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SOCIETY LAWS AND ETHICS

Ethical issues

❖ There are various ethical issues involved with usage and availability of information:

  ❖ Intellectual property rights

  ❖ Plagiarism

  ❖ Digital rights management

  ❖ Licensing

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Intellectual Property Rights

- Intellectual property is the product of the human intellect including creativity concepts, inventions, industrial models, trademarks, songs, literature, symbols, names, brands,....etc.

- Intellectual Property Rights do not differ from other property rights. They allow their owner to completely benefit from his/her product which was initially an idea that developed and crystallized.

- They also entitle him/her to prevent others from using, dealing or tampering with his/her product without prior permission from him/her.

- He/she can in fact legally sue them and force them to stop and compensate for any damages.

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Plagiarism

- **Plagiarism** refers to using some other person's ideas and information without acknowledging that specific person as the source. Similar to all other forms of theft, **plagiarism** also has many disadvantages associated with it.

- It means you are actually not giving credit to the original creator whose work you are using or copying.

- It can be classified as :
  - Accidental / Unintentional
  - Deliberate / Intentional

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Digital Rights Management

- Digital property include data, information, internet account, files (Word processor, spreadsheet, etc) stored in computer, online or any electronic storage.

- Generally the person who has created the digital property owns it right. So the owner can decide who can use this in which form by making payment or giving credit it other form.

- But other than, this there are many other Digit Property threats…

Threats to Digital rights

- There are many tools available by which we can crack the unlicensed software to registered software by generating product key using Keygen software or other tools.

- The hackers may get the actual source code of your digital work and modifies it and release it with their name.

- We can protect these kind of threat by mean of Anti-temper software which prevent reverse engineering, or by adding legal clause in the form of "Term of Service" or by limiting the sharing of code or only to authorized persons/organization.

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Licensing

- A license or license is an official permission or permit to do, use, or own something.
- A license can be granted by a party to another party as an element of an agreement between those parties.
- There are various types of license in term of digital elements:
  - Creative Commons
  - GPL
  - Apache
  - Copy left, etc.

Creative Common License

- A **Creative Commons** (**CC**) **license** is one of several public copyright licenses that enable the free distribution of an otherwise copyrighted "work".

- A CC license is used when an author wants to give other people the right to share, use, and build upon a work that they (the author) have created.

- CC provides an author flexibility (for example, they might choose to allow only noncommercial uses of a given work) and protects the people who use or redistribute an author's work from concerns of copyright infringement as long as they abide by the conditions that are specified in the license by which the author distributes the work.

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General Public License

- The **GNU General Public License** (**GNU GPL** or **GPL**) is a widely-used free software license, which guarantees end users the freedom to run, study, share and modify the software.

- GPL allows:
  - Copy the software
  - Distribute the software
  - Charge a fee to distribute
  - Modification of software

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Apache License

□ It is written by Apache Software foundation (ASF)

□ It allows user to use the software for any purpose, modify, redistribute the software under the term of license without concern for royalties.

□ Apache License offers:

  ▪ Rights once granted can be continued forever(Perpetual)

  ▪ Rights are worldwide

  ▪ Rights are granted for no fee or royalty

  ▪ It is non exclusive (license can be given to multiple users)

  ▪ Rights once give cannot be revoked.

Open Source

- is computer software that is available in source code form: the source code and certain other rights normally reserved for copyright holders are provided under a free software license that permits users to study, change, improve and at times also to distribute the software.

- Its source code is available.

- Open source software is modified and redistributed free of cost of with nominal charges.

- Open source software are generally developed in collaboration and made freely available.

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Open Source

☐ Open source offers:

- Freedom to run the software for any purpose
- Freedom to distribute the copies
- Freedom to study how program works
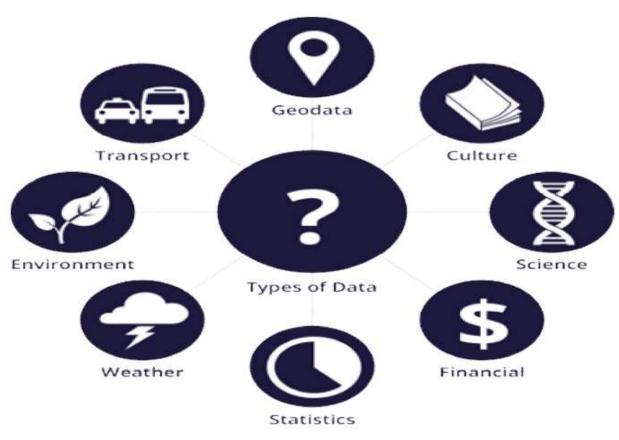- Freedom to improve the software and release your improvement to public

Open Data

- The idea of Open Data is some data should be freely available to everyone to use and republish as they want, without restriction from copyright, patent or any other mechanism.

- It is the data that any one can access, use or share by attributing to creator.

- It is mostly available on subjects like science, medicine, maps, chemical compound, or any other field which is in the benefit of common people.

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Open Data

- Three important principle of behind the definition of Open Data:
  - **Availability and Access :** easily get the data
  - **Re-use and Redistribution :** reuse and share the data
  - **Universal Participation :** anyone around the world can use it.

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Open Data

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Data Privacy (Information Privacy)

☐ It deals with the ability of an organization or individual has to determine what data in a computer system can be shared with third parties.

☐ As more and more world is digitizing, we share most of the data on line, so data privacy is taking greater importance.

☐ When data that should be kept private gets in the wrong hands, bad things can happen. A data breach at a government agency can, for example, put top secret information in the hands of an enemy state. A breach at a corporation can put proprietary data in the hands of a competitor.

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Tips to help protect your personal data

- At Home, use mail slot or locking mailbox, so that thieves can't steal your mail.

- Before discarding, shred documents, including bank receipts, credit/debit card statement that contain personal information.

- Make sure to secure your Home Wi-Fi with strong password so that no one can "eavesdrop" your online activity

- Think before you share personal information with others, check whether it is actually needed, if so make sure they will protect your privacy

- Use Strong and unique password for all online activities

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Privacy Law

- **Privacy law** refers to the laws that deal with the regulation, storing, and using of personally identifiable information, personal healthcare information, and financial information of individuals, which can be collected by governments, public or private organizations, or other individuals.

- It also applies in the commercial sector to things like trade secrets and the liability that directors, officers, and employees have when handing sensitive information.

- Privacy Law can be classified in :
  - General Privacy Law
  - Specific Privacy Law

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Privacy Law

- **General Privacy Law :** General privacy laws that have an overall bearing on the personal information of individuals and affect the policies that govern many different areas of information.
  - Trespass
  - Negligence
  - Contract, etc.

- **Specific privacy Law** : designed to regulate specific types of information
  - Communication Privacy Law
  - Financial Privacy Law
  - Online Privacy Law

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Privacy Law in India

- The Right to Privacy is a fundamental right and an intrinsic part of Article 21 that protects life and liberty of the citizens and as a part of the freedoms guaranteed by Part III of the Constitution. In June 2011, India passed subordinate legislation that included various new rules that apply to companies and consumers.

- On 24 August 2017, a nine-judge bench of the Supreme Court unanimously held that the right to privacy is an intrinsic part of right to life and personal liberty under Article 21 of the Constitution.

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Cyber Crime

☐ Cybercrime, or computer-oriented crime, is a crime that involves a computer, electronic gadgets and a network.

☐ Cybercrimes can be defined as: "*Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm, or loss, to the victim directly or indirectly, using modern telecommunication networks such as Internet (networks including chat rooms, emails, notice boards and groups) and mobile phones*"

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Types of Cyber Crime

☐ Cyber crime involves various types of activities like :

- ☐ Phishing
- ☐ Illegal download
- ☐ Child Pornography
- ☐ Scams, etc.

Phishing

- Phishing is a cybercrime in which a target or targets are contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords. In recent web series JAMTARA is good example of how phishing works.

- The information is then used to access important accounts and can result in identity theft and financial loss.

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Phishing

- Commons features:

- **To good to be true :** Lucrative offers and eye catching or attention – grabbing statements are designed to attract people's attention immediately. For instance, many claim that you have won an iPhone, a lottery, or some other lavish prize. Just don't click on any suspicious email. Remember that if it seems to good to be true, it probably is!

- **Sense of Urgency** : This trick is used by attackers, to act fast because of super deal is for limited time period, some of them even tell you that you have only few minutes or seconds to respond. Just ignore these types of offers.

- **Hyperlink** : Clicking of hyperlink may lead to you phishing site, hovering over link shows you actual URL where you will be redirected on click. It could be completely different from desired web site. For example Hyper link is coming as SBI ONLINE but when you hover it is showing URL as www.sbionlime.com , here 'n' is misspelled as 'm' at it will lead to phishing site.

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Prevention from Phishing

- To protect from SPAM mail, use filter, however it is not always accurate.

- Browser settings can be changed to prevent from fraudulent site from opening. Browser keep list of fake website and block it when you try to open

- Change password on regular basis, and never use the same password for multiple accounts. It is good idea for website to use CAPTCHA security added.

- Banks and financial organization use monitoring system to prevent phishing. Individual may report on observing this type of attack, so that action can be taken.

- If there is a link in email, don't click on it, rather copy it and paste it in address bar. Secure website will have SSL certificate with protocol https

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Illegal Download

- Illegal downloading is obtaining files that you don't have the right to use from the internet.

- Digital piracy involves illegally sharing copyrighted media such as games, music, movies, TV shows and software. It does not matter whether you upload the content to share with others without permission or whether you download it for free or for a bargain price. Anyone involved in this type of operation is breaking the law.

- *If you are a member of a website that shares music files without permission from the recording labels, you are involved in piracy, even if you pay a fee to the website for downloading them. If you are able to access and download movies, TV shows or movies for free or at extremely low prices, these are usually illegal copies. To avoid downloading media illegally, obtain it from reputable dealers that have the rights to sell it to you.*

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Dangers of Illegal Download

☐ **Against the Law :** Illegal downloads have an adverse effect on revenue to the music and movie industry, consequently the entertainment industry takes illegal downloading seriously and monitors the web for signs of illegal downloading. If your child gets caught, you are responsible.

☐ **Dodgy Downloads:** If you downloads from an illegal website there's a chance they will inadvertently download viruses, Trojan malware and worms. These can cause varying degrees of damage, from slowing down your machine to wiping data, crashing your device and encrypting your files and demanding money to repair it.

Child Pornography

- is a form of pornography showing children which is against the law in many countries. Child pornography is most often made by taking pictures or video.

- Child pornography is publishing and transmitting obscene material of children in electronic form. In recent years child pornography has increased due to the easy access of the internet, & easily available videos on the internet.

- Child pornography is the most heinous crime which occurs and has led to various other crimes such as sex tourism, sexual abuse of the child etc.

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Child Pornography

- Child pornography is a crime in India. Information Technology Act, 2000 & Indian Penal Code, 1860 provides protection from child pornography. Child is the person who is below the age of 18 years.

- On 12 February 2009, the Parliament of India passed the Information Technology Bill which made creation and transmission of child pornography illegal. The newly passed Information Technology Bill is set to make it illegal to not only create and transmit child pornography in any electronic form, but even to browse it. The punishment for a first offence of publishing, creating, exchanging, downloading or browsing any electronic depiction of children in "obscene or indecent or sexually explicit manner" can attract five years in jail and a fine of Rs 10 lakh.

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Cyber Forensics

- Cyber Forensics, also known as computer forensics, plays a crucial role in the investigation of cyber offenses and online frauds.

- *It involves the extraction and analysis of digital evidence such as an electronic document, computer, laptop, and storage mediums such as USB drives, hard disks etc.*

- Cyber Forensics is one of the branches of Digital Forensics that deals with the extraction, preservation, and inspection of any such device that has a storage memory and basic computing power.

- Cyber Forensics experts are proficient in the extraction of existing or deleted information from a storage or computing device for conducting investigations.

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IT Act, 2000

- The **Information Technology Act, 2000** (also known as **ITA-2000**, or the **IT Act**) is an Act of the Indian Parliament notified on 17 October 2000. It is the primary law India dealing with cybercrime and electronic commerce.

- The original Act contained 94 sections, divided into 13 chapters and 4 schedules. The laws apply to the whole of India. Persons of other nationalities can also be indicted under the law, if the crime involves a computer or network located in India.

- The Act provides a legal framework for electronic governance by giving recognition to electronic records and digital signatures. It also defines cyber crimes and prescribes penalties for them.

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Common Section under IT Act

SECTION	OFFENCE	PENALTY
67A	Publishing images containing sexual acts	Imprisonments up to seven years or fine up to Rs. 10,00,000.
67B	Child pornography	Imprisonment – 5 years to 7 years Fine – 10,00,000
70	Securing access or attempting to secure access to a protected system	Imprisonment up to 10 years or fine

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