5/18/2016 Preview

# **Threat Model Concepts**

# 1. Identify Security Objectives 2. Application Overview Application Application Application Threats

# **Vocabulary**

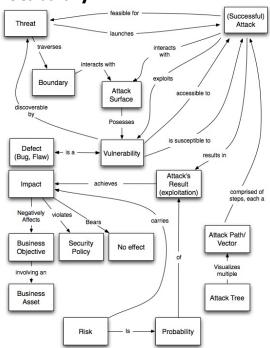


Image from https://www.cigital.com/blog/threat-modeling-vocabulary/

### **DFD Elements**

External Entity The external entity shape is used to represent any entity outside the application that interacts with the application via an entry point



Represents a task that handles data within the application. The task may process the data or perform an action based on the



Used to present a collection of subprocesses. The multiple process can be broken down into its subprocesses in another DFD.

Data Store

Represents locations where data is stored



Data Flow

Represents data movement within the application. The direction of the data movement is represented by the arrow.



Represent the change of privilege levels as the data flows through the application.

# **Data Classification**

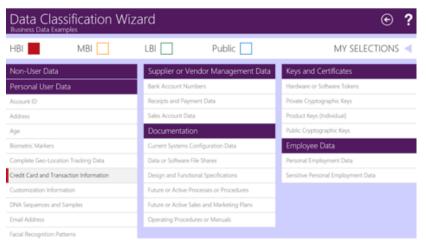


image from https://www.microsoft.com/security/data/

## **STRIDE**

Threat	Description	Breaks
<b>S</b> poofing	Pretending to be somebody else	Authentication
<b>T</b> ampering	Modifying data that should not be modifiable	Integrity
<b>R</b> epudiation	Claiming someone didn't do something	Non-Repudiation
Information Disclosure	Exposing information	Confidentiality
<b>D</b> enial of Service	Preventing a system from providing service	Availability
Elevation of Privilege	Doing things that one isn't supposed to do	Authorization