

INFO2009 Legal, Professional and Ethical Issues 2012-13

Coursework 2: Content Briefs

Review each of the following briefs. Decide amongst your team which of the following you would prefer. You should make a first, second and third choice. There are lots of options within the individual briefs, so read them carefully to ensure you make the best choice for your team as a whole. Be aware however, that you will not necessarily be able to follow your first choice. A voting form to make your choice will become available later in the week; probably Wednesday 7th. You will be informed of the final allocation by 17.00 Friday 9th November.

1) Globalisation

New graduates who progress to employment are sometimes criticised for lacking business awareness. An understanding of the extent and implications of globalisation is one aspect where such criticisms might be directed. The widespread use of the Internet, use of the web, and worldwide communications networks demand skills, knowledge and understanding relevant to the global workplace. Areas on which globalisation can impact include working practices, finance, logistics and manufacturing.

Produce a resource designed for informing undergraduate students who might have a background in the Science, Technical, Engineering and Mathematical (STEM) subjects which addresses some of these issues discussing the topic in the context of professional, legal and ethical issues.

2) Digital Futures Sci Fi or Vision?

Augmented reality is one aspect of the digital future which has captured imaginations. Virtual world infrastructure and scenarios not only appear in science fiction, cinema and gaming, but are implemented in many disparate areas including military, hostile environments, training and education.

Produce a resource designed for informing undergraduate students who might have a background in the Science, Technical, Engineering and Mathematical (STEM) subjects which addresses some of these issues discussing the topic in the context of professional, legal and ethical issues.

3) Security and Privacy

Facebook is widely used by individuals as a convenient and effective way of keeping in contact and sharing information. However, Facebook's terms and conditions run to many thousand words, and few have actually read them. Furthermore, critics claim that the convenience of contact and information sharing is gained at considerable personal cost, where users often unwittingly make accessible large amounts of personal data without fully understanding who has access to that information or how it is or might be used.

Produce a resource which explains some of the privacy and security issues which underlie the widespread use of this particular social network. Your resource may be addressed to

i) undergraduate students

or

ii) a wider audience taking a public awareness of science perspective.

4) Digital Futures Awareness

Universities want to recruit the best students, the IT industry bemoans a skill shortage in computing and IT related employment, government is changing the school curriculum to introduce more computer science into undergraduate education. An understanding of digital futures can be informative for the newly graduated student and inspiring for students facing future career choices.

Produce a resource which identifies specific aspect of digital futures which is set to make a transformative impact on society; in the workplace, at home and in everyday life. Topics which might be addressed include, but are not confined to:

- Social computing;
- Semantic web (so called web 3.0);
- Web science;
- Open and linked data;
- Open source;
- Open educational resources and MOOCs;
- Virtual Worlds and Augmentation;
- e-commerce
- Big data

Your resource may be addressed to

i) undergraduate students

or

ii) students who you wish to encourage to study subjects in the computing disciplines

5) Legal Awareness

Practicing IT professionals may hold strong views of digital rights and wrongs which are informed by their professional expertise and specialism.

Additionally IT professionals need to have a basic awareness of legal issues which are relevant to their chosen profession; more so if they have membership of the BCS (and are thus bound by codes of professional conduct and practice).

Produce an educational resource which presents an overview of the key legal issues relevant to undergraduates studying computer science or IT related degrees accredited by the BCS. Topics which might be addressed include, but are not confined to:

- Copyright, ownership and digital rights management
- Data Protection Act
- Rights and Equality in the workplace
- Crime online, cyber security
- Telecommunications Legislation
- Freedom of speech and defamation
- Privacy and security
- Ethical dilemmas at work

6) Green IT, sustainability and the environment

There are many different possible perspectives of the issues related to Green IT, sustainability and the environment of which an undergraduate studying computer science or an IT related degree should be aware.

- UK and European legislation place constraints in the workplace.
- Individuals and organisations need to be informed on the implications of their current practice in terms of their carbon footprint (from both a Green and a cost perspective).
- New technologies and technological approaches offer possibilities for optimising or reducing costs and carbon footprint

Furthermore, academic research in computer science can make contributions to effective responses to the challenges of a securing a sustainable future; researchers at Southampton have harnessed semantics, linked and open data in this field.

Produce an educational resource which presents an overview from a legal, technical or mixed perspective which is relevant either to i) undergraduates studying computer science or IT related degrees accredited by the BCS, or from a wider public awareness of science viewpoint.

7) Employability

Students of computer science and IT don't only go on to get jobs as programmers. The skills, knowledge and understanding developed during an undergraduate degree leads to many different opportunities. In a harsh economic climate potential and existing students may be inspired and motivated to begin or sustain their studies in our areas if they better understand the options which are available to them in the future.

Basing your content on real information gathered from a mix of public sources and other material such as individual interviews or careers destination data produce a resource which explains and illustrates these points. Your resource may be of equal interest to undergraduates or the wider range of existing and potential students.

8) New business models

Approaches harnessing technologies such as mobile computing, social networks, semantics and open and linked data have supported transformative new business models which exhibit and support novel organisational structures and employment patterns. These include micro-businesses; social enterprises; technology supported charging and tracking systems. Such innovations are having transformative impacts in countries with already established industrial traditions and in those countries with different economic and social profiles (for example the so called BRICK nations).

Produce an educational resource which compares and contrasts novel and traditional approaches and highlights major impacts of such changes. You could also use this material as a basis for a public awareness of science resource which emphasises the role and importance of underlying technologies