Cybersecurity Management

University of Minho

Master's Program in Cybersecurity

2025/2026

Practical Lab Exercises #03

1 Questions

Read the paper "Why you should care about the Target data breach", by N. Manworren, J. Letwat and O. Daily. The paper is available at the course community on the e-learning platform of University of Minho.

Note: To answer the questions below, this reading should be enough. However, you are free to complement your readings with other documents about the Target case, as long as the documents are scientifically or journalistically rigorous. If you use other resources to elaborate your answers, cite them after your answers.

1. Provide your interpretation of what happened to the company Target, using the framework "Dimensions of Information Systems Security" for that purpose. Structure your response according to the four dimensions of that Framework (Technical, Formal, Informal, and Regulatory). (maximum response length: 1000 words)

2. Identify the security controls mentioned—directly or indirectly—in the paper by completing the following table

Control	Type	Purpose
⋮	⋮	⋮

in which the column Control is the designation of the control referred to, Type is the classification of the control according to its type (Technical, Formal, Informal, or Regulatory) and Purpose is the classification of the control according to its purpose (Directing, Structuring, Learning, Preventing, Detecting, or Reacting).

2 Deliverable

The deliverable for this assignment must be submitted as a PDF document formatted for A4 paper size. Each page should be numbered with Arabic numerals, right-aligned in the footer.

The first page of the deliverable must include the following information: name of the course, name of the academic institution, academic year, title of the pratical lab exercises, and identification of the students. Student identification should follow the structure: student number, m-dash, full name of the student, m-dash, program the student is enrolled. The identification of each student must appear on a separate line. Students in a group should be listed in alphabetical order by full name of the student.

Each answer must begin on a new page, corresponding to the question number. Answers may be written in Portuguese or English. Make sure your answers do not exceed the maximum word limit in questions where one is specified. At the end of each of those answers, provide the corresponding word count in square brackets.

Failure to follow these directives will result in a grade of zero for the assignment.

Each student must submit the deliverable individually, using the submission channel provided in the course community on the University of Minho's e-learning platform, by the deadline specified on that platform.

Students who do not submit the deliverable will receive a grade of zero. Submission attempts by other means or after the deadline will be rejected outright.

Prof. Filipe de Sá-Soares
University of Minho, 2025