

Ethics

Ethics is the study of what it means to "do the right thing". There is much agreement about general ethical rules, many different theories about how to establish a firm justification for the rules and how to decide what is ethical in specific case.

1) Deontological Theories: They tend to emphasize duty & absolute rules, to be followed whether they lead to good or ill consequences in particular cases.

Ex: Do not lie. An act is ethical if it complies with ethical rules & is chosen for that reason.

2) Immanuel Kant: a) Principle of universality: We should follow rules of behaviour that we can universally apply to everyone.

b) "Respect the reason 'in you'", that is, to use your reason, rationality and judgement, rather than emotions, when making a decision in an ethical context, is a wise one.

c) Interacting with other people: One must never treat people as merely means to ends, but rather as ends in themselves.

Kant took an extreme position in the absolutism of ethical rules. He argued that it is always wrong to lie; but for example, if a person is looking for someone who intends to murder, and he asks you so it is wrong to lie to protect the victim.

But most people would say that even very good universal rules should be broken because of consequences.

John Stuart Mill: He expressed that utilitarianism is to increase happiness or utility. A person's utility is what satisfies the person's needs & values. An ~~also~~ action might decrease utility for some people and increase it for others.

Utilitarian principle applies to individual actions and for each action we consider the impact on utility and judge the action by its net impact known as "act utilitarianism."

[Exo SPIC-18, Pg-4]

It thinks before acting, about the consequences of people following that rule. If the outcome is regarded as positive, she might decide that it's good to follow that rule in general, & will apply it in future.

Act vs Utilitarianism:-

An act utilitarian doesn't generalise the act, but regards it as a single action with a single outcome. She will have to weigh the possible consequences each & every time she acts.

Therefore, rule utilitarianism is considered to be more practicable, countering the anti-utilitarian argument that weighing each and every possible outcome each & every time is just not the way we want to spend our time.

[Ex: Pg-7]

Negative Rights:- It means to act peacefully without interference. The only obligation they impose on others is not to prevent you from acting.

Positive Rights:- It impose the rights & obligation on some people to provide certain things for others.

Digital Rights Management on Software Protection:-

DRM is management of legal access to digital content. Various tools or technological protection measures such as access control technologies can restrict the use of hardware & copyrighted works.

Technologies:

① Verification can be done through product keys, activation limits, persistent ~~online~~ online DRM.

Product Key: It is usually an alphanumeric string, can represent a licence to a particular copy of software. The user is ~~asked~~ asked to enter a key; if the key is valid then he can continue. Product keys can be combined with DRM practices to prevent cracking the software to run without a product key, or using a keygen to generate acceptable keys.

Activation Limits: DRM can limit the no. of devices on which a legal user can ~~int~~ install content.

Persistent online DRM: Always on DRM checks & re-checks authorization while the content is in use by interacting with a server operated by the copyright holder.

Encryption:

Encryption can ensure that other restriction measures cannot be bypassed by modifying software, so DRM systems typically rely on encryption in addition to other techniques.

Copy Restrictions:-

Restrictions can be applied to e-books, documents, in order to prevent copying, printing, forwarding or creating backup copies. It typically integrates with content management system software.

Runtime restrictions:-

Windows Vista contains a DRM system called Protected Media Path, which contains protected video path (PVP). It tries to stop DRM restricted content from playing while unsigned software is running, in order to prevent the unsigned software from accessing the content.

Regional lockout:-

It prevents the use of a certain product or service except in a specific region.

Tracking can be done through watermarks or Metadata.

Watermarks :- Digital watermarks can be steganographically embedded within ~~audio~~ audio or video data. They can be used for recording the copyright owner etc. They are not complete DRM machines, but are used as a part of a system for copyright enforcement, such as helping

provide evidence for legal purposes, rather than enforcing restrictions.

Metadata This information is not embedded in the content, as a watermark is. It is kept separate from the content, but within the file or stream.