**ETHICS IS NOT LAW. MORALITY IS NOT LAW. ETHICS IS NOT LAW.** law is rigid; ethics is not rigid. law followed to the letter; ethics not followed to the letter bc not written down. law is based on ethics mostly, but ethics is NOT law. possible to be ethical but not legal (hungry child steals bread from shop. running a traffic light if someone’s life depends on it) OR legal but not ethical (smoking cigs in public. death penalty. abortion) Society has collaborative behavior or competitive behavior. Most everyone shares core values desiring life, happiness, ability to accomplish goals. Two ways to view world: selfish point of view consider only own self and core values OR ethical point of view: respect other people and their core values. “goal of human kind = minimize, NOT eliminate, dark/bad aspects of ourselves.” Morality=societies rules of conduct. ETHICS: IS NOT LAW! Rational examination of morality. evaluation of people’s behavior. Ethics=way to decide the best thing to do; study or morality. rational systematic analysis; voluntary moral choices. Q? swerve to miss child and hit another person? not ethics, biology to swerve. Q? making a decision to buy a pink car is personal choice, not ethics. Q? drunk driving is ethical decision. some say “never” drink and drive.. this indicates ethics. **relativism:** no universal right and wrong. one person “x is right” another person “x is wrong” both are right **subjective relativism:** “who are you to tell me what I should be doing?” NOT workable. each person decides right and wrong for themselves. caseFOR: well-meaning and intelligent people disagree on moral issues such as abortion. ethical debates are disagreeable are pointless. caseAGAINST: blurs doing what you think is right and what you want to do. makes no moral distinctions between actions of different people (pope v hitler). decisions may not be based on reason. NOT a workable theory. **cultural relativism:** NOT workable. what is right/wrong depends on societies moral guidelines. guidelines vary from place to place and time to time. a particular action may be right in one society at one time and wrong in other society or at another time. A group is defined by a time and a place. caseFOR: diff. social contexts demand diff. moral guidelines. it is arrogant for one society to judge another. caseAGAINST: bc 2 societies do have diff moral views doesn’t mean they ought to have diff moral vies. doesn’t explain how moral guidelines are determined. what if no cultural norms? (people walking in middle of highway). no way out for cultures in conflict. doesn’t account for moral guidelines. societies DO share core values (do not murder). indirectly based on reason. NOT a workable theory. **divine command theory:** NOT workable. good actions-those aligned with Gods will. bad actions= opposite. holy books reveal gods will and are moral decision-making guidelines. caseFOR: we owe obedience to our creator, god is all good and knowing, god is ultimate authority. caseAGAINST: diff holy books disagree. society is multicultural/secular. some modern moral problems not discussed in scripture. based on obedience NOT reason. NOT a workable theory. **ethical egoism:** NOT workable theory. each person should focus exclusively on his own self-interest. the morally right actions will provide self with maximum long-term benefits. caseFOR: practical bc already to do whats best for ourselves. better to let others take care of themselves. community benefits when people put their own well-being first. other moral principles are rooted in self-interest. caseAGAINST: we know a lot about what is good for somone else (don’t murder). self-interest can lead blatantly immoral behavior. other moral interests are more superior than self-interest. people who take good of others into account lead happier lives. does not respect ethical point of view. NOT workable. **Kantianism:** Workable theory! good will=desire to do the right thing. reason should cultivate desire to do the right thing. 1st form. categorical imperative-> “act only from moral rules that you can at the same time will to be universal moral laws.” Universalize the rule to everyone and see if it’s alright. if one starts to break promises then everyone does it, it would make promises unbelievable, contradicting the desire to have the promise believed. hence the rule is flawed so the answer is No. 2nd form categorical imperative-> “act so that you treat both yourself and other people as ends in themselves and never as means to an end.” it is not alright even if a noble/worthy goal to use people as means to end. plagiarism example. Carla wants credit for plagiarized work. rule universalized=you may claim credit for work performed by someone else. reports would no longer be credible, and professors would not give credit for reports. proposed moral rule is self-defeating. it is wrong for her to turn in plagiarized report. she treated professor as means to an end. prof. issues grade (means) passing her for course (end). Carla is wrong. caseFOR: rational. produces moral guidelines. treats people as moral equals. Workable theory! perfect duty: duty obliged to fulfill without exception. i.e. telling the truth. imperfect duty: obliged to fulfill in general, but not every instance. i.e. helping others. caseAGAINST: sometimes no rule adequately characterizes action. if conflict between perfect and imperfect dut… perfect duty wins. conflict between 2 perfects = no solution. NO exceptions to perfect duties. Workable ethical theory!  **act utilitarianism***:* Workable theory! applies principal of util. to individual actions. an action is good if it benefits someone or bad if it harms someone. utility: tendency of an object to produce happiness or prevent unhappiness for an individual or community. principal of utility = greatest happiness principal. an action is right (or wrong) to the extent that it increases (or decreases) the total happiness of the affected parties. happy=advantage=benefit=pleasure|||unhappiness=disadvantage=cost=pain. Unitarianism: morality of an action has nothing to do with intent. focuses on consequences. act utilitarianism: add up change in happiness of all affected beings and if sum>0 action=good or sum<0 action=bad. weighing pleasure/pain by intensity,duration,certainty,purity,extent,fecundity. highway routing scenario: if benefits exceed costs build to highway! caseFOR: focuses on happiness. practical. comprehensive. Workable ethical theory! caseAGAINST: unclear whom to include in calculations. too much work. susceptible to problem of moral luck. **rule utilitarianism:** Workable theory! we should adopt moral rules that when followed by everyone will lead to the greatest increase in total happiness. applies to principle of utility to moral rules. anti-worm scenario: helpful worm located another worm and destroyed it and acted like a virus to stop a virus. evaluation using rule utilitarianism: proposed rule: if I can write helpful worm that removes a harmful worm I should do it. who benefits? people who don’t update their systems. who’s harmed? people who use networks and people’s who’s comps. are invaded by buggy anti-worms, system admins. conclusion: harm outweighs benefits. releasing anti-worm is wrong. caseFOR: compared to act util. it’s easier to perform the utilitarian calculus, it’s easier to perform utilit. calc., not every moral decision required util. calc., moral rules survive exceptional situations, avoids problem of moral luck. Workable theory! caseAGAINST: all consequences measured on a single scale. utilitarian’s must quantify human life. 2. ignores problem of unjust distribution of good consequences. what wins princip. of util. vs princip. of justice? Workable theory! **social contract theory:** Workable theory! “we implicitly accept a social contract”. in ideal society no one above rules. negative rights: a right another can guarantee by leaving you alone. positive right: a right obligating other to do something on your behalf. absolute right: (right to life/religion) right guaranteed without exception. limited right: (right to education) right that may be restricted based on other circumstances. each person has rights as long as they are consistent with everyone else having claim to the same rights and liberties. socioeconomic inequalities must be to the greatest benefit of the least-advantaged members of society. DVD rental company selling customer info to marketers and marketers spamming… evaluation: consider rights of Bill, customers, and mail order companies. does cust. have right to expect name/addres to be kept confidential? if cust. rents dvd from bill who owns transaction? if bill and cust. have equal rights to info then bill did nothing wrong. if cust. have right to expect confidentiality with bill then bill was wrong to sell info without asking for permission. caseFOR: framed in language of rights. explains why people act in self-interest without common agreement. provides clear analysis of govt/citizen problems. Workable! caseAGAINST: no one signed a contract! conflicting rights problem. may unjustly treat people who cannot hold contract. objectivism vs relativism: objectivism: morality has an existence outside human mind. Relativism: morality is a human invention. Kantianism, Utilitarianism, and Social Contract are examples of objectivism. **breaking the law:** should only break law if compelled to follow a higher-order moral obligation. social contract: must obey law. Kantianism: everyone wants to be treated justly. imagine rule “I may break laws I believe are unjust.” if everyone acted in this way laws would be subverted. contradiction: cannot both wish to be treated justly and allow laws to be subverted. rule utilitarian: what would be consequences of people ignoring laws they felt to be unjust? good-happiness of people to do what they please|bad- harm to people directly affected by lawless actions, general loss of respect for laws, increase on court system. harms greater than benefits so don’t break law. **summary:** Kantian: interactions with others should respect them as rational beings. Utilitarian: consider the consequences of action before deciding whether it is right or wrong. social contract: promote collective right, such as rights to life, liberty, and property. unworkable theories are based on beliefs. workable theories based on logic. |||**virtue ethics:** happiness results from living life of virtue. virtues=benelovence,generosity,loyalty.,etc. person of strong moral character. has many virtues and knows right thing to do. strengths-> provides motivation for good behavior, a solution to problem of impartiality (some virtues. partial(generosity) some impartial(honesty…always be honest)). doesn’t work as standalone theory, good compliment to utilitarianism. allows for rational for action to be considered, solves moral luck problem that plagues act utilitarian. **soft engine. code of ethics:** code is practical framework for moral decision making. comps have central and growing role in commerce,medicine,govt,etc. software engineers have ability to do tremendous good or harm bc of their roles in developing software systems. to ensure their efforts used for good, they must commit to making it a beneficial and respected profession and thus adhere to the Code. public interest is central to the code. dynamic and demanding context requires an adaptable code. code is a whole, not collection of parts. concern for public interest is paramount. **1.** act consistently with public interest (approve software only if safe) **2** act in best interest of client, employer(don’t use software obtained illegally) **3**ensure products meet highest standards(ensure proper and achievable goals) **4**maintain integrity in professional judgement (disclose conflicts of interest!!!) **5**promote effective project management **6**advance the profession (create environment supporting ethical conduct) (blow the whistle when NO alternative to reporting significant Code violations) **7**be fair to and supportive of colleagues **8**participate in lifelong learning (improve ability to create high quality software). ACM and ICEE. **whistleblowing:** tries to report harmful situation through authorized channel FIRST. IF rebuffed by organization, make disclosure through unauthorized channels (blow the whistle!). Whistleblowers may be punished for their actions->lose job or all chances of advancement. financial/emotional hardship. motives: morality of action may depend on motives. good motive=desire to help public. bad motive= retaliation, avoiding punishment. corporate response to blowers: they are disloyal, and action harms bc bad publicity, hard to work on team. blowing harms organization= bad publicity, harms blower=retaliation**. organizations should improve their communication.** Moral responsibility->borne by people, not exclusive. every possible channel needs to be tried internally first. **censorship:** must show it harms a group. “Individual freedom becomes a reality only when taken in context of others freedom. Can walk anywhere but cant walk in middle of interstate 40 bc it infringes on other people’s freedom.” **case studies:** #1. S asks for free advice on lan security. Z answers questions and recommends package she has financial interest in while other package given best rating. did Z do anything wrong? against code1 Z was deceptive, against code6 did not reveal conflict of interest. Z should have revealed conflict of interest. #2. J installs software on C’s computer. J not allowed to read other files or emails. J sees suspicious file names and discovers child pornography. what should he do? code2 someone misused company PC and used in interest not in employer’s interest. code3 J violated policy against opening files. code5 someone else may have planted the files on Cs computer. conclusion: J was wrong to violate company policy. once discovered however he is obliged to share it with company authorities. J should be discreet. #3. internet plagued by new worm. TS creates anti-worm that exploits same flaw and fixes PCs it infects and launch new virus to new PCs. TS launches anti-worm with good OpSec so it cant be traced to him. Anti-worm infects millions of computers, SysAdmins have to combat the worm. code1 TS did not accept responsibility for his action. cost sysAdmins lots of time. code2 anti-worm entered comps without permission of owners. code8 TS improved his skills by creating anti-worm. conclusion: TS welfare is less important that the public good. He did not accept responsibility bc he hid his identity. TS violated rights or PC owners and violated the Code. #4 J works in support in Acme. Acme customers are downgrading their level of support. HotBox gives J opportunity to run a training class similar to that provided by Acme. J tells no one at Acme. J develops materials on her own time. J takes paid vacation to teach class. code3 J was well qualified to develop materials and teach class. code8 by creating materials, J became more familiar with Acme’s package and it capabilities. code4 J did NOT disclose her conflict of interest with employer. code2 J deprived himself of “time-off” needed to do his best work at Acme code6 J put his own self-interest above that of his employer. conclusion: J did not disclose HotBox offer or his decision to Acme management. Acme now likely to question Js loyalty to the company. Js actions were wrong and unwise. COPYRIGHT: must have a physical product to copyright. Copyright is fine for physical expression, but you can NOT copyright ideas. Copyright is the expression of an idea, not the actual abstract idea. You can copyright a written description of a dance, but you cannot copyright the actual dance. Software represents neither a process nor a product… software patents are highly debated. “patents are childs play… too many patents have been issued.”🡪 Chakra. Copyrights are not serving their purpose of promoting progress, wrong to allow someone to “own” a piece of software. **OPEN SOURCE:** gives everyone opportunity to improve program, newer versions more frequently, eliminates tension between law and helping others, shift focus from manufacturing to service. Disadvantages: quality can be poor, without an owner incompatible versions may arise, weak UI and graphical interface, no research and Development