

Day 1: Introduction to Cybersecurity

Description :

This chapter introduces the basics of cybersecurity, including its core purpose, foundational principles (CIA Triad), and key concepts like threats, risks, and vulnerabilities.

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What is Cybersecurity?

Cybersecurity is the practice of protecting systems, networks, and data from cyber attacks. It includes preventing unauthorized access, data breaches, and maintaining the security of digital assets.

The CIA Triad

The **CIA Triad** is the foundation of cybersecurity:

- **Confidentiality:** Only authorized users can access the data.
- **Integrity:** Data remains accurate and unchanged.
- **Availability:** Systems and data are available when needed.

Key Concepts

Term	Meaning
Asset	Something valuable like data or devices
Threat	Potential danger to an asset
Vulnerability	Weakness that can be exploited
Risk	Likelihood of a threat exploiting a vulnerability

Roles in Cybersecurity

- **Security Analyst:** Monitors systems for threats
- **Penetration Tester:** Finds security weaknesses
- **Incident Responder:** Handles breaches
- **Security Architect:** Designs secure systems

Summary

Today I learned the core foundation of cybersecurity, including the **CIA Triad**, key concepts like assets and threats, and various job roles in the field.