Professional Issues

Professions and Professionals



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
- 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 Qualified	ications [p. 17]
• Compulsory Registration of Software Engineers	[p.18]

Breakout Session



- 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 <u>IT Societies</u> 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 <u>Technical Committees</u>
- 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"

24/09/2012

IFIP: no Code of Conduct



• Why might that be?

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Professional Issues: Meeting 1 Professionalism

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

- 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 time:
 - 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.