what I could do with the limited means available to me and have developed a deeper understanding of the GDPR which I might not have otherwise.

Lessons and future actions

If faced with a similar situation again, I would Had this been a professional work task I would reach out much earlier to a mentor or supervisor and break through the feeling of isolation.

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