Ethical Hacking

PenTesting (Penetration testing) -> VAPT (Vulnerability Assessment and Penetration Testing)

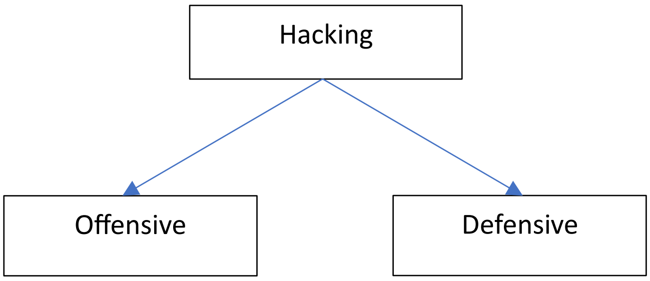
-> Web application PenTesting "Bug Bounty"

-> IOT

-> Mobile application (Android & iOS)

Cloud Security

DevSecOps



Triad (CIA/Pillars of Security)

C - Confidentiality

I - Integrity

A - Availability

A - Authenticity

NR - Non-reputational

Confidentiality: In confidentiality, data exchange between two people is not accessible to the third person.

Integrity: In integrity, data exchange between two people should not be tampered.

Availability: At any given point of time, data should be accessible to its legitimate user.

Authenticity: Before providing the data, the system has to verify - Is the user same as he portrays?

Non-reputational: A person shouldn't be able to deny the activity he performed.

A person cannot deny his activity after performing it.

Data states

1) Data in Transit
2) Data in Use
3) Data at Rest

1) Data in Transit - When the data is moving
2) Data in Use - When the data is being processed
3) Data at Rest - When the data is not moving

OSIG (Open-Source Information Gathering)

Hacking Phases

1) Reconnaissance (Information Gathering)
   Capturing information about the target
2) Extrapolation (Gaining access)
3) Privilege Escalation
4) Maintaining access
   Creating a backdoor
5) Erase Traces
   Clearing logs (Clearing footprints)

Cyber Killchain Methodology