

**ETHICAL, LEGAL, CULTURAL AND ENVIRONMENTAL FACTORS**



### Legislation

- What are the 8 principles of the Data Protection Act 1988?
- Explain why the Computer Misuse Act 1990 was developed.
- If you could make 1 change to the Computer Misuse Act what would it be?
- Find out how much the pirating of software and music costs their industries each year.
- Explain if you think the Copyright and Patents Act is effective.
- Explain the different levels of Creative Commons Licencing
- What are the three most important revelations made under the FOI Act? Justify the order you have put them in.

### Ethics

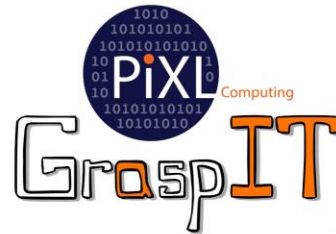
- Explain, with examples, the difference between formal and informal codes of ethical behaviour.
- Explain the difference between unethical behaviour and illegal behaviour
- Give 3 examples of legal but unethical actions
- Why is a code of ethics important for computer scientists? Can you illustrate your answer with examples?
- Create 5 ethical guidelines for computer scientists to follow
- What is the *most* unethical but legal action you can think of?
- Is there ever an occasion when an action could be ethical but illegal?

### Hacking and Cracking

- Explain what a hacker is
- Explain what a cracker is
- Would you prefer to be a white or black box penetration tester? Why?
- What is a hacktivist?
- Write a 200 word essay arguing for/against hacktivism.
- If one country "hacks" the election of another country, should the election be redone?

### Environmental Impacts

- Explain who is responsible for the negative environmental consequences of technology. The individual, the manufacturers, the government or someone else?
- Explain how decommissioning technology in the UK can have a negative impact on another country.
- What will have a bigger positive impact on the environment: electronic cars or renewable forms of energy?
- To what extent does technology have a positive impact on the environment?



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### Things!

- To what extent do you agree with the statement "everyone will own wearable technology in 10 years"?
- To what extent do you agree with the statement "everyone will have a computer based implant in 20 years"?
- Explain how the global population could benefit from computer based implants?
- Explain the rise in popularity of the "internet of things"
- Research and explain how the internet of things have been used to launch DDOS Attacks and increase "click revenue" for websites.

### Cultural Impacts

- Explain how social media has helped re-engage young people in democracy. Try to give examples to illustrate your answer.
- "Parents should seek their children's permission before posting photos of them online". To what extent do you agree with this statement?
- Is there a link between the rise in social media and the rise in mental health/wellbeing issues? Explain your answer
- Due to developing technology, the next generation will never need physical money. Explain why this could be the case.

### Privacy

- "There is no longer any such thing as privacy". To what extent do you agree with this statement?
- Explain how companies like Google and Facebook collect data individuals' data.
- Is targeted advertising an invasion of privacy? Explain your answer.
- What personal freedoms would you give up to help the state keep you safe?

### How key stakeholders are effected by technology

- Explain the impact driverless cars will have on the automotive industry and its customers.
- Explain the impact driverless lorries could have on the transport and haulage industry and its customers.
- If a driverless car crashes into and kills someone, who is responsible: The owner, the company that made the car or the software developers that programmed the car?
- Computer code isn't a physical object. Therefore is it stealing if you copy a software company's code for your own use?