In this chapter we will learn about:
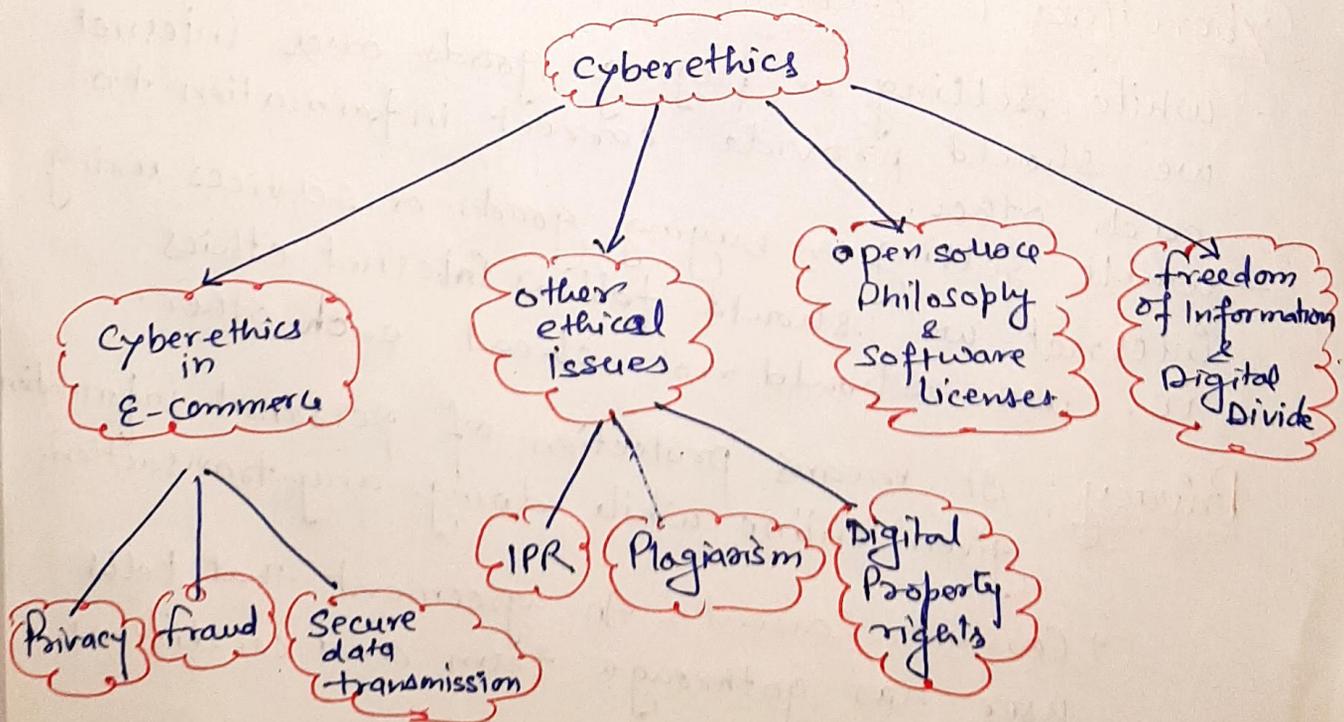
* **Cyberethics** in e-commerce
* - Privacy - How to safeguard user privacy
* - fraud - various forms of fraud.
* - Secure data transmission

* **Other Ethical Issues**
  - Intellectual Property Rights
  - Plagiarism
  - Digital Property Rights

* **Opensource Philosophy & Software Licenses.**
* **freedom of Information & Digital Divide.**

key terms :

Ethics — Manners, Moral duties

Cyber ethics — The ethics we should follow while using internet.

E-Commerce — Doing business activities (selling or buying goods) using internet.

Protocol — A set of rules that governs the working of Internet.

Encryption — Converting readable data into non-readable for that cannot be understand by unauthorized person.

_____

Cyberethics in E-commerce :—

- while selling or buying goods over internet we should provide correct information to each other.

- while selling or buying goods or services using internet we should follow internet ethics i.e. we should not cheat each other.

Privacy : It means protection of personal information given online while doing any transaction.

* **Consumer Consent** — An agreement that tells user has go through a term and conditions of e-commerce company.
It state whether consumer has give choice to decide what information can or cannot be used.

* If Proper security of user's data is provided then user will not mind to share information required for transaction.

How to Safeguard user Privacy?

To ensure user privacy

Responsibility of Seller (Merchant)

- Seller must clearly state that how user data will be used.
- Seller must ensure that user has go through the term and conditions before making any transaction.
- Seller must provide proper security mechanism for safety of user's data.

Responsibility of user

- User must gothrough term & conditions of seller site & also- ensure safe site by checking https protocol and padlock sign.

fraud :

fraud (providing wrong informations) committed using internet is called online fraud.

Different forms of fraud are.

- Non-delivered goods
- Non-existent companies.
- Stealing Information
- fraudulent Payment.

1. **Non-delivered goods:**
In this type of fraud, company taking amount from consumer but not delivering products

2. **Non-existent companies:**
In this type of fraud, company is not really exist, rather a fake website is used to misguide user.

3. **Stealing Information: (Identity Theft)**
Stealing someone's online identity or information & some fraudulent posts are posted or some other activity is done on behalf of some other person.

4. **Credit card fraud (fraudulent payment):**
Stealing someone's credit credit card information & use it for fraud payment.

How to stop these fraud:

1. Monitoring official body to ensure existence of e-commerce company.

2. Strong security mechanism must be applied for safety of use's data.

3. Official guidlines on selling of user's data to third parties.

Ensure safe sites while entering sensitive information

1 Type url as your own, don't click on any link

2. Ensure website uses safe protocol (HTTPS) & closed padlock 🔒 sign before entering sensitive information

Secure Data Transmission:

Applying enough security mechanism so that our data travelling over internet network is secure from unauthorized user.

Technique to apply for secure data transmission

① Use of SSL → SSL stands for "Secure Socket Layer."
It create encrypted link between your computer and server.

② Data Encrption : Encrpted data is safe because it is hard to understand by unauthorized person.

③ Use of Safe Protocols :
we can use safe protocols such as SFTP, SSH to ensure safety of data.

Authentication : process to verify identity of user. befor using system or data.

Authorization : process to ensure what the resources a user is allowed or permitted to use.

Other Ethical Issues :

* Intellectual Property Rights :

* Intellectual Property — Any piece of information produced or created by us is our intellectual property

* Intellectual Property rights are the rights of owner of information to decide how much information is to be exchanged, shared or distributed.

i.e. dealer or owner of the information is the real owner of the information. He has rights to protect his/her intellectual property.

To protect one's intellectual property rights he can get information copyrighted or patented or use trademarks.

* Copyrights :
These are the rights, granted by the law, to protect owners work. Without the owner's permission no one can use his or her work

* Patents :
Special power of monoply, granted by law, to own of a work. Only owner of a work can decide how much information can be used or distributed to other & under which conditions.

* Trademark :
A special registered logo or symbol that represent any brand or organisation.

→ **why Intellectual property must be protected ?**

* To encourages individuals to create new software or applications.
* To ensure new ideas & technologies are widely distributed.
* Promotes investment in national economy.

Plagiarism :- Stealing someone else's creativity or ideas and representing it as our own with acknoleging the source of information.

Type of Plagiarism :-

Ghost writer: In this type of Plagiarism a person copy anyone else's intellectual work word to word & present it as his own with acknowlediy the own of a work.

Photo copier :- In this type of Plagiarism, a person copy some part of any other's work & present it as his own with any changes.

Potluck Paper: In this type of Plagiarism, a person copy the content from different sources and without any changes present it as his own.

Self Stealer :- In this type of Plagiarism, a person copy his own work and submit it again without any changes.

How to avoid plagiarism?

To avoid plagiarism one should –
- Give proper credit to other's work.
- Acknowledge the source of information.
- Acknowledge all type of resources.
- Use quotes for other persons idea or creativity.

Digital Property Rights:

Digital Property: Any information about you or created by you which exists in digital form on storage media or online is termed as your digital property.

e.g Online account, e-mail, photos, videos etc.

Digital property rights lie with the owner: legally a person who has created it is the real owner. Only he can decide who else can use his or her digital property.

Threats to Digital Property:

① **Digital Software penetration tools.**
There are many software penetration tools such as cracks or keygen created by hackers that enable unauthorized users to freely use your licensed software.

② **Stealing or plagiarising code of your digital property**
Sometimes other devlopers steal your source code of software and make their own version & sell it.

How to protect our digital property :

1. Anti-temper Soulitions : There are many antitemper solutions available that ensure your digital property is tamper proof ie hacker cannot access your software in unauthorized way.

2. Legal Clause : You can add legal clause to describe term and conditions for use of your software.

3. Limit the sharing of code : we should share our software source code to only with trusted person.