Defining Cyber Security

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Terms

Cyber Security

- security of any device connected to a network

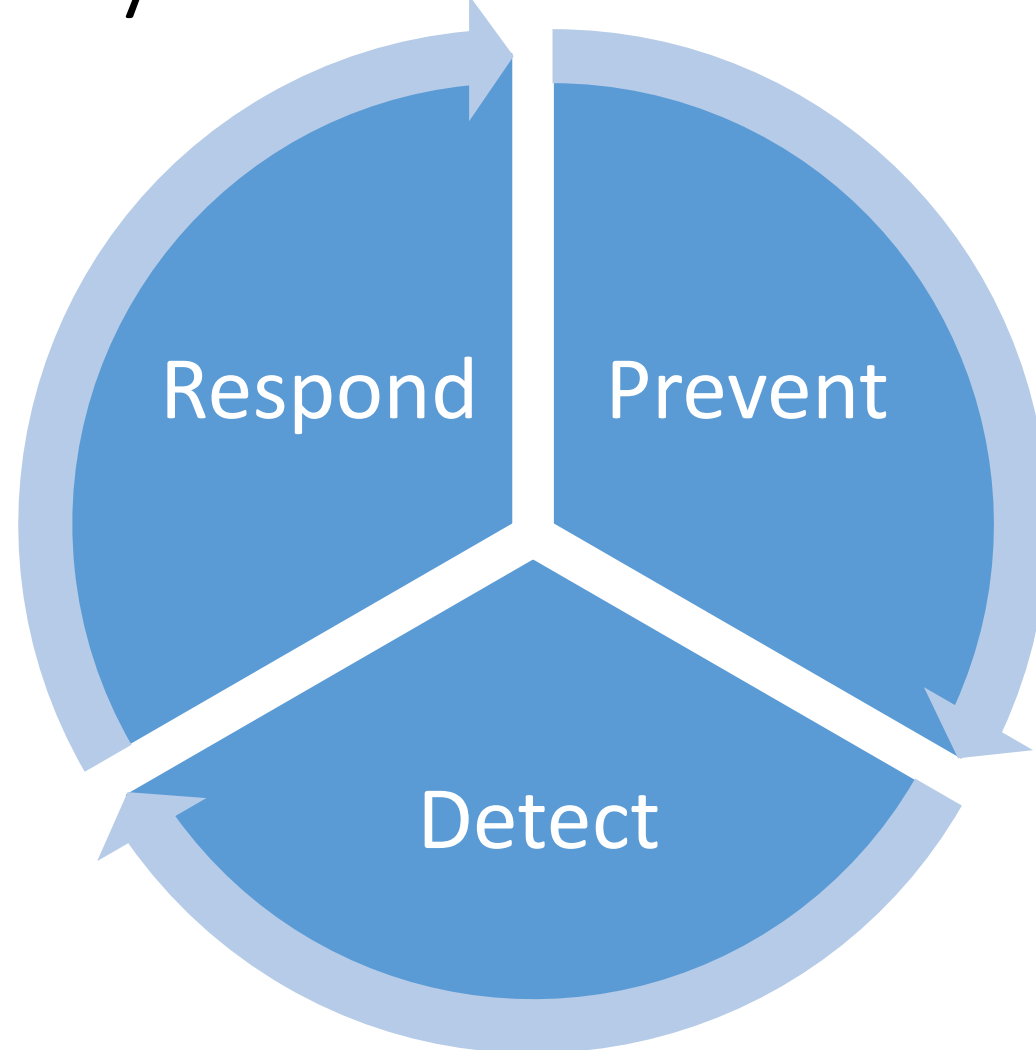 e.g. a smartphone connected to the internet

Information Security

- Relates to the security of any information

  (digital or physical)

Computer Security

- Security of any computing device

Cyber Security Process

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Risk Management

- Identify assets

- Determine potential risks

- Determine mitigation techniques to implement

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CIA Triad (Information Security)

INTEGRITY
Information should not be altered without appropriate authorisation

AVAILABILITY
Information should be available to legitimate users in line with the design of the system

CONFIDENTIALITY
Information should only be viewed by authorised users

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Terminology - Attackers

- Bad Actor

- Threat Actor

- Malicious Actor

- Attacker

Terminology – Attack Categories

- Malicious
- Non-malicious

Terminology

- Vulnerability- limitation which opens a system to potential attack
- Threat – something or someone which poses harm to a system
- Attack- an event which aims to exploits a vulnerability of a system

Attack Surface and Vector

Attack Surface

- Collection of all entry points an unauthorised attacker could attempt to exploit

Attack Vector

- The path an attacker has taken to gain (unauthorised) access to a system

Laws and Regulations

- Computer Misuse Act 1990

- Serious Crime Act 2015

- Data Protection Act 2018