

# Welcome to this session: Cyber Threats

The session will start shortly...

Questions? Drop them in the chat. We'll have dedicated moderators answering questions.





# What is Safeguarding?

Safeguarding refers to actions and measures aimed at protecting the human rights of adults, particularly vulnerable individuals, from abuse, neglect, and harm.

To report a safeguarding concern reach out to us via email: safeguarding@hyperiondev.com



# Live Lecture Housekeeping:

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly.
- No question is daft or silly ask them!
- For all non-academic questions, please submit a query: www.hyperiondev.com/support
- To report a safeguarding concern reach out to us via email: safeguarding@hyperiondev.com
- If you are hearing impaired, please kindly use your computer's function through Google chrome to enable captions.

### Stay Safe Series:

Mastering Online Safety One Week/step at a Time

While the digital world can be a wonderful place to make education and learning accessible to all, it is unfortunately also a space where harmful threats like online radicalisation, extremist propaganda, phishing scams, online blackmail and hackers can flourish.

As a component of this BootCamp the *Stay Safe Series* will/is designed to guide you through essential measures in order to protect yourself & your community from online dangers, whether they target your privacy, personal information or even attempt to manipulate your beliefs.



### Don't Take the Bait: How to Spot Phishing Scams

- Check email address.
- Unprofessionalism.
- Avoid attachments from unknown sources.
- Avoid signs of urgency.
- Content should make logical sense.



# HyperionDev

# **Cyber Threats**





### **Learning Outcomes**

- Understand the concept of cyber threats and their significance.
- Identify different types of cyber threats.
- Learn basic strategies to mitigate cyber threats.



# **Software Engineering**

Have you ever experienced or heard of a cyberattack?





# Strings, Lists and Functions

What do you think is the most common type of cyber threat? (Phishing, Malware, Denial of Service, Ransomware)





# **Cyber Threats**

- Harmful activity committed with the intent of destroying, stealing, or disrupting data, critical systems, and digital life.
- Motivation behind cyber attacks:
  - Financial gain
  - Espionage
  - Activism, etc.





#### Phishing

 A type of social engineering attack used to steal user data, such as login credentials and banking details.

> From: authenticationmail@trust.wiki-media2.com To: johnsmith@email.com Subject: A new login to your Wikipedia account



Dear user,

There has been a recent login to your Wikipedia account from a new divice:

IP address: 192.168.0.1 Location: Newville, Anyland

432 new edits have been made with this account since your last login.

If this was not you, please reset your password immediately with this link:

https://trust.wiki-media2.com/reset-password

Thank you,

Wikipedia Foundation





# **Types of Threats**

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# **Types of Threats**

#### Malware

- Malicious software used to disrupt, damage, or gain unauthorized access to a system.
- Types
  - Viruses
  - Worms
  - Trojans
  - Bots





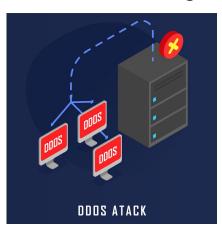


Denial of Service (DoS) and Distributed Denial of Service (DDoS)

• Attempts to overload a website or network

Degrades its performance sometimes making it completely

inaccessible







#### Social Engineering

- Uses manipulation tactics to get vulnerable users to provide sensitive information to a malicious actor.
- Phishing is a subset of social engineering.

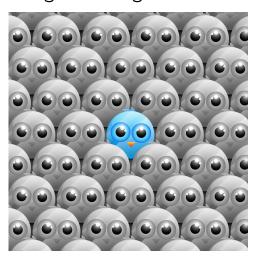






#### **Insider Threats**

- Threats that exist within the inner working of an organization.
  - Current of former employees
  - Contractors
  - Associates





# Threat Mitigation

- Use strong passwords and multi-factor authentication.
- Keep software and systems updated.
- Recognise and avoid suspicious links/emails.
- Backup data regularly.
- Use antivirus software and firewalls.







Please have a look at the poll notification and select an option.

Which cyber threat do you now feel most confident identifying?

- A. Phishing
- B. Malware
- C. DDoS



## Polls

Please have a look at the poll notification and select an option.

What is the primary goal of a phishing attack?

- A. To install hardware on the victim's device
- B. To gain sensitive information like passwords or credit card details
- C. To create fake websites for no purpose
- D. To slow down the victim's computer



## Polls

Please have a look at the poll notification and select an option.

What is the best way to protect against ransomware?

- A. Ignoring suspicious emails
- B. Regularly backing up important data
- C. Using public Wi-Fi
- D. Installing ad blockers





- Harmful activity committed with the intent of destroying, stealing, or disrupting data, critical systems, and digital life.
- We get many different types of threats and it is important to know what each one is doing.
- Use different types of strategies such as strong passwords, 2-factor authentication, data backup, etc. to mitigate the risks of attacks.



# Q & A SECTION

Please use this time to ask any questions relating to the topic, should you have any.



