

SecureRole

An Incident Response Tabletop Role-Playing Game

Graduate



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Objective: Over the last couple of years, cyber security attacks have become a dominant issue in the global landscape. Phishing campaigns are on the rise and the world is in a current "gold rush for ransomware". Companies are being targeted with an increased frequency all around the world. This calls for IT experts, which often receive their first in-depth training in security during their time at college or in secondary education. The goal of this thesis is to better prepare students with the development of an incident response role-playing game. This can be achieved by collaborative training and using simulations to mimic a situation as close as possible to the real-world scenario. Teaching with versatile and adaptable scenarios builds up skills to prepare a company against different kinds of attacks and how to mitigate them, should one of its systems be compromised. Additionally, they learn to appropriately react, how to communicate, and on which basis to make meaningful decisions, as a key to success for eradication of the attacker and recovery to normal operation.

Approach: It started with an analysis of existing products, we evaluated if any of them could be an exact fit for our purposes. Sadly, none of them fully met the requirements. So we then used them to draw inspiration for our product. After we defined how the game is going to be played and how the framework for content creation is structured, we started the process of content creation itself. For verification and improvements of the content, we established a process of peer-reviews, asked external educators for their opinions, and tested it with our target audience. The created content was finally verified with an acceptance test, the results of which allowed for final improvements to be made to the product.

Result: The result of the bachelor thesis is a framework, that gives guidance for the creation of packages and scenarios in a versatile and adaptable way, packages, that can be chained to create scenarios, and predefined scenarios to directly start a cybersecurity role-playing game. The framework allows for interchangeable content, which makes it possible to change certain parts of the role-play giving it an agile nature. The packages also include additional materials, such as text scripts, presentations, and curated internet content to deepen the knowledge about cyber security attack techniques and mitigations. The predefined scenarios are created with the packages and were tested during the thesis.

Advisor

Prof. Dr. Nathalie Weiler

Co-Examiner

Giorgio Tresoldi,
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Subject Area

Security

Logo of SecureRole

Own presentation



First ideas of the game type

Own presentation



Categories in SecureRole Flavors

Own presentation

