
Professional Responsibilities and Codes of Ethics

Lecture 09

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Agenda

- Profession, Professional, and Professionalism
- Attributes of a Profession
- Impact of your profession
- Ethics and Codes of Ethics
- Purpose of professional codes
- Activity

Terms

- **Profession:** A calling requiring specialized knowledge and often long and intensive academic preparation
- **Professional:** A person who engaged in one of the learned professions conforming to the technical or ethical standards of a profession
- **Professionalism:** The conduct, aims, or qualities that characterize or mark a profession or a professional person

Who is a Professional ?

- Who possesses certain attributes such as
 - Expert Knowledge
 - Autonomy with respect to “independence in conducting one’s professional practice”
- Have special responsibilities or moral obligations that exceed those of ordinary individuals.





Without professionalism I'd be an
amateur, and the clients I want don't
hire amateurs.

— *David Airey* —

AZ QUOTES

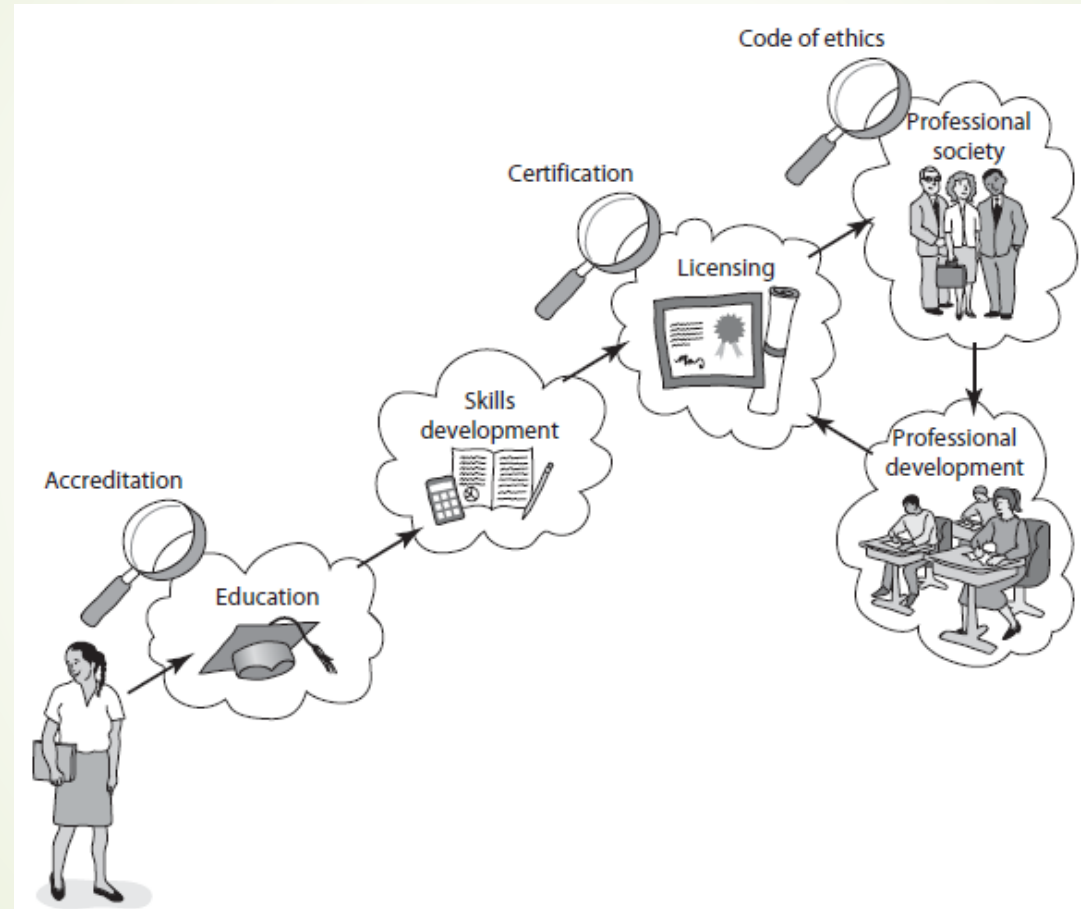


Professional is not a label you give yourself - it's a description you hope others will apply to you.

— David Maister —

AZ QUOTES

Attributes of a Profession



- A professional association or professional body (IET, CSSL, SLMC) seeks to further a particular profession, the interests of individuals engaged in that profession and the public interest

Who is a Computing Professional ?

- Anyone who is employed in computer, information technology or information/communication fields.
- Can include
 - Software / Hardware designers
 - software engineers,
 - software quality/ system analysts,
 - Database administrators
 - software technical writers,
 - software managers,
 - Computer scientists

Impact of your job/work

- Computer systems that can have direct life-threatening impact.
 - Air craft and air traffic control systems
 - Mass transportation systems
 - Nuclear reactors, missile systems
 - Medical treatment systems
 - Design of bridges and buildings
 - Development of analytical models for medical treatment

Responsibilities of Computing Professionals

- To Clients and Users
- To Employers
- To Other Professionals
- To the Public

Ethics

- Ethics is a set of beliefs about right or wrong behavior
- Ethical behavior conforms to generally accepted social norms - > Universally accepted
 - Eg : Lying and cheating are unethical

Why Ethics ?

- Helps people to make moral decisions
- Assumes that people are rational and free to choose how they will act
- Describes how people do act and how people should act.

CODE of ETHICS

- Professional Ethics cover the personal, organizational and corporate standards that are expected of professionals.
- Includes issues involving relationships or responsibilities with:
 - Employees, employers, and other people who use the products or services.
- “Computer Ethics” includes social, political, and personal issues.

Professional codes of Ethics for IT

- Computer Society of Sri Lanka (CSSL)
- The Institute of Engineering and Technology (IET)
- The Association for Computer Machinery (ACM)
- The Institute for Electrical and Electronic Engineers- Computer Society (IEEE- CS)
- British Computer Society (BCS)



CSSL Codes of Ethics

1. Professionalism

That you will work to improve the value and virtue of the society and respect all its members while protecting the safety, welfare and health of the community.

2. Professional Development

You will always work in your professional interests to develop your career while also enhancing the professional development of your colleagues and fellow staff.

3. Added Value to Sri Lanka

You will work diligently to strive to enhance the value of Sri Lanka and its citizens in any possible way and place the interests of your country above those of personal sectional interests.

4. Honesty

Maintain honesty in all dealings and in your representation of knowledge, skill and services. In addition to that, you are required to strive in order to protect the public from misinformation and misinterpretation.

5. Competence

You will pay meticulous and diligent attention to work competently for your stakeholders and perform services only in areas of competence.

IEEE Codes of Ethics

- Accept responsibility in making engineering decision consist with the safety, and welfare
- Avoid real conflicts of interest wherever possible
- Be honest
- Reject bribery in all forms



ACM Code

- Contribute to society and human well being
- Avoid harm to others
- Be honest and trustworthy
- Be fair and take action not to discriminate
- Honour property copy and patents
- Give proper credits to IP
- Respect the privacy of others
- Honour confidentiality

ACM – SE-CODE

- Software Engineering code of ethics (by ACM)
 1. PUBLIC – SE s shall act consistently with public interest
 2. CLIENT AND EMPLOYER – SE s shall act in a manner that is the best interests of their client and employer consistent with the public interest.
 3. PRODUCT – SE s shall ensure that their products and related modifications meet the highest professional standards possible

ACM – SE-CODE

- 4. JUDGMENT – SE s shall maintain integrity and independence in their professional judgement
- 5. MANAGEMENT – SE managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
- 6. PROFESSION – SE s shall advance the integrity and reputation of the profession consistent with the public interest.

ACM – SE-CODE

- 7. COLLEAGUES – SE s shall be fair to and supportive of their colleagues
- 8. SELF – SE s shall participate in life-long learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

Purpose of Professional Codes

- Professional codes of ethics are often designed to motivate members of an association to behave in certain ways.
- Five primary functions of codes are to:
 - *Inspire*
 - *Educate*
 - *Guide*
 - *Responsibilities*
 - *Discipline the members*

IT professionals need to commit to....

- Integrity
- Competence
- Professional Responsibility
- Work Responsibility
- Societal Responsibility

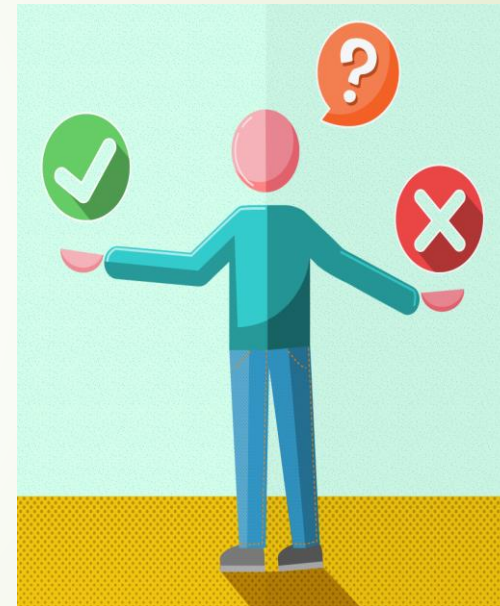
**DO WHAT
IS RIGHT,
NOT WHAT
IS EASY**

Example

- You are a programmer at a bank and you found flaws in your program which is used in ATMs.
- Would you tell your employer ?
- Solution : You have to be honest. Inform your employers and try to fix the program. The consequences for hiding faulty programs would be worst than admitting your mistakes.

Setting your own professional Ethics

- ▶ We need professional ethics because of the impact that our actions have on society as a whole
- ▶ Review and refresh your knowledge in professional ethics constantly
- ▶ Reflect on the ethics of how we behave as we carry out our duties should be one of our professional obligations



Task 1:

- Scenario : A team of programmers are working on a computer-controlled device for treating cancerous tumors. The project is behind schedule caused by various delays and the deadline is approaching. There would be no time for testing the device. The system has been functioning well in the routine treatment tested so far.
- As the project manager, you have to consider delivering the system on time without proper testing or continue testing to make patches if the team finds any bugs.

Task 1:

1. Do a stakeholder analysis by identifying the possible stakeholders of the project and their positive and negative impacts of the system delivered.
2. Identify the IET Rules of Conduct that will directly applicable for the decision.
3. As the project manager, what are some solutions or decision you could make ?

Task 1: Answer All 3 Questions.

Reflective Journal

- You have to obtain a cumulative GPA of 2.5 or more at the completion of your degree programme to obtain IET membership
- Task 2: Consider above fact and **write how you plan to achieve above GPA.**
- Write a Reflective Journal on An Incident in your life where you realized the importance of Ethics or Morality.
- Submit your assignment as a **PDF on or before midnight 04th May, 2021.**