

## 1.1 Computer ethics: an overview

Computer systems perform tasks and how they perform tasks has moral consequences that affect human interests.

Johnson & Powers, (2004)

What is Computer Ethics?

It is about the analysis of the nature and social impact of computer technology. Also, the corresponding formulation and justification of policies for ethical use of such technology.

**Three properties that make computers a special case:**

- **Logical malleability**
  - Computer technology can be commanded or will receive tasks to do activities through inputs, outputs and even connecting logical operations.
  - Example/s of this logical malleability are cars, television, or refrigerator that have well-defined, and quite specific, functions.
- **Impact on society**
  - In the year 1985 when Moor wrote his paper, at the same time, only a few caught their attention on how the Internet and the World Wide Web will impact society but Moor made it. It was the time when the workplace and nature of work changed.
- **Invisibility Factor**
  - An important fact about computers is that most of the time, and under most conditions, computer operations are invisible. Moor identifies three kinds of invisibility that can have ethical significance:
    1. **Invisible abuse** – Intention to use the underground operations of a computer that may lead to unethical doings.
    2. **Invisible programming values** – It is the value where a computer program and a programmer embedded some value judgments about what is important and what is not. These values become embedded in the final product and may be invisible to someone who runs the program.
    3. **Invisible complex calculation** – In this time of ours, Computers have the ability of enormous calculations beyond human comprehension. Even if a program can be understood, it does not mean that the respective meaning is understood. Computers today perform calculations that are too complex for human thinking or understanding.

## **1.2 Identify an ethical Issue**

Most of us have known the difference between 'ethical' and what is 'not ethical'. But, in time to explain for reasons for deeming an action to be ethical or unethical, some of us expressed it difficult. This is often because we base our judgment on a complex set of criteria that may include those remarkable human traits – common sense, instinct, and wisdom. Ethics comes from the Greek word ethos. Where morality comes from the Latin word moralis. The ancient Greeks were greatly interested in issues of philosophy and thus we may consider ethics to relate to the philosophical study of how we act. Also, ethics in Oxford English Dictionary defines as the science of morals in human conduct.

Morals are pointed in good and bad, right and wrong, justice and injustice. In certain cases, the distinction between right and wrong. Helping someone who is in trouble is acting ethically. While stealing from someone is acting unethically.

Issues that relate directly to computer ethics are:

- Stealing
- Intellectual property
- The right to privacy
- The right to equality
- Keeping promises
- Not lying

## **1.3 Ethics and the law**

In law, it should be a number or something that would tell us when it is right or wrong when doing something. However, laws are not always ethical why? Because these are created by governments and may be introduced to further ethical or not-so-ethical aims. As far as law and ethics are concerned, we can have laws that are ethical, and laws that are unethical. When we pursue a course of action it can be:

- Legal and ethical
- Not legal but ethical
- Not ethical but legal
- Not ethical and not legal

## **1.4 Ethical Theories**

Commonly used to explain natural phenomena and so provide us with an understanding of the world in which we live is theory. It put forwarded, assessed, and discussed. Sometimes, it is generally accepted, revised, or discarded. There is also usually more than one theory put forward on a specific topic, and some people will be convinced by one theory and not by another. Ethical theories attempt to explain human morality, and why we think some actions are good, while other actions are bad.

Aspects of the two theories are outlined below. These are:

- Kantianism
  - It is by Emmanuel Kant believed of how we behave ethically comes from within us, and the things that we decide either good or bad are based on whether we could imagine everyone doing them and embodies this idea within a categorical imperative. Act only according to that maxim by which you can at the same time will that it should become a universal law.

- **Consequentialism**
  - It is a contrast to Immanuel Kant's theory where consequentialism deals with the consequences of actions rather than the actions themselves.

### 1.5 Professional codes of conduct

Most professional bodies have codes of conduct or what we called codes of ethics. Their purpose is to offer guidance to members and set standards for the professional body.

### 1.6 An ethical dilemma

Some of these describe actual, real-world situations; others are of a hypothetical nature. By and large, we do not place ourselves in situations in which we seek out ethical dilemmas – these are simply situations that we encounter (often by chance) and must deal with.

### 1.7 A framework for ethical decision making

Many ethical issues are complex or hard to understand. Deciding on the best course of action can be difficult. We have briefly outlined aspects of the relationship between ethics and the law, and the role of codes of conduct, and have introduced two ethical theories. These ideas, coupled with social norms and the remarkable human attribute of common sense, can help us to develop a rational approach to making an ethical choice.

### 1.8 Review questions:

1. Briefly describe the three kinds of invisibility mentioned by James Moor with regard to computer operations.

**1. Invisible abuse** - Intention to use the underground operations of a computer that may lead to unethical doings.

**2. Invisible programming values** – It is the value where a computer program and a programmer embedded some value judgments about what is important and what is not. These values become embedded in the final product and may be invisible to someone who runs the program.

**3. Invisible complex calculation** - Computers have the ability of enormous calculations beyond human comprehension. Even if a program can be understood, it does not mean that the respective meaning is understood. Computers today perform calculations that are too complex for human thinking or understanding.

2. What are the arguments for and against a Kantian position?

- it is about Utilitarianism or Utilitarian theory

3. Explain utilitarianism in your own words, giving your own example.

- For me, Utilitarianism is a form of consequentialism that determines right from wrong by focusing on the outcomes. An example of this, if you are choosing ice cream to sustain your cravings, for the utilitarian view of this is that you should choose the flavor that will give you the most pleasure. If you enjoy chocolate but hate the strawberry

flavor, so you should choose chocolate for the pleasure it will bring and avoid strawberries because they will lead to your displeasure.

4. What are the four guiding principles for understanding ethical issues, and making informed decisions?

These four principles are the:

1. Law
2. Codes of conduct
3. Ethical theories
4. Social norms and other arguments