

SNS COLLEGE OF TECHNOLOGY



(**Autonomous**) COIMBATORE – 35

## DEPARTMENT OF COMPUTER SIENCE AND ENGINEERING (UG & PG)

### Third Year Computer Science and Engineering, 5th Semester

# **UNIT III - CYBERCRIME: MOBILE AND WIRELESS DEVICES**

#### Topic Name: Cybercrime: Mobile and Wireless Devices

#### Introduction

Cybercrime is defined as a crime in which a computer is the object of the crime (hacking, phishing, spamming) or is used as a tool to commit an offense (child pornography, hate crimes). Cybercriminals may use computer technology to access personal information, business trade secrets or use the internet for exploitative or malicious purposes. Criminals can also use computers for communication and document or data storage. Criminals who perform these illegal activities are often referred to as hackers. Cybercrime may also be referred to as computer crime.

Why should mobile devices be protected? Every day, mobile devices are lost, stolen, and infected. Mobile devices can store important business and personal information, and are often be used to access University systems, email, banking.

A cyber-crime is a criminal act in which someone targets a computer or a network of devices in order to gain illegal rights, steal data from them, frauds etc. This type of crime is carried out using technology which primarily takes place online.

Some cyber-crime includes the following

- Harassment
- Cyber-stalking
- Bullying

Types of Cyber-crimes

The types of cybercrimes are as follows,

Hacking

It is a type of cybercrime in which a person tries to identify and exploit weakness in a computer system or a computer network for his own benefits.

Some types of hacking are given below,

- Social Engineering & Phishing
- Malware-Injecting Devices
- Cracking Passwords
- Distributed Denial-of-Service

### Virus dissemination

Virus dissemination is a process in which a Malicious software attaches itself to other software (which can be a trojan horse, time bond, virus, worm etc) which has the ability to destroy the victim computer/system.

### Cyber Terrorism

Cyber terrorism is a type of attack in which a person uses the Internet to establish violent acts which may result in loss of a life, harm to a person or threaten to life. The main object of this is to gain political advantages by the use of threat.

### Computer Vandalism

Computer Vandalism is a type of process in which a program has the ability to perform malicious tasks such as getting someone's passwords or important data. This can even include the removal of user data or deleting one's hard drive.

### Security Threats

Now, let us see the Security threats related to mobile devices, which are as follows -

- Data Leakage
- Unsecured Wi-Fi
- Network Spoofing
- Phishing Attacks
- Spyware
- Broken Cryptography
- Improper Session Handling

Let us discuss each threat in detail.

# Unsecured Wi-Fi

Free wi-fi is easily attractive to people, if anyone connects to the free wifi, then the hackers might steal your data. Never use the free wifi when accessing confidential services like banking and transactions, there might be a chance of stealing your money.

# Phishing Attacks

Phishing attacks are mostly seen in emails and messages. When the user clicks on a suspicious link, there might be a chance of virus files download which can corrupt and hack your devices which results in data loss. In some cases, they will send a form to fill in the confidential information.

## Malicious Apps and websites

When you download any app manually from the websites, there might be a chance that the app can accomplish some objectives like stealing data, encrypting the data, etc.

## Weak Passwords

If the passwords of the mobile devices are weak there might be a change of others accessing the data. This might result in data leakage and privacy issues. So make sure that the passwords for mobile devices or apps must be strong.

### Iot Mobile security threats

As we all know most of the things are correcting to the internet and works easily, fast with the internet from wearable tech like smartphones, watches, etc. If these devices are hacked then misuse of these devices might result in huge costs.