Purpose CVE Focus CVE is a dictionary or It assigns unique Common catalog of publicly identifiers (CVE IDs) to known information vulnerabilities, **Vulnerabilities** security vulnerabilities making it easier to and Exposures and exposures. share data across separate vulnerability databases and security tools. **CVE Example Interoperability Hub Managed by** A specific instance **CVE's standardized** identifiers facilitate of a software seamless integration and It is managed by vulnerability with interoperability among security tools, the CVE Program, a unique identifier, streamlining the sharing operated by the e.g., CVE-2023and correlation of 12345. **MITRE** vulnerability information.

Corporation.

CWE Common Weakness **Enumeration Example**

Purpose

CWE is a communitydeveloped list of common software and hardware security weaknesses.

Focus

It provides a standardized way to describe and categorize vulnerabilities, weaknesses, and flaws in software architecture and development practices.

CWE

Buffer overflows, SQL injection, crosssite scripting (XSS), etc.

Managed by

It is maintained by the MITRE Corporation.

·Contextual Insight

·CWE establishes relationships between vulnerabilities, providing a holistic view of potential interactions within intricate software systems.

NVD National Vulnerability Database

Purpose

NVD is the U.S. government repository of standards-based vulnerability management data.

Focus

It provides information on vulnerabilities, including their descriptions, public identifiers (CVE IDs), and information about how to mitigate or remediate the vulnerabilities.

Example

NVD hosts information related to CVEs, including severity scores and impact assessments.

NVD

Managed by

It is sponsored by the **National Institute of** Standards and Technology (NIST) and is part of the larger NIST **Cybersecurity Program.**

Severity Metrics

NVD utilizes metrics like CVSS scores. enabling effective vulnerability prioritization and targeted risk mitigation strategies.