Todays topic is vulnerability , assets , threat , attack , risk , exploit , impact . This topic was done is our class where teacher used multiple real life examples.

Any resource that is valuable to an organisation is considered an asset.  
Examples include networks, employees, data, hardware, software, and intellectual property.  
Threat Definition: A possible hazard or damage to property.  
Types: malevolent attacks, natural disasters, and human mistake.  
Malware, phishing scams, illegal access, and system failure are a few examples.  
Definition of vulnerability: A flaw in a system or one of its parts that a threat could exploit.  
Examples include unpatched systems, unsafe network settings, software vulnerabilities, and weak passwords.  
An exploit is a piece of software or code that compromises a system by taking advantage of a vulnerability.  
Samples include keyloggers, spyware, and ransomware.

The WannaCry ransomware attack in 2017 is a prime example of how cybersecurity threats can unfold.

* **Asset:** The assets affected were the data and systems of countless individuals and organizations worldwide.
* **Vulnerability:** The primary vulnerability was an unpatched flaw in Microsoft Windows systems, known as EternalBlue.
* **Threat:** The threat was the WannaCry ransomware, designed to encrypt files and demand a ransom for decryption.
* **Exploit:** The attackers used the EternalBlue exploit to spread the ransomware rapidly across vulnerable systems.
* **Attack:** The attack involved infecting computers with the ransomware, encrypting files, and demanding a ransom.
* **Risk:** The risk was significant, as it could lead to data loss, system downtime, financial loss, and reputational damage for affected organizations and individuals.
* **Impact:** The impact was widespread, causing disruptions to businesses, healthcare systems, and critical infrastructure.

This incident highlights the importance of timely software updates, strong cybersecurity measures, and incident response plans.

Resources - The information was synthesized from various reliable sources, including:

* **Wikipedia:** <https://en.wikipedia.org/wiki/WannaCry_ransomware_attack>
* **Kaspersky:** <https://www.kaspersky.com/resource-center/threats/ransomware-wannacry>
* **Cloudflare:** <https://www.cloudflare.com/learning/security/ransomware/wannacry-ransomware/>