# Glossary

## Cybersecurity



#### Terms and definitions from Course 2

#### Α

**Antivirus software:** A software program used to prevent, detect, and eliminate malware and viruses

**Assess:** The fifth step of the NIST RMF that means to determine if established controls are implemented correctly

**Asset:** An item perceived as having value to an organization

**Attack vectors:** The pathways attackers use to penetrate security defenses

Authentication: The process of verifying who someone is

Authorization: The concept of granting access to specific resources in a system

**Authorize:** The sixth step of the NIST RMF that refers to being accountable for the security and privacy risks that might exist in an organization

Availability: The idea that data is accessible to those who are authorized to access it

#### B

**Biometrics:** The unique physical characteristics that can be used to verify a person's identity

**Business continuity:** An organization's ability to maintain their everyday productivity by establishing risk disaster recovery plans

#### C

**Categorize:** The second step of the NIST RMF that is used to develop risk management processes and tasks

Chronicle: A cloud-native tool designed to retain, analyze, and search data

**Confidentiality:** The idea that only authorized users can access specific assets or data

Confidentiality, integrity, availability (CIA) triad: A model that helps inform how organizations consider risk when setting up systems and security policies

### D

**Detect:** A NIST core function related to identifying potential security incidents and improving monitoring capabilities to increase the speed and efficiency of detections

#### Е

**Encryption:** The process of converting data from a readable format to an encoded format

**External threat:** Anything outside the organization that has the potential to harm organizational assets

**Identify**: A NIST core function related to management of cybersecurity risk and its effect on an organization's people and assets

**Implement:** The fourth step of the NIST RMF that means to implement security and privacy plans for an organization

**Incident response:** An organization's quick attempt to identify an attack, contain the damage, and correct the effects of a security breach

Integrity: The idea that the data is correct, authentic, and reliable

**Internal threat:** A current or former employee, external vendor, or trusted partner who poses a security risk

Log: A record of events that occur within an organization's systems

#### M

**Metrics:** Key technical attributes such as response time, availability, and failure rate, which are used to assess the performance of a software application

**Monitor**: The seventh step of the NIST RMF that means be aware of how systems are operating

#### N

National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF): A voluntary framework that consists of standards, guidelines, and best practices to manage cybersecurity risk

National Institute of Standards and Technology (NIST) Special Publication (S.P.) 800-53: A unified framework for protecting the security of information systems within the U.S. federal government



Open Web Application Security Project/Open Worldwide Application Security Project (OWASP): A non-profit organization focused on improving software security

Operating system (OS): The interface between computer hardware and the user

#### P

Playbook: A manual that provides details about any operational action

**Prepare:** The first step of the NIST RMF related to activities that are necessary to manage security and privacy risks before a breach occurs

**Protect:** A NIST core function used to protect an organization through the implementation of policies, procedures, training, and tools that help mitigate cybersecurity threats

#### R

**Ransomware:** A malicious attack where threat actors encrypt an organization's data and demand payment to restore access

**Recover:** A NIST core function related to returning affected systems back to normal operation

**Respond:** A NIST core function related to making sure that the proper procedures are used to contain, neutralize, and analyze security incidents, and implement improvements to the security process

Risk: Anything that can impact the confidentiality, integrity, or availability of an asset

**Risk mitigation:** The process of having the right procedures and rules in place to quickly reduce the impact of a risk like a breach

#### S

**Security audit:** A review of an organization's security controls, policies, and procedures against a set of expectations

Security controls: Safeguards designed to reduce specific security risks

**Security frameworks:** Guidelines used for building plans to help mitigate risk and threats to data and privacy

**Security information and event management (SIEM):** An application that collects and analyzes log data to monitor critical activities in an organization

**Security orchestration, automation, and response (SOAR):** A collection of applications, tools, and workflows that use automation to respond to security events

**Security posture:** An organization's ability to manage its defense of critical assets and data and react to change

**Select**: The third step of the NIST RMF that means to choose, customize, and capture documentation of the controls that protect an organization

**Shared responsibility:** The idea that all individuals within an organization take an active role in lowering risk and maintaining both physical and virtual security

**Social engineering:** A manipulation technique that exploits human error to gain private information, access, or valuables

Splunk Cloud: A cloud-hosted tool used to collect, search, and monitor log data

**Splunk Enterprise:** A self-hosted tool used to retain, analyze, and search an organization's log data to provide security information and alerts in real-time

Τ

Threat: Any circumstance or event that can negatively impact assets

V

Vulnerability: A weakness that can be exploited by a threat