Threat management and modelling

Threat is a danger that can cause damage to the system, vulnerability is a weakness of the system. Threat modelling is a process to understand how a threat can be harmful and how to eliminate that threat for a system/value. There are plenty of threat modelling techniques i.e., Stride and Dread, CVSS, Attack Trees and Trike.

Attack trees is a model representation of a security system with different paths to achieve the attack goals. A tree structure is built to understand how an attacker can be successful by using different ways, a counter part of that tree is made to eliminate any possibility in which an attacker can be successful.

STRIDE is a process of classifying threat into six categories (Spoofing, Tampering, Repudiation, Information disclosure, Denial of Service and Elevation of privileges). DREAD gives rating to the risk associated with a theat.