University of Southern Denmark

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE BADM500: GROUP REPORT

Title

Authors

 $\begin{array}{ccc} X \ X \\ xx.x \end{array} \qquad \begin{array}{ccc} Y \ Y \\ xx.x \end{array}$

ZZ xx.x

January 29, 2025



The report should be of at most 10 + X * 4 pages where X is the number of group members (not including the front matter before this box and any references)

1 Introduction

Briefly explain the purpose of the group project, the types of challenges created.

2 Preliminaries

If you have used not well-known tools or libraries briefly introduce them. Provide references to what you have used.

3 Group Web Security Challenge

3.1 Challenge Overview

Provide a brief description of the challenge scenario, what participants need to accomplish (i.e., what skill is tested, the goal of the challenge).

3.2 Technical Details

Provide a detail description of the implementation of the challenges including:

- Challenge Design: Step-by-step explanation of how the challenge works, including potential vulnerabilities, know how, or weaknesses that participants are expected to exploit. If possible use an image to illustrate the challenge architecture and how the different components interact.
- Environment and implementation: Describe the setup required (e.g., server configurations, programming language used, ...) and how the challenge was implemented.
- Tools and Resources: Any tools or libraries used for creating the challenge.
- Difficulties Encountered: Describe any technical or conceptual challenges the group faced while creating this challenge.
- Design Choices: Explain why certain design decisions were made (e.g., complexity level, choice of vulnerability, tools used).
- Testing Process: How the challenge was tested to ensure it works as intended.
- Difficulty Assessment: Rate and justify the challenge's expected difficulty level

4 X Open Challenge

4.1 Challenge Overview

Every open challenge should be described providing the challenge name, a description of the challenge scenario, where the idea comes from, what participants need to accomplish (i.e., what skill is tested, the goal of the challenge) and the expected level of difficulty. In particular, you should also mention who was the primary proponent of the challenge, who was the primary developer and who else had a secondary role in the design/implementation of the challenge.

4.2 Technical Details

Provide a detail description of the implementation of the challenges including:

- Challenge Design: Step-by-step explanation of how the challenge works, including
 potential vulnerabilities, know how, or weaknesses that participants are expected to
 exploit. If possible use an image to illustrate the challenge architecture and how the
 different components interact.
- Environment and implementation: Describe the setup required (e.g., server configurations, programming language used, ...) and how the challenge was implemented.
- Tools and Resources: Any tools or libraries used for creating the challenge.
- Difficulties Encountered: Describe any technical or conceptual challenges the group faced while creating this challenge.
- Design Choices: Explain why certain design decisions were made (e.g., complexity level, choice of vulnerability, tools used).
- Testing Process: How the challenge was tested to ensure it works as intended.
- Difficulty Assessment: Rate and justify the challenge's difficulty level.

5 Team work description

This section can be skipped if the group is composed of only one person.

Describe how you decided to work as a team and the approach you have used. Describe how you planned the communication between all of you.

6 Discussion

Summarize the learning experience and insights gained from creating these challenges.

Discuss what are the shortcomings/limitations of your project, possibly explaining how they could be solved or mitigated.

Discuss any potential improvements or enhancements that could be made to the challenges.

7 References

Add your references here.