# Fundamentals of Computer Science
# ETHICS and PROFESSIONALISM

**Based on material by Tony Jenkins**

# Ethics

- What are ethics and professionalism?
- Examples of ethical codes
- Relevance to your area
- BCS - The Chartered Institute for IT

# Ethics

- Ethics addresses questions about morality, right and wrong, doing the right thing

- Most professions have an code of conduct or a set of rules outlining the responsibilities of an individual or organisation

- 'Most professionals agree that building and maintaining a comprehensive ethics and compliance program and strong ethical culture are essential to good business.' www.ethics.org/services

# Ethics

The week before Christmas, Harry comes bounding into the office, distributing woolly hats for all the staff, and dropping hints about a special present for Tony.

"The boss wanted me to give you more than a hat this year," he says   "as a thank you for all the business you've put our way over the years," and he hands Tony an envelope, containing 2 tickets for an all-expenses paid trip to Iceland over New Year.

# Ethics

- You sit down at a PC in JG109.
- It has been left logged in by the previous user.
- What do you do?

# Professionalism

- Your job is to develop software for an automatic sprinkler system in a new building.
- It fails (you missed a semicolon) and the building burns down.

# Ethical Codes in Professions

- Medical Ethics
  - The British Medical Association – confidentiality, consent, doctor-patient relationship, health records https://www.bma.org.uk/advice/employment/ethics http://bma.org.uk/practical-support-at-work/ethics/medical-students-ethics-tool-kit/key-concepts

  - Nursing and Midwifery Council – The Code covers standards of conduct, performance and ethics http://www.nmc-uk.org/Publications/Standards/The-code/Introduction/
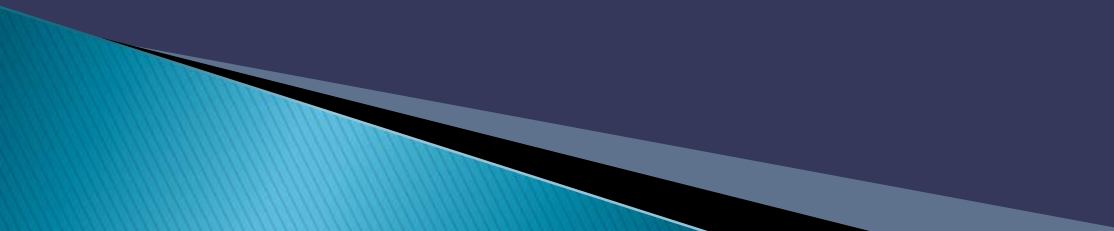
- The Law
  - The Solicitors Regulation Authority (SRA) deals with all regulatory and disciplinary matters, and sets, monitors and enforces standards for solicitors across England and Wales www.sra.org.uk/solicitors/handbook/code/content.page

  - Code of Ethics for Police Officers http://www.college.police.uk/What-we-do/Ethics/Pages/Code-of-Ethics.aspx

- Teachers' Standards
  - Includes teachers' personal and professionalism conduct https://www.gov.uk/government/publications/teachers-standards

# Ethical Codes in Professions

**Ethical codes vary across industries and organisations have their own specific codes**

- Compliance, Integrity and Anticorruption
- Conflicts of Interest
- Employee, Client and Vendor Information
- Employment Practices
- Environmental Issues
- Internet, social networking and social media
- Relationships with third parties

# Ethics related to Computing

- Business ethics concerns questions such as
  - the limits on managers in the pursuit of profit
  - the duty of 'whistleblowers' to the general public as opposed to their employers

- Product development
  - Safety and risk

- BCS – The Chartered Institute for IT has code of conduct for its members

- Sets out how an IT professional should behave in a professional, legal and ethical way:
  - www.bcs.org/upload/pdf/conduct.pdf

# BCS - Code of Conduct

- sets out the professional standards required by BCS as a condition of membership

- applies to all members, irrespective of their membership grade, the role they fulfil, or the jurisdiction where they are employed or discharge their contractual obligations

- governs the conduct of the individual, not the nature of the business or ethics of any Relevant Authority

# BCS - Code of Conduct

The code covers four areas:

1. Public Interest
2. Professional Competence and Integrity
3. Duty to Relevant Authority
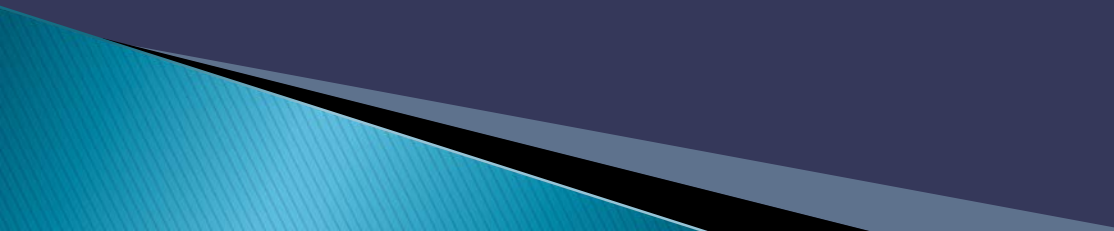4. Duty to the Profession

# Public Interest

Would you

◦ Clone yourself?

◦ Trust robotic cars to share our road?

◦ Recruit team members based solely on technical ability?

◦ Develop a website that cannot be used by users with visual impairments?

◦ Write software to extract personal information from a dating site?
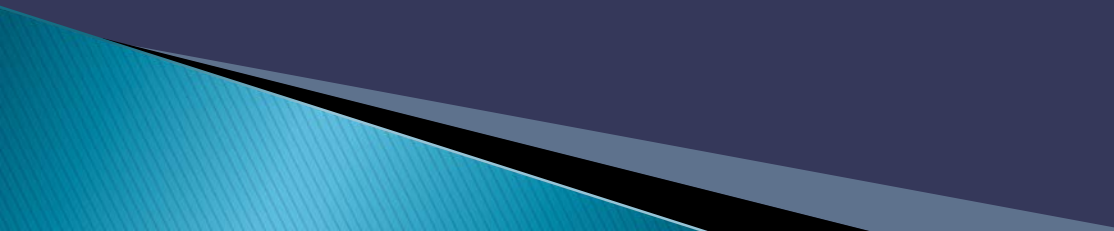
# Professional Competence and Integrity

Would you:

- Claim experience you do not have in order to get a job?

- Develop your skills on an ongoing basis?

- Keep up to date with relevant legal developments?

- Develop and test all software to the best of your ability?

- Accept bribes or other unethical inducement?

# Duty to Relevant Authority

"Relevant Authority" means employer or client, that has authority over the professional.

Would you:

- Give a customer alternative facts about your product?

- Avoid any conflict of interest when working on a project?

- Take advantage of a client's lack of knowledge of IT?

- Treat all your colleagues and subordinates equally?

# Duty to the Profession

Would you:

- Uphold the reputation of the IT profession?

- Improve professional standards?

- Seek to develop professionally, and encourage others to do the same?

# In a nutshell…

Computing ethical issues are wide-ranging

- Computer crime, responsibility for computer failure

- Privacy, sharing data

- Cyber bullying, sexting

- Hacking, unauthorised access, viruses, sabotage

- Face recognition via CCTV

- Automatic number plate recognition

- Log files and their use

- Giving back to open source

# Now...

- All projects have ethical and legal aspects

- Reflect on the examples given

- Start working on your Killer Robot Presentation
  http://www.onlineethics.org/Resources/Cases/killerrobot.aspx

- Refer to the BCS Code of Conduct