



# Professionalism in Practice

Professional codes of conduct & EDI  
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# Professionalism

- Computing is not a 'profession' in the same way as medicine, law, or engineering
- However – it has professional societies (BCS, ACM, IEEE) that try to encourage professionalism in practice
- Technology is a powerful tool and needs to be developed with care

# Defining professionalism

Professionals:

- Require mastery of a body of knowledge – usually through HE
- Often have a good deal of autonomy in their work
- Usually belong to a professional organisation that controls admission and sets guidelines & acknowledged by gvmt
- Fulfil an important social function – i.e. doctors, lawyers

# Are computer professionals professional?

- Possess some of the characteristics:
  - Mastered a body of knowledge
  - Usually gone through higher education
  - Many have a degree of autonomy, but this varies
    - i.e. If run own business or are involved in making decisions may have a lot of autonomy. However, some software developers simply implement the designs of others
  - There are professional computing bodies such as the BCS, ACM, IEEE – but there is no ‘legal body in charge of admissions or standards in the field of computing’
  - Computing is crucial to society, but it is not a ‘good’ in itself as are health and justice (or is it?). It supports activities in society, but they are varied.

# Professionalism

- It could be argued that professionals function in a special context (Johnson 1985)
  - Typically, that includes relationships with employers, clients, fellow professionals and the public.
  - They operate under legal, political and economic constraints
  - They have skills that enable them to affect the world. They usually use their skills to produce products or provide services that are widely used – this usually involves working with a range of others. Because of this they are seen as bearing a responsibility to not do harm to individuals or the public

# What's the purpose of a code?

- A Professional Code of Ethics serves several functions:
  - Symbolises the professionalism of the group
  - Defines and promotes a standard for external relations with clients and employers
  - Protects the group's interests
  - Codifies members' rights
  - Expresses ideals to aspire to
  - Offers guidelines in “grey areas”

# Examples of Codes of Ethics

- British Computer Society Code of Ethics & Conduct
  - <https://www.bcs.org/membership-and-registrations/become-a-member/bcs-code-of-conduct/>
  - 4 sections
- ACM Code of Ethics and Professional Conduct.
  - <https://www.acm.org/code-of-ethics>
  - 4 sections: ethics, professionalism, leadership, compliance
- IEEE Ethics and Member Conduct
  - <http://www.ieee.org/about/ethics/index.html>
  - Separate code of ethics (3 sections) & code of conduct (5 sections)

# BCS Code of Conduct

- Applies to all members of BCS
- Covers 4 main areas:
  - The public interest
  - Professional competence and integrity
  - Duty to relevant authority
  - Duty to the profession



# BCS – 1 PUBLIC INTEREST

- Have regard for public health, privacy, security and wellbeing of others and the environment.
- Have regard for the legitimate interests of third parties
- Don't discriminate against others in any of your dealings
- Promote equal access to IT and generally support inclusion

# BCS – 2 PROFESSIONAL COMPETENCE & INTEGRITY

- Only undertake work within your competence
- Don't claim level of competence you do not possess
- Keep professional knowledge up-to-date
- Know relevant legislation
- Respect the viewpoints of others
- Avoid injuring others, property, reputation, employment
- Reject bribery

# BCS – 3 DUTY TO RELEVANT AUTHORITY

- Carry out work with due care and diligence
- Avoid situations which may result in a conflict of interest between you and your relevant authority (i.e. company, client)
- Accept professional responsibility for your work and the work of colleagues that you supervise
- Don't disclose or use for personal gain, confidential information relating to your work, except with permission or if legally required
- Don't misrepresent or withhold information about the performance of products

# BCS – 4 DUTY TO THE PROFESSION

- Accept personal duty to uphold reputation of the profession
- Improve professional standards by taking part in their development, use and enforcement
- Uphold the reputation of the BCS
- Act with integrity and respect in your relationships with others
- Encourage and support members in their professional development

# ACM – CODE OF ETHICS

1. Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing
2. Avoid harm
3. Be honest and trustworthy
4. Be fair and take action not to discriminate
5. Respect the work required to produce new ideas, inventions, creative works, and computing artifacts
6. Respect privacy
7. Honour confidentiality

# ACM – Professional responsibilities

- Strive to achieve high quality work
- Maintain high standards of competence, conduct & ethics
- Know and respect rules (laws + policies) pertaining to your work
- Accept and provide appropriate professional review
- Give comprehensive evaluations of computer systems incl. risks
- Only perform work in areas of competence
- Foster public awareness and understanding of computing
- Only access computing resources when authorised
- Design and implement systems that are secure

# ACM – Professional leadership principles

- Ensure the public good is the central concern
- Encourage the fulfilment of social responsibilities by all colleagues
- Manage people and resources to enhance quality of working life
- Support policies that reflect this code
- Create opportunities for others to grow as professionals
- Use care when modifying or retiring systems
- Recognise and take care with systems that are integrated into the infrastructure of society

# Characteristics of codes

- They are not simple ethical algorithms that generate ethical decisions.
- Sometimes elements of the code may be in tension with each other or other sources.
  - Requires the IT professional to use ethical judgement to act in the spirit of the code of ethics.
- A good code of ethics/conduct will set out fundamental principles that require thought rather than blind allegiance.



# Problems with codes

- They don't cover every case (nor should they).
- Can a list of rules define a behaviour that everyone considers right?
- Little penalty for non-compliance
  - Realistically compliance requires a personal code of ethics that is broadly in line with the professional code.

# How do you apply codes?

- Consider the ethical dilemma you are facing
- Decide which principles and rules are at stake
- Identify which people/groups are affected by the outcome
- Decide if there are any conflicts between principles in this case
- Make a decision based on prioritisation of principles

# Equality, Diversity & Inclusion

- Related to professionalism – and relevant for the IT workplace AND IT systems that we develop as software engineers
- Compelling reasons for considering this in SE development
  - Legal issues ... i.e. not to discriminate ... Equality Act 2010
  - Professional issues ... it's mentioned in the codes of conduct
  - Ethical issues ... fairness and justice
  - Social issues ... ensuring that IT systems represent and can be useful to the whole of society
- Equality Act 2010 - 9 protected characteristics – Age, Disability, Gender reassignment, Marriage or civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, Sexual orientation