### VULNERABILITY 101

#### What Are Vulnerabilities?

Components of code that can be exploited to negatively impact the security of data, systems, people, or IP.



## What Is The Cause Of Vulnerabilities?

Vulnerabilities can be the result of erroneous scripting or can arise from changes in the deployment environment, or from several seemingly intentional commands combined in unintentional ways.



# How Common Are Vulnerabilities?

The average software application reportedly has 15-50 "bugs" per thousand lines of code.



#### **How Are Vulnerabilities Surfaced?**

Most internally developed software progresses through similar development lifecycles, which include several phases of targeted testing prior to, and throughout production. Unfortunately, it's impossible to simulate every possible use case, permutation or potential interaction in such controlled settings. Additionally, software is always evolving—expanding and contracting like a living organism to adapt to new operating environments and an ever-growing list of connected tools and services.





Internal Software Developers



**End-users** 



Hackers/Security Researchers

Vulnerabilities are inevitable and are not a sign of weakness. It's all about how an organization responds to these vulnerabilities.