

King Saud University College of Computer and Information Sciences Computer Science Department		
CSC 429: Computer Security	Homework# 2	1 st Semester, 1446 – Fall, 2024

Question 1:

- A. Briefly describe each of the following risk assessment approaches:
- Baseline Approach
 - Informal Approach
 - Detailed Risk Analysis
 - Combined Approach
- B. Based on these descriptions, which approach would you recommend for a mid-sized organization with a limited budget? Justify your choice.

Question 2:

Consider a fictional organization, "Tech Solutions," a mid-sized software development company with around 200 employees. The organization has assets including customer databases, email systems, a proprietary project management application, and development servers. Develop a Risk Register for the company ensuring the following:

A. Asset Identification:

List the key assets in "Tech Solutions" that need protection. Briefly explain why each asset is valuable to the organization.

B. Threat and Vulnerability Identification:

Identify at least three potential threats and associated vulnerabilities for these asset. Use the threat sources categories (e.g., natural, man-made, accidental) as a guide.

C. Risk Assessment Matrix:

Using the risk likelihood and consequence tables from the chapter, assign a risk level for each identified threat. Describe the existing controls you would expect for each asset and discuss if they are sufficient.

D. Risk Treatment:

Propose one of the following risk treatment methods (risk acceptance, risk avoidance, risk transfer, reduce likelihood, or reduce consequence) for each threat. Explain your reasoning.

Question 3:

- A. Reflect on the limitations of each risk assessment approach in dealing with unforeseen threats (e.g., emerging technologies or new types of attacks). Which approach would you find most adaptable to changing threat landscapes?
- B. Compare the risk assessment you performed on "Tech Solutions" with the Silver Star Mines case study in Chapter 14. How do the assets and threat levels differ, and what does this imply about the importance of tailoring risk assessments to an organization's specific needs?

Note:

- Due date to submit the assignment is **SATURDAY 30-Nov-2024 at 11:59 pm.**
- Form a group of **3 students** for the assignment. One submission per group. Students who do not contribute to the assignment will receive **ZERO**.
- Upload your assignment to LMS.
- Your assignment **MUST** be in **PDF** format.
- Name your assignment file: **Group#_HW2.pdf**