

# Capstone Computing Project

Australian Computer Society (ACS)  
Code of Ethics  
and Code of Conduct

\*Based on the material available on ACS Website  
<https://www.acs.org.au>

# ***Outline***

- ACS Code of Professional Conduct
  - ACS code of ethics
- ACS values
- Case studies
  - what would you do in these situations?

# ***Code of Professional Conduct***

- An essential characteristic of a profession:
  - the need for its members to abide by a code of ethics
- Binding on every ACS member
- Identifies six core ethical values and the associated requirements for professional conduct
- Code of Professional Practice
  - a set of guidelines for acceptable practice within the ICT industry

## ***Relevance to Law***

- The Code of Ethics has relevance to professional standards legislation
- Failure to abide by the Code could be used as grounds for a claim of professional negligence
- The Code may be quoted by an expert witness giving an assessment of professional conduct
- Failure to observe the Code could also lead to disciplinary action by the ACS

# ***ACS Code of Ethics***

1. **The Primacy of the Public Interest:** You will place the interests of the public above those of personal, business or sectional interests
2. **The Enhancement of Quality of Life:** You will strive to enhance the quality of life of those affected by your work
3. **Honesty:** You will be honest in your representation of skills, knowledge, services and products
4. **Competence:** You will work competently and diligently for your stakeholders
5. **Professional Development:** You will enhance your own professional development, and that of your colleagues and staff
6. **Professionalism:** You will enhance the integrity of the ACS and the respect of its members for each other

# ***ACS Code of Conduct***

- Not exhaustive guidelines
  - not a complete definition of acceptable professional conduct in all practical situations
  - intention to illustrate ethical and professional conduct under the Code of Ethics
- Apply the spirit of the Code to resolve ambiguous or contentious issues
- ACS will try to help you to resolve ethical dilemmas when they present themselves
  - a confidential consultation can be organised if you ever find yourself in a difficult position

## 1.2.1: *The Primacy of the Public Interest (I)*

- Public interest takes precedence over personal, private and sectional interests
  - any conflicts should be resolved in favour of the public interest
- In your work, you should safeguard the interests of your immediate stakeholders
  - provided these interests do not conflict with the duty and loyalty you owe to the public
- The public interest includes matters of public health, safety and the environment

## 1.2.1: *The Primacy of the Public Interest (II)*

In accordance with this value you will:

- a) identify those potentially impacted by your work and explicitly consider their interests;
- b) raise with stakeholders any potential conflicts between your professional activity and legal or other accepted public requirements;
- c) advise your stakeholders as soon as possible of any conflicts of interest or conscientious objections that you have;
- d) take into consideration the fact that your profession traverses many other professions, and has implications for other social systems and organisations;
- e) endeavour to preserve the integrity, security, continuity and utility of ICT;
- f) respect the intellectual property of others; and
- g) endeavour to preserve the confidentiality and privacy of the information of others



## 1.2.2: *The Enhancement of the Quality of Life (I)*

- Significant impact of ICT on society and our way of life
  - Mostly beneficial
  - But some negative effects
  - An ethical approach to your work will help to recognise and minimise these adverse effects
- You should promote equal access to the benefits of ICT by all members of society

## 1.2.2: *The Enhancement of the Quality of Life (II)*

In accordance with this value you will:

- a) recognise, in your work, the role that ICT can play to enhance the quality of life of people, particularly the disadvantaged or those with disabilities;
- b) protect and promote the health and safety of those affected by your work;
- c) understand, and give due regard to, the perceptions of those affected by your work; and
- d) attempt to increase the feelings of personal satisfaction, competence, and control of those affected by your work

### 1.2.3: *Honesty (I)*

- Do not breach public trust in the profession or the specific trust of your stakeholders
- Observance of utmost honesty and integrity must underlie all your professional decisions and actions
- In your professional career, circumstances may arise when it may appear to be beneficial for you to be deceptive in some way
  - This type of behaviour is not acceptable professional conduct

## 1.2.3: *Honesty (II)*

In accordance with this value you will:

- a) reject, and will not make, any offer of bribery or inducement;
- b) not knowingly mislead a client or potential client as to the suitability of a product or service;
- c) distinguish between your professional and personal opinions and advice;
- d) give realistic estimates for projects under your control;
- e) qualify professional opinions which you know are based on limited knowledge or experience;
- f) give credit for work done by others where credit is due; and
- g) not attempt to enhance your own reputation at the expense of another person's reputation

## 1.2.4: *Competence (I)*

- Accept only such work as you believe you are competent to perform
- Do not hesitate to obtain additional expertise from appropriately qualified individuals where advisable
- You should always be aware of your own limitations and not knowingly imply that you have competence you do not possess
  - This is distinct from accepting a task that requires more expertise than your own
  - You cannot possibly be knowledgeable on all facets of ICT but be able to recognise when you need additional expertise and information

## 1.2.4: *Competence (II)*

In accordance with this value you will:

- a) endeavour to provide products and services which match the operational and financial needs of your stakeholders;
- b) not misrepresent your skills or knowledge;
- c) make yourself aware of relevant standards and legislation, and act accordingly;
- d) respect and protect your stakeholders' proprietary interests;
- e) advise your stakeholders when you believe a proposed project, product or service is not in their best interest;
- f) accept responsibility for your work; and
- g) respect, and seek when necessary, the professional expertise of colleagues in their areas of competence

## 1.2.5: *Professional Development (I)*

- Keep yourself informed of new technologies, practices and standards relevant to your work
  - Others will expect you to provide special skills and advice;
  - in order to do so, you must keep your knowledge up-to-date
  - Encourage your colleagues and staff to do the same
- Pass on your knowledge and experience

## 1.2.5: *Professional Development (II)*

In accordance with this value you will:

- a) continue to upgrade your knowledge and skills;
- b) increase your awareness of issues affecting the profession and its relationship with the public;
- c) encourage your colleagues, staff and students to continue their own professional development; and
- d) support education, training and professional development in ICT that reflects the diverse needs of individual professionals and their various career paths



## 1.2.6: *Professionalism (I)*

- The ICT industry is relatively new and characterised by rapid change
- Need to maintain professional standards that improve and enhance the industry's image, especially in the workplace
- All people have a right to be treated with dignity and respect
- Discrimination is unprofessional behaviour, as is any form of harassment
- ACS can help them resolve ethical dilemmas
- ACS can also provide support for taking appropriate action, including whistle-blowing, if you discover an ACS member or employer engaging in unethical behaviour

## 1.2.6: *Professionalism (II)*

In accordance with this value you will:

- a) take a calm, objective, informed and knowledgeable stance on your professional work, complementing your enthusiasm and engagement in it;
- b) take appropriate action against members who engage in behaviour contrary to the Code of Ethics;
- c) confront attempts to limit diversity in the workplace, and ensure that opportunities for employment, advancement, remuneration and other working conditions are based on the actual skills and performance of employees, free of stereotypes and prejudices;
- d) note that the corporate actions of the ACS are subject to this Code, and you should do whatever you can to ensure that the ACS and its officer bearers and staff meet this obligation;

## 1.2.6: *Professionalism (III)*

In accordance with this value you will:

- e) neither require, nor attempt to influence, any person to take any action which would involve a breach of the Code of Ethics;
- f) refrain from any conduct or action in your professional role which may tarnish the image of the profession or detract from the good name of the ACS;
- g) endeavour to extend public knowledge and understanding of ICT;
- h) co-operate in advancing ICT by communication with other professionals, students and the public; and
- i) have pride in your profession, and protect and promote professionalism and trustworthiness in ICT

## ***Code of Ethics - Case Studies***

- Some questions to consider are:
  - What are the issues here?
  - What would you do?
  - How can the ACS code of ethics help?
  - Should an organisation have a policy about this issue?

## ***Case 1: Kelly The Programmer***

Kelly, a statistical database programmer, is trying to write a large statistical program needed by her company. Programmers in this company are encouraged to write about their work and to publish their algorithms in professional journals. After months of tedious programming, Kelly has found herself stuck on several parts of the program. Her manager, not recognising the complexity of the problem, wants the job completed within the next few days. Not knowing how to solve the problems, Kelly remembers that a coworker had given her source listings from his current work and from an early version of a commercial software package developed at another company. On studying these programs, she sees two areas of code which could be directly incorporated into her own program. She uses segments of code from both her co-worker and the commercial software, but does not tell anyone or mention it in the documentation. She completes the project and turns it in a day ahead of time.

What are the issues here? Does the Code of Ethics apply?

## ***Case 2: Max in the State Department***

Max works in a large state department of alcoholism and drug abuse. The agency administers programs for individuals with alcohol and drug problems, and maintains a huge database of information on the clients who use their services. Some of the data files contain the names and current addresses of clients.

Max has been asked to take a look at the track records of the treatment programs. He is to put together a report that contains the number of clients seen in each program each month for the past five years, length of each client's treatment, number of clients who return after completion of a program, criminal histories of clients, and so on. In order to put together this report, Max has been given access to all files in the agency's mainframe computer. After assembling the data into a file that includes the clients' names, he downloads it to the computer in his office.

Under pressure to get the report finished by the deadline, Max decides he will have to work at home over the weekend in order to finish on time. He burns the information onto a CD and takes it home. After finishing the report he leaves the CD at home and forgets about it.

What are the issues here? Does the Code of Ethics apply?

## ***Case 3***

A computer company is writing the first stage of a more efficient accounting system that will be used by the government. This system will save tax payers a considerable amount of money every year. A computer professional, who is asked to design the accounting system, assigns different parts of the system to her staff. One person is responsible for developing the reports; another is responsible for the internal processing; and a third for the user interface. The manager is shown the system and agrees that it can do everything in the requirements. The system is installed, but the staff finds the interface so difficult to use that their complaints are heard by upper level management. Because of these complaints, upper-level management will not invest any more money in the development of the new accounting system and they go back to their original, more expensive system.

What are the issues here? Does the Code of Ethics apply?

## ***Case 4***

A small software company is working on an integrated inventory control system for a very large national shoe manufacturer. The system will gather sales information daily from shoe stores nationwide. This information will be used by the accounting, shipping, and ordering departments to control all of the functions of this large corporation. The inventory functions are critical to the smooth operation of the system. Jane, a quality assurance engineer with the software company, suspects that the inventory functions of the system are not sufficiently tested, although they have passed all their contracted tests. She is pressured by her employers to sign off on the software. Legally she is only required to perform those tests which have been agreed to in the original contract. However, her considerable experience in software testing has led her to be concerned over risks of the system. Her employers say that they will go out of business if they do not deliver the software on time. Jane contends if the Inventory sub-system fails, it will significantly harm their client and its employees. If the potential failure were to threaten lives, it would be clear to Jane that she should refuse to sign off. But since the degree of threatened harm is less, Jane is faced with a difficult moral decision..

What are the issues here? Does the Code of Ethics apply?



# ***Resources***

- [https://www.acs.org.au/content/dam/acs/rules-and-regulations/Code-of-Professional-Conduct\\_v2.1.pdf](https://www.acs.org.au/content/dam/acs/rules-and-regulations/Code-of-Professional-Conduct_v2.1.pdf)
- [https://more.acs.org.au/data/assets/pdf\\_file/0004/30964/ACS\\_Ethics\\_Case\\_Studies\\_v2.1.pdf](https://more.acs.org.au/data/assets/pdf_file/0004/30964/ACS_Ethics_Case_Studies_v2.1.pdf)