

PROFESSIONAL PRACTICES - FAIZ AHMED

Ethics, norms, standards

28/10/22

agile hr

عقليات

Ethics

Manners, values

Ethics comes from best practices.

Gradually, it becomes your standards.

Topic Application

I.T. Company → Services → Ethics.

Meta Ethics - general principle for ethical systems building.

Moral Theory - ethical systems themselves, a criteria to decide actions to be right or wrong.

Practical/Applied Ethics - application of ethical systems to analyse particular situations.

Social Engineering

"If you are not paying for the product, you are the product."

• Dumpster Diving
disposing or discarding data.

SLA
(Service Level Agreement)

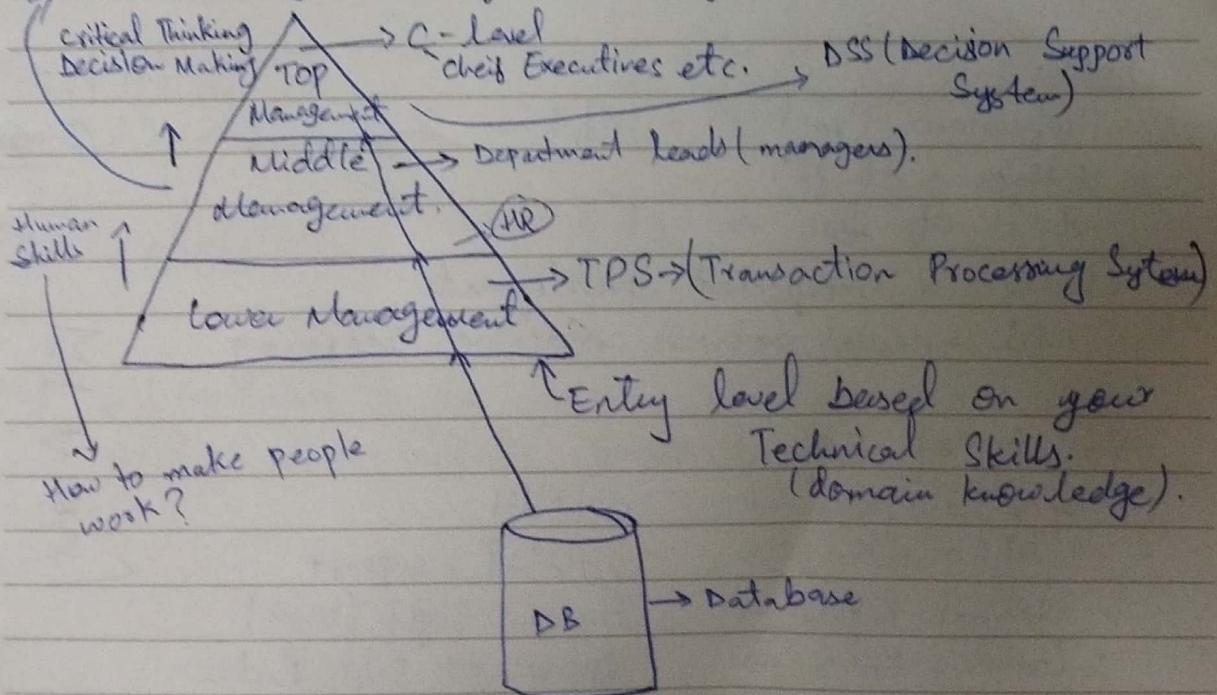
Information System:

3/11/22

• Information Technology.

People + System + Infrastructure.

MIS → Management Information System



Profession:

collective body of person engaged in a specialized field

In 1818, civil engineering institutions started Engineering:

CPD (Continuous Professional Development)

a continuous approach, ideas & techniques that will help you manage your own learning & growth

BS-SE → HEC
BE-SE → HEC + PEC

PEC
Pakistan Engineering Council

"Learning activities professionals engage in to enhance their abilities"

FEANI
European Federation of National Engineering Associations

Absolutism

vs

Relativism

Rigid

Flexible

Adaptable

Efficiency v/s Effectiveness

How to manage time?

انجینئرنگ

Pace of Change:

10/11/22

agile

Books

Professional Practices - Software Engineering → Ch ① & ②

Ethics → ch ①

Gift of fire → ch. ②

next week

Change & Unexpected Developments

• AI → neural network, machine learning

Variety of Ethical Views

• Deontological → ذلالت

• Utilitarianism → Utilitarian, support

• Natural Rights → Human Rights (Basic)

• Golden Rules → Basic or Old Rules

IT
Marty

-1. PRIVACY:-

maintaining confidentiality
protected.
secrecy

Freedom from intrusion
control of info. by oneself.
Freedom from surveillance.

Laws Amendment Related to Privacy.

Privacy Threats:-

- law enforcing agencies can access personal data
- insiders (sunder wala DALAL)
- theft of information
- due to carelessness, leakage of info.
- own actions.

inadvertent.
غیر متعمد

Self Branding

Privacy - New Risks

18/NOV/2022

Data Analysis

Database

v/s.

Data ware house

↓
CRUD on Data
(queries)

↓
• Storing data in bulk.
• inserting data in multidimensional
form

data archiving

POWER BI

stakeholders

Sand

utilitarianism is the reason-based approach to determining right or wrong (ethics). it has limitation

CYBER CRIME PREVENTION TIPS

Pakistan Electronic Crime Act (PECA) → make sure to do search for this topic
2016

Cyber Crime:-

Cyber wing is in FIA, who deals with cyber crimes.

frauds, identity stealing

• piracy

http / https
ssl protocols

25/NOV/22.

PECA:

- The law came in 2016.
- A comprehensive framework for various cyber crimes
- It is in accordance with Cyber Crime Bill 2007.
 - Illegal Access of Data (Hacking).
 - Denial of Service Attack (DOS Attack).
 - Electronic forgery or Electronic Fraud.
 - Cyberterrorism.
- 3yrs imprisonment, 1m fine or both for accessing critical information system without authorisation.
- ~~xxx~~ Data damage:
- Electronic Fraud.
- Electronic Forgery.
- Malicious Code.
- Cyberstalking
- Spamming
- Spoofing
- Cyberterrorism
- Hate Speech
- Offences against dignity of a natural person.
- digital threat (blackmail)

25/11/22

Electronic Transaction Ordinance - 2002 (ETO).

2002 → ETO



2007 → Electronic/Cyber Crime Bill.



2016 → PECA (Prevention of Electronic Crimes Act)



2022 → Amendments In PECA

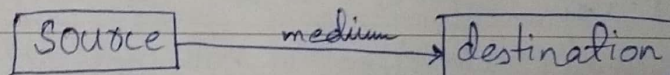
MOITT → Ministry of Information ^{Technology} & Telecommunication
→ presented PECA.

8-9 years were taken to make this bill (PECA).

PERCEPTION OF POWER:

1/12/2022

COMMUNICATION



communication distortion.

full duplex

(transmission in receiving at same time)

• through proper channel.

half duplex

(communication only in one direction)
eg walkie talkie

• Contract / Agreement (Agreement can be change or review and contract is for limited time)

• SLA ⇒ Service Level Agreement

• Bond Paper?

50 wala, 100 wala

8/12/22

Book - A Gift of Fire.

Ch: 1

Ch: 2 - Privacy

Ch: 3 - Freedom of Speech ✓ No slides shared

Book - Profession Issues in S.E

Ch:- 1

Ch:- 2

Book - Ethics for the Information Age.

Ch: 2

Ch: 3

Social Engineering.

I.S → Information Security Department.

ISACA → company provides basic for I.S.

↓
CISA → Certified Information Security Auditor

CISM → " " " Manager

CISSP → " " " Specialist.

Social engineering is a part of I.S which is related to end users.

• Phishing Attack.

• Dumpster Diving (disposing data so that it can't be misused)

• Back door access.

• Pharming

• Fake ID.

Freedom of Speech:

a right to express their opinion about any topic on an appropriate platform

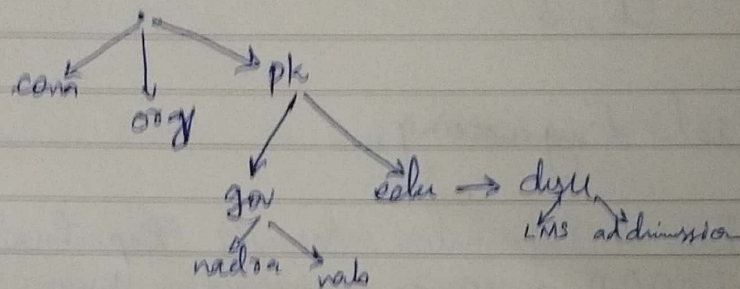
Censorship
 ↓
 Youtube → violence
 → inappropriate
 HBO
 PG. Netflix.

Internet Addiction:
 Dark Web.

www

http

https://www.dsu.edu.pk.



Cyber Bullying

Ethics book pg no. 168.

Deontology uses rules for right or wrong
 follow the rules or do their duty.

consequentialism
 judges actions by
 their results.

It may sometimes be unacceptable when you just follow the rules but it can cost even more by disregarding consequences.

Utilitarianism determines right from wrong by focusing on actions. most ethical choice will produce greatest good for greatest number. we don't know the consequences of our actions, so it has limitations. most reason-based approach for determining right or wrong.

- ① Employee Relations Law.
- ② The structure of organization, logical form of organization, motivation and performance Appraisal.
- ③ Health and Safety Responsibilities.
- ④ Computer Contract.
- ⑤ Reliability

reporting officer
↓
department's head

computer contracts
↓
licence granted to use any software

CASE STUDY (Intellectual Property).

29-12-22.

Copyright law can will implement only if it is in working and registered by the respective authority but not on just an idea.

Copyright Ordinance 1962.

30/12/22.

CASE STUDY (Ethical Dilemma for Software Engineer).

1. What are the facts of the case study?

Company X and Y entitled both of them to access each other data and Company Z's S.E was entitled for data retrieval or access.

Company Y got a hole for which hackers can get sensitive info. as it was also effecting company X's data.

Faisal got to know about the significance of a problem and also told his manager but it didn't go well.

2. What is the moral problem for Faisal?

Faisal thought that it's not right as just to tell Company regarding the situation. He was sincere to his job as truthful to his moral values that's why it was hard for him to hold.

3. What are the alternative courses of action?

The alternative courses of action includes that either Faizal resigned from his job in order to not denying his manager's orders or he can take serious actions and let Company X and Y know regarding the illegal access on their information so they can ~~be~~ amend it.

4. What will be the effect of your decision on the society?

It is not ethical if someone is trusting on you for some confidential information and if there is some loop hole risking the confidentiality but you just lay low and don't make them know regarding this. Truly letting them know can solve the problems and you will be a more trusted party for next tasks. It'll effect the society in such a way the being sincere and adaptive and practicing ethical values can help you to grow personally or professionally.

• prosperity.

Case 2: Dispute Arising out of a Trademark Infringement.
Hamdard Laboratories vs Mohamad Fakim.

Rooh-Afza vs Rooh-e-Sauhar.

Presentation → Case study (last 2 weeks).

Paper pattern:

- Case study
- 2 scenario-based questions.

ethical hacking → penetration testing

6/01/2023

6/1/23

1. CYBER CRIMES

Hacking

→ Ethical hacking ⇒ penetration testing

Cyber Crime facts.

• illegal drug trafficking

• identity theft after every 3 seconds.

Cyber Crime Categories.

• Cyber bullying ↔ Cyber Stalking

• Spoofing → data tampering

→ getting data and change it acc. to requirements & then using illegally.

• Vandalism.

20/01/2023

Gift of Five

1, 2, 3, 4, 5, 6.

Ethics for Information Age.

1, 2, 3, 4, 5, 7, 8, 9.

Professional Issues

1, 2, 5, 6, 7, 8, 9.

WORK:

Hard Working → Smart working

10 → hardware
→ 1 computer
smartwork