HUM 4441

Engineering Ethics

UNDERSTANDING ETHICAL PROBLEMS

Motivation

Develop moral theories that can be applied to the ethical problems confronted by engineers.

Ethical problem solving approaches are similar to problem-solving strategies.

We need some knowledge of ethical theory to provide a framework for understanding and reaching solutions in ethical problems.

Ethical Theories

Several theories of ethics to consider in decision making

- Doesn't indicate a weakness in theoretical understanding of ethics or a "fuzziness" of ethical thinking

- Reflects the complexity of ethical problems and the diversity of approaches to ethical problem solving

- Allows problems to be looked at from different angles

FOUR Ethical Theories

Utilitarianism

Duty Ethics

Virtue Ethics

Rights Ethics

Utilitarianism

Secure the greatest good for the greatest number.

It seeks–
➔ to produce the most utility i.e. it focuses on **collective welfare**.
➔ to balance between good and bad consequences of an action as it identifies goodness with the greatest amount of good for the greatest number of people: the '**greatest happiness principle**'.
➔ taking into account the **consequences for everyone affected**.
➔ It does a sort of **cost benefit analysis** i.e. utility is the net result of benefits and 'disbenefits' – or costs.

Emphasis in utilitarianism is not on maximizing the well-being of the individual, but rather on maximizing the well-being of society as a whole, and as such it is somewhat of a **collectivist approach**

Utilitarianism

Suppose that you are buying ice cream for a party that ten people will attend. Your only flavor options are chocolate and vanilla, and some of the people attending like chocolate while others like vanilla. As a utilitarian, you should choose the flavor that will result in the most pleasure for the group as a whole. If seven like chocolate and three like vanilla and if all of them get the same amount of pleasure from the flavor they like, then you should choose chocolate. This will yield the famous phrase, called "**the greatest happiness for the greatest number.**"

The utilitarian method requires you to count everyone's interests **equally**. You may not weigh some people's interests—including your own—more heavily than others.

Utilitarianism - Steps

I. Identify the **issues**
II. Identify all possible **solutions**
III. Identify **costs** and **benefits**
IV. **Weigh** the costs and benefits for each option
V. Choose the option which results in the **greatest benefit** for the **greatest number** of people.
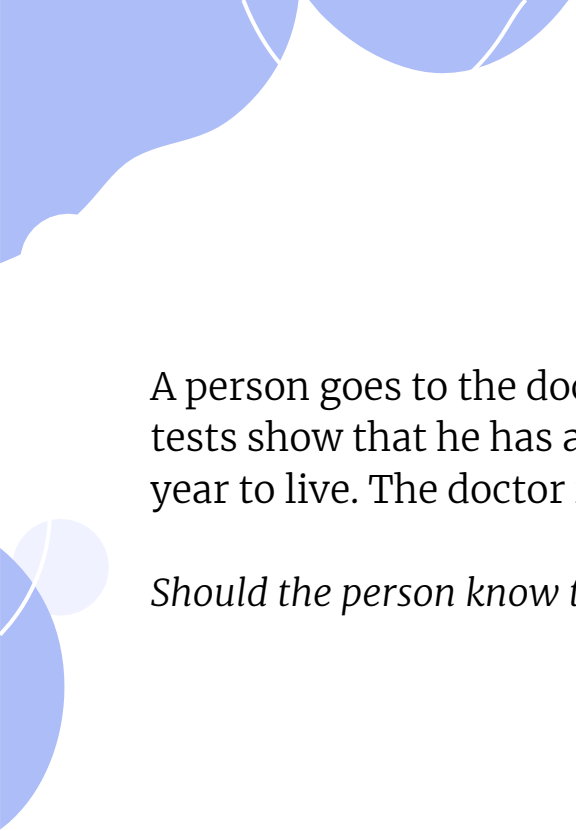
Utilitarianism

ACT

Focuses on the consequences of *individual actions* and assesses them based on their expected utility or benefit. It evaluates actions *separately*, considering each one in terms of its effect on happiness or pleasure. Act utilitarianism means an act may be considered morally right even if it violates traditional notions of justice or individual rights.

RULE

Considers *larger sets of actions* rather than just individual acts. It looks at how certain rules or norms can *maximize utility for society* when followed by everyone. It considers justice and individual rights, as it promotes rules that benefit everyone in the long run without disadvantaging certain groups more than others.

A person goes to the doctor. The doctor performs a series of test and examinations. The tests show that he has an incurable and life threatening disease and only has roughly 1 year to live. The doctor is considering what would be GOOD to tell the person.

Should the person know the truth or should the person be told something other than the truth?

The **act** utilitarian might calculate that in telling the truth there will be a great deal of pain and hardly any pleasure at all. The person will be upset, their family will be upset, the doctor will be upset in informing the ill person that there is nothing that the doctor can do to alter their condition. The doctor's staff will be upset seeing the person come in for whatever treatment there may be.

On the other hand if the doctor lies a little which will give the ill person more time to enjoy life before the illness makes it obvious that the end is near, well then the results are different. The doctor is not so upset in seeing the person, the doctor's staff is not upset . The family and friends of the person have some more time with that person to enjoy things instead of being morose and depressed. So the ACT utilitarian might calculate that the **GOOD** is to **lie**.

The **rule** utilitarian would need to consider what would the long term consequences be if doctors were to lie to those who come to them and have life threatening, incurable illnesses. The rule utilitarian might calculate that people would no longer be able to trust their doctors and this would break down the confidence they need for their therapies to be effective. The RULE utilitarian might calculate that there is far more harm in lying and so the **GOOD** is to **tell the truth.**

Act vs Rule Utilitarianism

Criticism of Utilitarian approach

➔ Sometimes what is best interest for everyone may be bad for a particular individual or for a group of individuals.
➔ Another object to utilitarianism is that **implementation depends greatly on knowing what will lead to the most good**. Frequently, it is impossible to know exactly what the consequences of an action are.
➔ The motives behind actions are **ignored**

Consider two individuals, A and B, who donate $100 and $1,000, respectively, to a charity. Suppose individual A donated the money because he wanted to help the charity and individual B made the donation so that he could improve his own standing in society. Utilitarianism would consider individual B's donation to be superior to individual A's donation, despite the fact that it was made with an ulterior, and less noble, motive.

Criticism of Utilitarian approach

➔ Aggregate measures of happiness ignore distributional aspects.

In utilitarianism, one considers only the sum total of pains and pleasures, not their distribution. Even though the sum total of units of happiness might be the same, it might be distributed "**unfairly**".

	Action X	Action Y	Action Z
Person A's Happiness	100	250	400
Person B's Happiness	100	150	50
Person C's Happiness	100	50	25
Person D's Happiness	100	30	25
Person E's Happiness	100	20	20
Aggregate Happiness	500	500	520
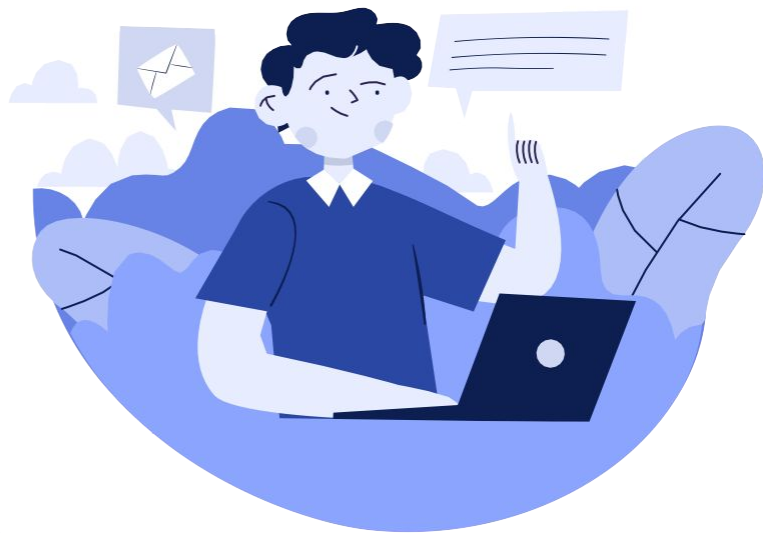
Thanks!

Do you have any questions?