Internet Security and Intellectual Property

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What is Internet Security

- Internet security is a set of security actions for protecting activities and transactions conducted online over the internet.

- Internet security is a branch of computer security specifically related to the Internet

- Its objective is to establish rules and measures to use against attacks over the Internet

Malicious software

- A computer user can be tricked or forced into downloading software onto a computer that is of malicious intent. Such software comes in many forms, such as:

1. **Malware**, short for malicious software, is any software used to disrupt computer operation, gather sensitive information, or gain access to private computer systems. Malware comes in several forms, including computer viruses, worms, Trojans, and dishonest spyware.

2. **Trojan horse**, or Trojan, is any malicious computer program which is used to hack into a computer by misleading users of its true intent.

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Malicious software

4. **Computer Viruses** are programs that can replicate their structures or effects by infecting other files or structures on a computer. The common use of a virus is to take over a computer to steal data.

5. **Spyware** refers to programs that surreptitiously monitor activity on a computer system and report that information to others without the user's consent.

6. **Computer worms** are programs that can replicate themselves throughout a computer network, performing malicious tasks throughout.

Malicious software

- **A botnet** is a network of zombie computers that have been taken over by a robot or bot that performs large-scale malicious acts for the creator of the botnet.

- **Spam:** Spam refers to unwanted messages in your email inbox. In some cases, spam can simply include junk mail that advertises goods or services you aren't interested in. These are usually considered harmless, but some can include links that will install malicious software on your computer if they're clicked on.

Phishing

- Phishing occurs when the attacker pretends to be a trustworthy entity, either via email or web page.

- Victims are directed to fake web pages, which are dressed to look legitimate, via spoof emails, instant messenger/social media or other avenues.

- Often tactics such as email spoofing are used to make emails appear to be from legitimate senders, or long complex subdomains hide the real website host.

- Insurance group RSA said that phishing accounted for worldwide losses of $1.5 Billion in 2012

Denial-of-service attacks

- A denial-of-service attack (DoS attack) is an attempt to make a computer resource unavailable to its intended users.

- Although the means to carry out, motives for, and targets of a DoS attack may vary, it generally consists of the concerted efforts to prevent an Internet site or service from functioning efficiently or at all, temporarily or indefinitely.

- According to businesses who participated in an international business security survey, 25% of respondents experienced a DoS attack in 2007 and 16.8% experienced one in 2010.

Social Engineering

- The strongest firewall and best anti-malware suite won't protect your system if you give away sensitive information such as passwords or security questions.

- Social engineering uses tricks to make you hand over information to criminals.

- An example is phishing, in which an email appears to come from a reputable organization such as a bank, tricking the recipient into entering their personal details.

- The phisher can then collect and use them to log in to the victim's account. If you want excellent Internet security, it's important to remain aware of social engineering.

Internet Safety: Protecting Yourself Online

- refers to the knowledge and practices that help protect individuals and their data from harm or risk when using the internet.

- encompasses everything from protecting your personal information to preventing malware and avoiding online scams.

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2-Phase Authentication (MFA)

- This adds an extra layer of security to your accounts. After entering your password, you're required to provide a second form of verification.

- This could be a code from an authenticator app like Google Authenticator, a one-time code sent to your phone via SMS, or using a physical security key.

- Even if a cybercriminal steals your password, they cannot access your account without this second factor.

Strong, Unique Passwords

- A strong password should be at least 12 characters long and a combination of uppercase letters, lowercase letters, numbers, and symbols.

- Avoid using easily guessable information like birthdays, roll number, or common words.

- This is where a reputable password manager can be a game-changer, generating and securely storing complex passwords for you so you only have to remember one master password.

Phishing Awareness

- Be cautious of suspicious emails, texts, or links.

- Red flags include urgent or threatening language ("Your account will be suspended!"), poor grammar and spelling, generic greetings ("Dear Customer"), and URLs that don't match the sender's real website

- Always hover over a link to see the real URL before clicking, and never download attachments from an unknown sender.

Secure Wi-Fi

- Public, unsecured Wi-Fi networks in places like coffee shops or airports are often not encrypted, making it easy for hackers to intercept your data.

- Avoid conducting sensitive activities like online banking, shopping, or accessing work files on these networks.

- If you must use public Wi-Fi, always connect through a Virtual Private Network (VPN) to encrypt your internet traffic and protect your privacy.

Check Privacy Settings

- Many online services, especially social media platforms, have default privacy settings that are not ideal for security.

- Use incognito or private window in your browser.

- Take the time to review and adjust these settings to control who can see your personal information, posts, and photos.

- Check your phone, which app access your microphone and photos.

- Be mindful of the information you share publicly, as it can be used to answer security questions or for identity theft.

Stay Safe, Be Smart

Intellectual Property

- Intellectual property (IP) refers to creations of the intellect for which a monopoly is assigned to designated owners by law.

- Intellectual property rights (IPRs) are the rights granted to the creators of IP, and include trademarks, copyright, patents, industrial design rights, and in some jurisdictions trade secrets.

- The Statute of Monopolies (1624) and the British Statute of Anne (1710) are seen as the origins of patent law and copyright respectively, firmly establishing the concept of intellectual property.

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Patents

- Patents are a form of intellectual property.
- A patent is a form of right
  - granted by the government to an inventor,
  - giving the owner the right to exclude others from making, using, selling for a limited period of time.
- **The Patents and Designs Act, 1911:** Under this act, the Department of Patents, Design and Trademark (DPDT) provides patent protection (registration) to the patent holders for 16 years on payment of prescribed fees..

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Copyright

- A copyright gives the creator of an original work exclusive rights to it, usually for a limited time.

- Copyright may apply to a wide range of creative, intellectual, or artistic forms, or "works".

- Copyright does not cover ideas and information themselves, only the form or manner in which they are expressed.

- The Copyrights Act Bangladesh, 2000 (amended in 2005) provides protection to authors, artists or dramatists.

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Geographical Indication (GI)

- A **geographical indication** (**GI**) is a sign used on products that have a specific **geographical** origin and possess qualities or a reputation that are due to that origin.

- Bangladesh has enacted 'The Geographical Indication of Goods (Registration and Protection) Act, 2013'.

- In order to implement the Act, the Geographical Indication of Goods (Registration and Protection) Rules, 2015 has been enacted Registration of GI goods shall remain valid for indefinite period unless it is rescinded or otherwise declared void.

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GI Certificate in Bangladesh

PRODUCTS WHICH ARE WAITING TO GET GI CERTIFICATION

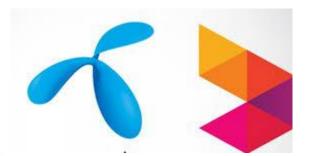| PRODUCTS	DISTRICTS
Khirsa Mango	Chapainawabganj
Langra Mango	Chapainawabganj
Aswina Mango	Chapainawabganj
Lotiraj Kochu/Arum	Joypurhat
Sonali Chicken	Joypurhat
Haribhanga Mango	Joypurhat
Porabarir Chomchom	Tangail (Three Separate application)
Haribhanga Mango	Rangpur
White Soil (Sada Mati)	Netrakona
Katarivog rice	Dinajpur
Kalijira Rice	Mymensingh
Mohisher dudher doi	Noakhali
Malta	Pirojpur
Fazli Mango	Rajshahi
Woven clothes	Sirajganj
Cow's Milk	Sirajganj
Sabitri Roskodom	Meherpur
Gangetic Koi from Chachuri Beel	Norail
Agor	Moulvibazar
Nak Fazli Mango	Naogaon
Chhatamukhi sweets	Brahmanbaria
Sundarbans honey	Bagerhat

Trademarks

- A trademark is a recognizable sign, design or expression which distinguishes products or services of a particular trader from the similar products or services of other traders.

- Under the Trade Marks Act, 2009, protection is granted for seven (7) years and it can be renewed after every expiry for further ten (10) years on payment of renewal fees.

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Trademarks

Thank you