Workshop on Cyber Safety and Security

Presented By
Swagatika Malik
Lecturer(IT)

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Introduction

❑ The term cyber security is used to refer to the security offered through on-line services to protect your online information.

❑ With an increasing amount of people getting connected to the internet, the security threats that cause massive harm are increasing also.

To Understand

What is the meaning of the word - CYBER

What is the need of Cyber Security

What are the security problems in Cyber field

How to implement and maintain security of a cyber field around us.

Meaning of the word CYBER

It is a combining form relating to information technology, the internet, and virtual reality.

Need of CYBER SECURITY

Cyber security is necessary since it helps in securing data from threats such as data theft or misuse, also safeguards your system from viruses.

Major Security Problems

- ✓ Virus
- ✓ Hacker
- ✓ Malware
- ✓ Trojan Horses
- ✓ Password Cracking

Viruses and Worms

A Virus is a Program that is loaded onto your computer without your knowledge and runs against your wishes.

Solution

Install a security suite that protects the computer against threats such as Viruses and Worms.

Hackers

In common HACKER is a person who breaks into computers, usually by gaining access to administrative controls.

How to prevent Hacking

It may pe impossible to prevent computer hacking, however effective security controls including strong passwords, and the use of firewalls can help.
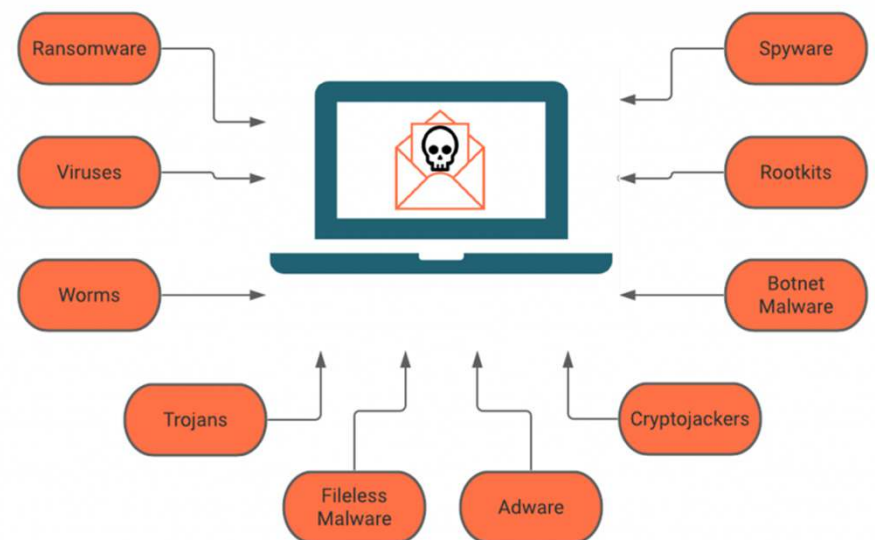
Malware

The word "MALWARE" comes from the term

"MALICIOUS SOFTWARE"

Malware is any software that infects and damages a computer system without the owner's knowledge or permission.

Types of Malware

To stop Malware

- Install an anti-malware program that also helps prevent infections.
- Activate Network Threat Protection, Firewall, Antivirus.

Trojan Horses

Trojan horses are email viruses that can duplicate themselves, steal information, or harm the computer system.

These viruses are the most serious threats to computers.

How to avoid Trojans

Security Suites will prevent you from downloading Trojan Horses.

Password Cracking

Password Attacks are attacks by hackers that are able to determine passwords or find passwords to different protected electronic areas and social network sites.

Securing Password

✓ Use always strong password

✓ Never use same password for two different sites.

Cyber security is everyones responsibility

Cyber Crime In India

Like many countries, India is suffering increasingly from cyber crime. The number of cyber-related crimes reported in 2018 was 208,456. In the first 2 months of 2022 alone, there were a reported 212,485 cyber crimes, more than the entirety of 2018.

The figures rose more sharply through the pandemic, with reported crime jumping from 394,499 cases in 2019 to 1,158,208 in 2020 and 1,402,809 in 2021. Between Q1 and Q2 2022, cyber crime across India increased by 15.3%.

Additionally, there have been an increasing number of Indian websites hacked in recent years. In 2018, some 17,560 sites were hacked. In 2020, an additional 26,121 sites were hacked.

78% of Indian organisations experienced a ransomware attack in 2021, with 80% of those attacks resulting in the encryption of data. In comparison, the average percentage of attacks was 66%, with the average encryption rate at 65%.

Cyber Crime In India

Major incidences appear to be the biggest factor in these impacted individuals. For example, March 2018 saw the third biggest data breach, when India's national identification database, Aadhaar, was exposed leading to the exposure of 1.1 billion records.
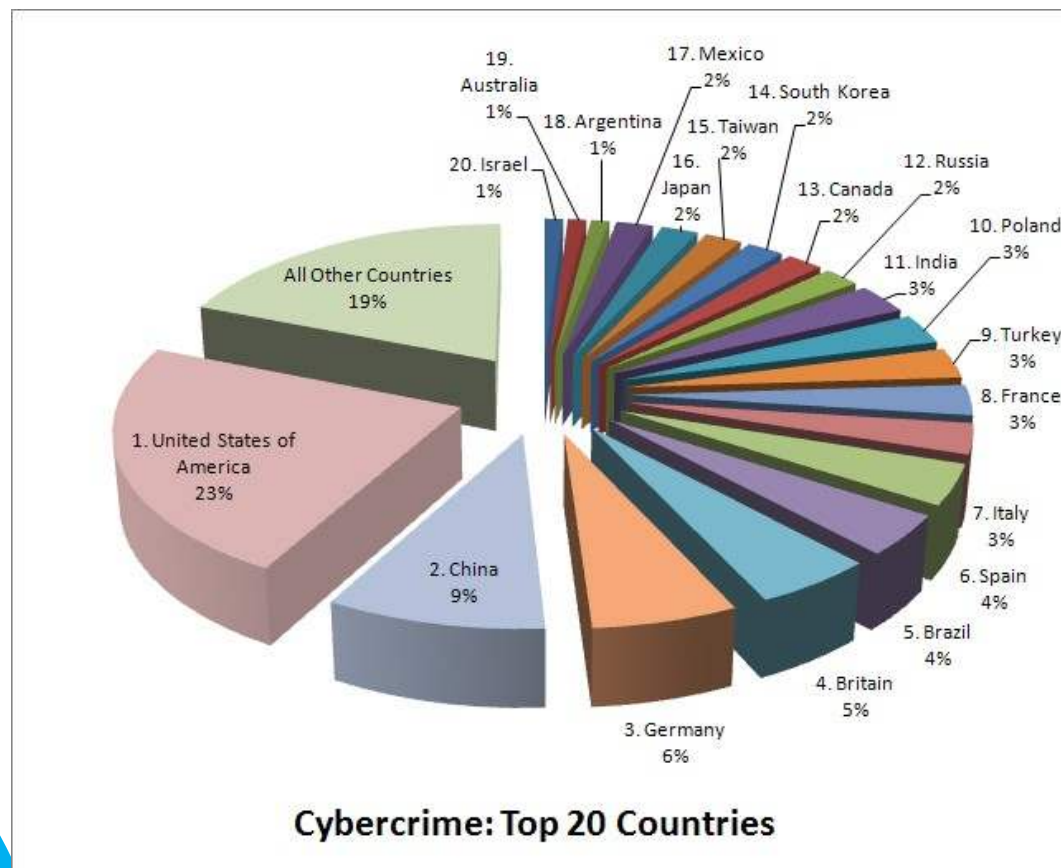
11. India
Share of malicious computer activity: 3%
Malicious code rank: 3
Spam zombies rank: 11
Phishing web site hosts rank: 22
Bot rank: 20
Attack origin rank: 19

Cybercrime: Top 20 Countries

Thank You!