# Professional Issues: Professions and Professionals

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# Profession

Wikipedia: *"A profession is a vocation founded upon specialised educational training, the purpose of which is to supply disinterested counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gain"*

(New Statesman, 21 April 1917)

Have a look at the Wikipedia page because it is contested precisely on the distinction between the vernacular and technical meanings.

# What Makes a Profession?

*"To me, the essence of professionalism is a commitment to develop one's skills to the fullest and to apply [them] responsibly to the problems at hand. Professionalism requires adherence to the highest ethical standards of conduct and a willingness to subordinate narrow self-interest in pursuit of the more fundamental goal of public service"*

(Justice Sandra Day O'Connor — US Supreme Court)

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# Some other definitions...

- *"Doing things right and doing the right thing"*

(Chambers 20th Century Dictionary)

- *"an employment not mechanical and requiring some degree of learning; habitual employment; the collective body of persons engaged in any profession..."* (e.g. lawyers, doctors, architects, surveyors, accountants, engineers)

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# The Computing Profession

- The nature of a profession

- Professional Bodies

- Reservation of title and function

- Software Development as engineering

- The Status of Engineers

- International Recognition of Engineering Qualifications

- Compulsory Registration of Software Engineers

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# Professional Bodies in Computing

- The development of Professional Bodies

- Professional Conduct

- Education

- Continuing Professional Development

- The advancement of Knowledge

- Membership Grades

- Official Advice

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(Bott, Chapter 3)

# The Collective Body

- The collective body controls entry to the profession

- The collective body is self governing and self regulatory, in the sense that it establishes and enforces a code of conduct on its members

- The collective body is established either by a Royal Charter or an Act of Parliament which defines the extent of its authority and requires it to undertake certain duties and responsibilities

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# **Professional Bodies**

- Promote and set standards in education — Accredit courses

- Promote continuing personal development

- Promote advancement of the subject

- Promote exchange of knowledge

- Give official advice

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# ...in USA

- Term *'engineer'* much more strictly applied than here

- State licensing boards

- Applying strict regulation to software engineers would cripple the sector

# ...in UK, BCS Codes

## ...of Conduct

- Sets out the professional standards required by the Society as a condition of membership
- Covers public interest, duty to relevant authority, duty to the profession, professional competence and integrity

## ...of Good Practice

- *"Describes standards of practice relating to contemporary demands found in IT"*
- Covers practices common to all disciplines plus some specific to IT, business, education...

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# IFIP

- *the leading multinational, apolitical organisation in Information & Communications Technologies and Sciences*

- *recognised by United Nations and other world bodies*

- *represents IT Societies from 56 countries or regions, covering all 5 continents with a total membership of over half a million*

- *links more than 3500 scientists from Academia and Industry, organised in more than 101 Working Groups reporting to 13 Technical Committees*

- *sponsors 100 conferences yearly providing unparallelled coverage from theoretical informatics to the relationship between informatics and society including hardware and software technologies, and networked information systems*

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# IFIP — no Code of Conduct

- Attempts were criticised as being from the perspective of white well-off males

- Instead it issued guidelines but left this to member organisations

- For instance, on viruses IFIP urges:

  - Computer professionals to recognise the disastrous potential of viruses and not to distribute viruses knowingly
  - Educators to impress upon students the dangers of viruses
  - Publishers to refrain from publishing details of virus programs
  - Developers of virus detectors not to distribute viruses as tests
  - Resources to be devoted to R & D of protection mechanisms
  - Governments to make distribution an offence

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# ACM — General Moral Imperatives

As an ACM member I will:

- Contribute to society and human well being

- Avoid harm to others

- Be honest and trustworthy

- ...

# EU FEANI

Mobility directives

- Allow movement and professional recognition between countries

- Fédération Européene d'Associations Nationales d'Ingénieurs

- Members can use prefix Eur.Ing.

# Practices Common to all Engineering Disciplines

- Maintain your technical competence

- Adhere to regulations

- Act professionally as a specialist

- Use appropriate methods and tools

- Manage your workload efficiently

- Participate maturely

- Respect the interests of your customers

- Promote good practices within the organisation

- Represent the profession to the public

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# Practices covered by the BCS

- Information Technology

- Programme/Project Management

- Relationship Management

- Security and Safety

- Change Management

- Quality

- Business Processes

- Research & Development

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# Summary

Members of the Computing Profession are expected:

- to work within the relevant legal framework

- to act within a framework of rules of conduct

- to be familiar with best practice and to exercise judgementin applying it

# Required Readings

- Textbook (Bott)

  - Chapter 1 on Law and Government
  - Chapter 2 on The Nature of a Profession
  - Chapter 3 on Professional Bodies in Computing

- BCS Code of Conduct

- BCS Code of Good Practice

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# Activity 1

- Read Chapter 1 (Textbook) and understand what is meant by:
  - Jurisdiction
  - Civil Law
  - Criminal Law
  - Burden of Proof
  - Standard of Proof
  - Statute Law
  - Common Law
  - Statute Lawmaking in the UK: Green Paper, White Paper, Bill, Act
- Other useful sources of information
  - www.parliament.uk
  - www.firstgov.gov
- Discuss or question any relevant aspect in the course wiki

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# Activity 2

- Take one of the sections of the BCS Code of Conduct and read the preamble to the code and your chosen section

- Read *A Comedy of Errors: the London Ambulance Service case study* paper (A. Finkelstein and J. Dowell, 1996)

- Construct a list of clarifying questions on the London Ambulance Service paper

- Work out how you think professionals involved in the London Ambulance Project might have violated your part of the code of conduct.

- Work out your top three violations

- Discuss or question any relevant aspect in the course wiki

# Activity 3

- Write a paragraph contrasting the BCS Code of Conduct with the BCS Code of Good Practice

- Invent two example contexts – one where the CoC is more useful than the CoP and vice versa

- Discuss or question any relevant aspect in the course wiki