




# Professional Issues

Professions and Professionals

**informatics**

# Law and Government

(Bott, Chapter 1)

- Read Chapter 1 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
- [www.parliament.uk](http://www.parliament.uk)
- [www.firstgov.gov](http://www.firstgov.gov)

# The Computing Profession

*(Bott Chapter 2 – read this)*



- The nature of a profession [p. 11]
- Professional Bodies [p. 12]
- Reservation of title and function [p. 12]
- Software Development as engineering [p. 13]
- The Status of Engineers [p. 14]
- International Recognition of Engineering Qualifications [p. 17]
- Compulsory Registration of Software Engineers [p.18]

# Breakout Session

1. On your own: write a definition of the meaning of “profession” (2 or three lines max).
2. In a pair:
  - compare and discuss your definitions - do they capture what you want to capture?
  - If they differ significantly keep both and refine them, otherwise produce a single refined definition
3. In fours: combine your definitions into at most two definitions: main and alternate
4. In eights: combine your definitions into at most two definitions.

# 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*

## 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 ...”
- (lawyers, doctors, architects, surveyors, accountants, engineers, etc )

# Professional Bodies in Computing

(Bott, Chapter 3)

- The development of Professional Bodies [p. 25]
- Professional Conduct [p. 26]
- Education [p. 29]
- Continuing Professional Development [p. 31]
- The advancement of Knowledge [p. 33]
- Membership Grades [p. 34]
- Official Advice [p. 36]



# 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.

# 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

# USA

- Term “engineer” much more strictly applied than here
- State licensing boards
- Applying strict regulation to software engineers would cripple the sector

# 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 .. Such as:

# Breakout Session

## 1. In fours:

- Take one of the sections of the BCS code of conduct each read the preamble to the code and your chosen section.
- Read the “comedy of errors” paper
- Construct a list of clarifying questions you might want to ask me 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.
- In your fours, work out your top three violations
- In eights, work out the top three of your top six.

## *International Federation for Information Processing*

- “the leading multinational, apolitical organization in Information & Communications Technologies and Sciences
- recognized 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, organized in more than 101 Working Groups reporting to 13 Technical Committees
- sponsors 100 conferences yearly providing unparalleled coverage from theoretical informatics to the relationship between informatics and society including hardware and software technologies, and networked information systems”

# IFIP: no Code of Conduct

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- Why might that be?

# 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
- E.g. 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



# ACM: General Moral Imperatives

- As an ACM member I will:
  - Contribute to society and human wellbeing
  - 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

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- 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

# Practices covered by the BCS

- Information Technology
- Programme/Project Management
- Relationship Management
- Security and Safety
- Change Management
- Quality
- Business Processes
- Research & Development

We'll Look at these in more detail later

# 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 judgement in applying it
- Important documents to read are
  - Bott et al. Chapter 1-3
  - BCS Code of Conduct
  - BCS Code of Good Practice
- Homework for next week:
  - Write a paragraph contrasting the Code of Conduct with the Code of Practice. In particular invent two example contexts - one where the CoC is more useful than the CoP and vice versa.