

Computer Ethics

**Assoc. Prof. Pannipa
Phaiboonnimit**

Adapted for English Section by
Kittipitch Kuptavanich
and Prakarn Unachak

Computer Ethics

Ethics

- Code of practice adopted/ agreed upon by a profession or organizations to regulate that profession/group.
- AKA code of responsibility
- Which will
 - Discuss difficult issues, difficult decisions
 - Provide a clear account of what behavior is considered "ethical" or "correct" or "right"

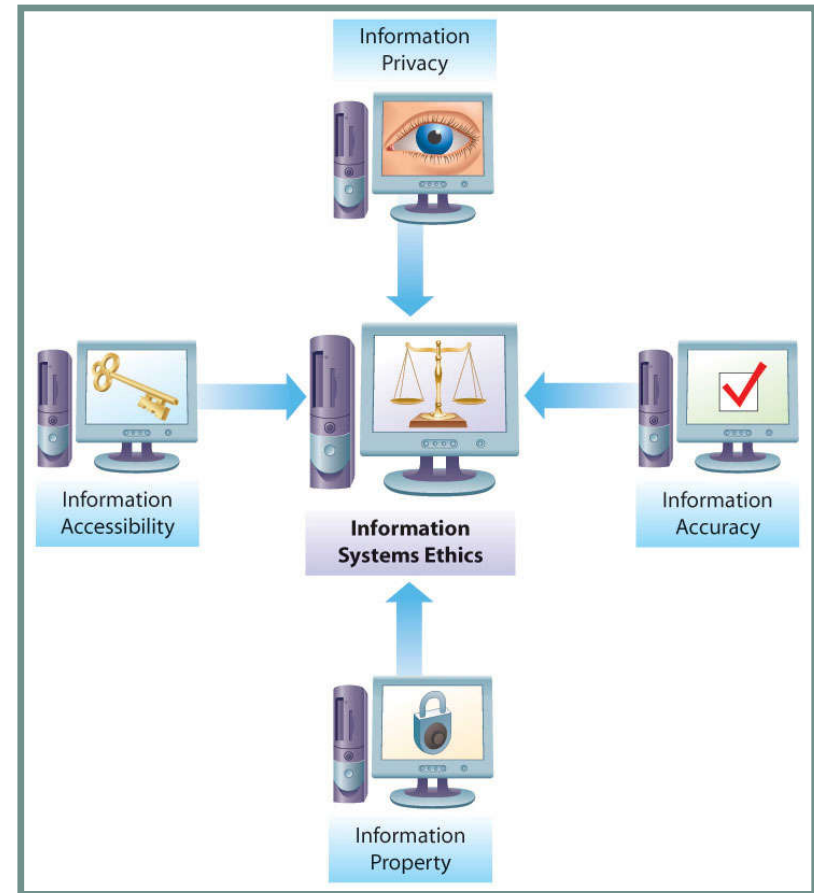
Why Ethics for Using Computer Systems?

- Computers are becoming greater part in many aspects of our lives
 - Banking
 - Medical System
 - Personal Information
 - Governmental Databases
 - Social Media
- Access and use to these information can affect the owner of such information, for good and/or for ill.
 - With the effect becomes larger and more widespread in modern time
- Hence, the need for ethics.

4 Issues in Information System Ethics*

PAPA

- Information **P**rivacy
- Information **A**ccuracy
- Information **P**roperty
- Information **A**ccessibility



*Richard O. Mason, **Four Ethical Issues of the Information Age**, *MIS Quarterly*, Vol. 10, No. 1 (Mar., 1986), pp. 5-12
misq.org/misq/downloads/download/editorial/336/

Information Privacy

- Which piece of information should you have to reveal?
 - To whom?
 - Any safeguard?
- Information you should keep private:
 - Family History
 - Medical History
 - Identification Information (ID numbers, Birth Date)
 - Location
 - Account and password information

Information Privacy (cont.)

- Channel of Privacy Loss
 - Automatic System
 - Trojan/Spyware
 - Privacy Setting on Social Network
- Result of Privacy Loss
 - Cyberstalking
 - Identity Theft
 - Fastest growing “information” crime
 - Other use/misuse of personal information
 - Employer might use your Social Media information to not hire you

Information Accuracy

- Ensuring of the authenticity and fidelity of information
 - “Is this information correct?”
 - “Is this information from credible source?”
- High costs of incorrect information
 - Banks
 - Hospitals
- Difficult to track down the person who made the mistake

Credibility of Information



Online Survey

Which Cola Giant Do You Prefer?

Cast your vote below and let the world know what you think



Total Votes: 29205



15528 Votes
(53%)

13677 Votes
(47%)

Unverified
Data

Information Property

- Who owns information about individuals/ products?
- How can this information be sold and exchanged?
- Data Ownership
- Intellectual Property

Data Privacy Statements

- Company maintaining the database with customer information legally owns it
 - Is free to sell it
 - Cannot sell information it agreed not to share
 - Must ensure proper data handling practices

Information Accessibility

- Who has the right to access a piece of information?
 - Under what condition?
 - Any Safeguard?
- Who has to right to block access to a piece of information?
- When can data be monitored?

IT Laws in Thailand

- Electronic Transactions Law
- Electronic Signatures Law
- National Information Infrastructure Law
- Data Protection Law
- Computer Crime Law (updated 2017)
- Electronic Funds Transfer Law

Computer Crime Law of 2017

What is illegal?

- Unauthorized access
- Unauthorized publication of security measures
- Unauthorized “snooping” of computer traffic
- Unauthorized alteration or destruction or other’s people’s system or data
- Unauthorized obstruction of other’s legitimate use of computer
- Sending information (or e-mail) pretending to be from other sources.

Posting and Sharing in Thailand

- You should not share/upload contents that
 - Are false/ partially false and intend to harm others
 - Are false/ partially false and threaten national security or intend to cause panic
 - Violate national security or related to terrorism
 - Consists of obscene materials
- Violator can be jailed up to 5 years, and/or fined for up to 100,000 baht.

Responsible Computer Use

Responsible computer use* (based on work of the Computer Ethics Institute) prohibits:

1. Using a computer to harm others
2. Interfering with other people's computer work
3. Snooping in other people's files
4. Using a computer to steal
5. Use a computer to bear false witness
(impersonation/spread lies)
6. Copying or using proprietary software without paying for it
7. Using other people's computer resources without authorization
8. Appropriating other people's intellectual output

* <http://computerethicsinstitute.org/publications/tencommandments.html>

Responsible Computer Use (cont.)

And encourage:

1. Thinking about the social consequences of what you are/will be doing.
2. Using a computer in ways that insure consideration and respect of your fellow human.

Intellectual Properties

Intellectual Properties

- Legally recognized exclusive right to creations of the mind
 - Intangible assets
- Laws can vary
 - Limited time
 - Limited to exclusivity
 - Fair use
 - Need to defend/ maintain

Types of Intellectual Property

- Copyrights
 - Creative works, including software
- Patents
 - Inventions
- Trademark
 - Recognizable sign, design or expression which identifies products or services of a particular source from those of others
 - Something that define a brand
 - Name, Logo, Slogan
 - Trademark holder needs to defend

Trademark

- Usually, trademark needs to be defended/ keep using.
- Can become abandoned, or generic: common name for that types of products.
- Examples:
 - Aspirin
 - Dry ice
 - Trampoline
 - Videotape







source: wikipedia

Fair Use

- Any copying of copyrighted material done for a limited and “transformative” purpose.
 - Comment upon/ criticize
 - Parody
- Can be done without permission from the copyright owner
- Examples:
 - A news report regarding a product
 - A music review quoting a few line from the lyrics
 - Fan-made parody of a TV show

Free Use License — Creative Commons

- Creative Commons (CC) licenses facilitates legal sharing
 - Customizable — owner can specify terms
 - Standardize — Easy to understand
- Based on (mainly) 4 terms
 -  Attribution (BY)
 - Must credit the original creator
 -  ShareAlike (SA)
 - Must license under identical terms
 -  NoDerivers (ND)
 - No derivatives — No modification
 -  NonCommercial (NC)
 - Can't use for commercial purpose

Creative Commons Licenses



1. Attribution (CC BY)



2. Attribution-ShareAlike (CC BY-SA)



3. Attribution-NonCommercial (CC BY-NC)



4. Attribution-NoDerivs (CC BY-ND)



5. Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)



6. Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

Free software

- Available for use at no monetary cost
- Free-to-use, but with restriction
 - Ads/ solicitation for donation
 - Limited types of use
 - Non-commercial
 - Limited time trial (shareware)
 - With upgradable version, for a price (freemium)
- May collect user's data
- Might not be safe
 - Only use free software from credible sources