**Tutorial 4: Ethics and Professionalism of IT**

**Part 1**

1. Naoki is a game developer. Three years ago, he produces a computer simulation game that was moderately well-received. Naoki’s company is directing him to develop the second edition of this game based on gamer and market feedback which indicates that the game would gain popularity with improved 3D graphics and increased violent content. With the latest gaming technology, the game would be able to simulate violence to a level of realism that would provide players with an exciting immersive experience which guaranteeing its success. This achievement would benefit Naoki both financially and career-wise. **Naoki refused to comply with his company’s directive** because producing violent games conflicted with his ethical philosophy. He was willing to resign from the company rather than compromised on his stand.

(i) State which philosophy ethic Naoki subscribes to and explain how it influences his actions. (PIC: Jun Wai)

| Naoki subscribes to Subjective Relativism  Subjective Relativism - It describes that each person will decides the right and wrong for themselves. For example: What’s right for one may not be right for others.   * Naoki’s company requests for a second version of the game with increased violence content from Naoki. Naoki made his own justification and refused because he thinks that violence would bring harm to the society where the game players might tend to have aggressive behaviour if he developed and released the second version of the game in the future. Hence, he thinks that it is conflicted with his interest and willing to resign from the company rather than compromised on his stand. On the other hand, Naoki thinks that the game is already violent enough and should not be added with more violent content and what company thinks is right for them but may not be right for Naoki. * Naoki’s company thinks that they should follow customers’ interest in developing the game with increased violence in order to gain more profits from the gamers and get more attention from the customers.   Answer 2:  **Social Contract Theory**  **§Morality consists in the set of rules, governing how people are to treat one another, that rationale people will agree to accept, for their mutual benefit, on the condition that others (majority in the society) will follow those rules as well.”**  **§It influences his actions in terms of the rational people will agree to accept, some would not accept the violence game which is in a level of realism, it will definitely bring disadvantages to the players and society as a whole in the long run.**  **§Naoki is making this decision as he subscribes to social contract theory as it is a social norm/consensus here that not to promote violent element through video games as it may cause some negative impacts in long run (e.g. increased family violence case, child abuse, crime rate….) to the society.**  ✅✅ |
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(ii) Consider the same scenario from a different philosophy ethic viewpoint. State which ethical stances you have selected and explain how a person with this stance might respond and why. (PIC: Mun Jun)

| Kantianism   * Naoki will refuse to obey and fulfill the market and gamer demands by creating games with more violent content although it might benefit himself. * According knatianism philosophy first law concept, he will make his decision which emphasize the good wills and act on the moral rules that are consider as universal moral laws which everyone may be accepting the promises and rules. * He knows the consequences that if more violent content appear in the community, the humanity of the people might turn into more aggressive behaviors. * This could lead to increase of cases such as abusing parent or child, school bullying, gangsterism, vandelism and more.   **Kantianism**   * According to the 2nd formulation of categorical imperative, it says “ACT SO THAT YOU ALWAYS TREAT BOTH YOURSELF AND OTHER PEOPLE AS ENDS IN THEMSELVES, AND NEVER ONLY AS A MEANS TO AN END” * The company is taking advantage of Naomi to develop a game which is considered violent and may bring extreme harm to the society. They are more concerned with the money or profits and have neglected the possible negative consequences such as the bloom of violence and aggressive behaviour among the younger generation.   OR  **Act Utilitarianism** can be a different philosophy ethic viewpoint.  In the stance of a utilitarian, there is no any objection to obeying the company’s directive to develop the second edition of the game. This is because to a person with this stance, their actions are judged solely by the consequences. An action is right or wrong to the extent that it increases or decreases the total happiness of the affected parties. In this case, the right action to a utilitarian is to produce a second version of the video game that can fulfil the demand of the market and provide a more desired gaming experience to the players. Besides, it would also bring profits to the company as well as benefit the game developer both financially and career-wise. This action can bring the greatest happiness over unhappiness to the company, game players, as well as the developer and hence a utilitarian may think that this action is good because it benefits a lot of parties. Any negative impact from the game such as causing realistic violence would not be the main concern to a utilitarian.  ✅✅ |
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2. Michelle works for a medical insurance company. She supervises the claims department and her main task is to improve efficiency there – each unit must process a minimum number of claims per day. In order to achieve this goal, she installs a software system which monitors:

• The number of claims processed by each clerk

• Number of keystrokes done by each clerk

• Log information on when each clerk is on or off his/her post

The system is being installed with the consent given by the insurance firm’s management and the claims department staff were being informed and aware of such a system. The system allows Michelle to watch all the above information in real-time on her screen. Michelle can also see all e-mails sent by each clerk regardless of whether the e-mail is business-related or not. With the aid of the software, Michelle manages to improve the overall claims department work performance and operation efficiency. As a result, Michelle got a job promotion and salary increment as the boss likes her work very much.

(i) Justify Michelle’s action according to Ethical Egoism. (PIC: Yee Hui)

| Ethical egoism means that each person should focus exclusively on his or her self-interest. Michelle installed a software system for monitoring to help her work efficiency. The function of this software helps Michelle to have faster work efficiency. In addition, high work efficiency of Michelle has also improved the performance of the entire claims department. After installing the system, Michelle also achieved her job goals and was promoted and raised. This proves that the action done by Michelle has brought long-term benefit to her. Hence, according to ethical egoism, it is ethical for Michelle to act so in the above case.  ✅✅ |
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(ii) Justify Michelle’s action according to Subjective Relativism. (PIC: Pei Xuan )

| Subjective Relativism means an individual is entitled to his/her opinion or perception on certain actions, behaviour, moral beliefs and laws regardless of general acceptance and of whether it is morally right or wrong.   * Michelle * Michelle’s role in the medical insurance company is to supervise the claim department staff working progress and improve staff efficiency. She thinks that installing the software system can let her more easily monitor the working progress and performance in order to reach her objective. * Claim Department Staff * Claim Department Staff thinks installing this software system is morally wrong because they will feel their privacy is being violated and also stress if their performance is not so efficient. Since above have mentioned that the emails will be monitored by Michelle whether it is related business or not. Thus, they think the software system is violating their privacy when they using PC.   There is no moral distinction between the actions of her and other people as subjective relativism allows each person to decide the right and wrong for herself.  Option2:  In this case, Michelle might say: “Since I am hired by the medical insurance company to improve the overall claims department work performance and operation efficiency, I know it’s not right to invade privacy of others with the use of surveillance software, but I will justify and said it is right for me to closely monitor the claims department staffs’ work done and email sent with the use of workplace surveillance software in order to improve the overall claims department work performance and operation efficiency or else I can’t complete those missions/tasks assigned by my boss.”    In this case, the claim department staffs might say: “Each of us should entitled for basic human right –privacy right - to free from surveillance/observed by other or free from outside intrusion. So, it is not right for Michelle/management to closely check/scan all emails sent by staff regardless of whether the e-mail is business-related or not with the use of workplace surveillance software.”    Hence, under subjective relativism, we cannot say that both of them right or wrong. It is all depends on what position you are in and those points that you used to justify/defend your decision/act accordingly.  ✅✅ |
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**Part 2**

3. Jennifer and her husband are both senior software engineers. Recently they have a baby boy. Jennifer decided to hire a maid to help them in cleaning the house and take care of the baby since both of them are working. In order to ensure their safety, the couple have installed a surveillance system at their home. The surveillance system provides online monitoring of the house through a camera recording function. The maid was informed and agreed with the surveillance system with a condition that certain areas such as the maid's room and washroom are exempted from the surveillance.

(a) Discuss whether Jennifer and her husband have violated the maid’s privacy. Where should

you draw the line between privacy and surveillance in this case? (PIC: Xin Yi)

| Jennifer and her husband have not violated the maid’s privacy because the surveillance system is installed in their own home which can know that anything happens to their home and also the safety of the baby and also the belongings such as money, smartphone when they are not at home. Besides, the maid also gives her consent which is agreed to by the surveillance system with a condition which is no monitoring her room and washroom. Therefore, her privacy is not violated because she still has her own personal space to protect her privacy. However, a violation of privacy would happen if the surveillance happened without the maid’s consent and knowledge, and intruded upon personal space like the toilet and room.  Conclusion --strive to draw a balance between maintaining personal (maid) privacy rights and meanwhile not putting the baby into danger under any circumstance by imposing some monitoring measure there.  ✅✅ |
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(b) Explain Act Utilitarianism and analyse the act of Jennifer by using Act Utilitarianism and justify whether she is ethical or unethical. (PIC: Jun Xian)

| Act utilitarians believe that whenever we are deciding what to do, we should perform the action that will create the greatest net utility to the majority in the society. In their view, they would do whatever that will produce the best overall result at that very moment but not in the long run.  Cost/Drawbacks/disadvantages:   * privacy infringement of maid other than the maid room and bathroom (Maid less happy) * Need to spend extra money in installing as well as maintaining the surveillance system * Maid will feel stress because under monitoring   Benefits:   * Safety of the baby, maid, like if there were accidents happened like fires, broke in etc. Jennifer and her husband can immediately take action. * Maid will be more cautious and carry out less mistakes because she knows that there will be a proof if anything were to happen to the baby * Serve as the evidence in case of any kind of crime is happened at the house, avoid false accusations for both parties (owner / maid) * Assurance for Jennifer and her husband of the well being of their baby (Jennifer, her husband is happy)   - If so maid did some harm to the house or baby, the system can be a proof.  Conclusion:   * more people are happy from this act meaning benefits over cost. Hence, under act utilitarianism, her act is ethical * The consequences of setting the surveillance system bring more benefits and the influence of the benefits in view of the benefits givens in terms of the importance of benefits also the number of benefits.   ✅✅ |
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(c) The software engineers that developed the surveillance system should practice the Software Engineering Code of Ethics in order to concern for the public interest. Explain how the software engineers can act consistently with the public interest. (PIC: Kah Wei)

| * Software engineers shall put greater emphasis on the interest of the public. * The surveillance system software developed must have a well-founded belief that it is safe(not easy to hack or breach), meets specifications(hardware and software, prevent breakdown, frozen screen, defect), passes appropriate tests(white box testing and black box testing) and does not diminish quality of life,diminish privacy or harm the environment. * The ultimate effect of the work should be to the public good. Software engineers should also be fair and avoid deception in all statements(data protection - not sharing data to public, take care of public and company), particularly the public ones, concerning software or related documents, methods and tools. * Software engineers should ensure the development process of software must be in accordance with public interest and social values. Software engineers also should ensure the quality of the software is what it is advertised in terms of risk, consequences and more. * Approve software only if it is safe. If it is not safe, change and test the CCTV system again. * Disclose actual/potential dangers. If the surveillance system can be easily hacked by others and to gain private information, public should be aware of it and take precautions steps.   ✅✅ |
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4. Jason works for a large automotive supplies company in the software quality assurance division. The company is developing the software for an anti-lock brake system (ABS) and vehicle stability system (VSS). He feels that the testing is not sufficient, but his boss disagrees and makes no changes to the testing system. Frustrated, Jason takes his concerns to the media who publish the allegations. Work is delayed on the project while extra testing is put in place, causing the company to lose their contract. No extra defects were ever found with the extra testing. Based on the above statement, explain how whistleblowing occurs in the above situation and suggest a solution for the mentioned case. (PIC: Yit Wee)

| Whistleblowing occurs when Jason(**whistleblower**) feels that the test is not sufficient but the boss disagrees and doesn't do anything changes, at last causing the work to be delayed and losing their contract.  Whistle-blow: the act of disclosing of the suspected wrong-doing / inappropriate/illegal measure that taken by a organization to reach out to public  **Solution:**  **Before you report the suspected wrongdoing to the public, need to take the following in measure/consideration in your mind:**   * By passing the immediate superior by reaching to those senior level management. Speak to the person-in-charge personally rather than exposing it to the public or higher level management to raise up their concerns. --**-The company also should improve the communication with their employees so that problems solve easily and everything go easy** * Ensure that you have strong evidence, supporting documents before you blow the whistle. **Conduct a survey among the project members**. Get all the ideas from project members whether anything part of the project has a problem, because sometimes it’s hard to make a project decision with only one person's idea. If there are too many people who agree to make changes then the boss might have more confidence to make this decision.   **-Jason should discuss with his colleague if the testing is sufficient or not.**  **-Got solid proof?**  **-As a whistle blower, are you ready/steady enough to accept the challenge / treatment imposed to you….**  ✅✅ |
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5. You have been newly appointed as the IT manager to a local famous insurance firm to upgrade its customer health record system. The insurance firm’s management stressed that the new upgraded customer health record system should be secure, efficient and able to support the business’s future growth. List and explain FIVE (5) actions that you should take to establish your due diligence practice to defend yourself from a claim that you have allowed a fraud to occur.

List and explain 2 actions (PIC: Chia Chung)

What is **Due diligence?**

* Reasonable step taken to avoid you and others from committing a serious offense OR
* Reasonable steps taken to defend yourself from being accused of allowing a fraud/disaster to occur.

| **Verify customer identities**   * Determine the identity and location of potential customers as well as have a better understanding of their business activities. This can be as simple as verifying their name and address. However, as online fraud increases, it may also be desirable to collect more information or run additional identity checks.   **Secure the information**   * When authenticating or verifying potential customers, classify their risk categories and define their customer types, and then store this information to any other documents digitally and securely. Although it may be necessary to retain personally identifiable information, there are usually strict legal requirements on how the information is collected, maintained and shared.   ✅✅ |
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List and explain 2 actions (PIC: Jun Rong)

| **Professional attitude**   * I need to make sure that I have the right and good attitude, such as a sense of responsibility by receiving adequate training in the project. For instance, I should request additional training and demonstration with regards to the system that I am handling so that I truly understand how the system works and what is to be done in order to make sure that the system is well functioning.   **Follow regulatory / procedure**   * In every process such as development, analysis, installation, and testing, I need to make sure that every step complies with the rules and regulations set by the organisation instead of leaving one step aside for convenience. This is to make sure that none of the processes go wrong and the system is developed in an efficient and effective way.   ✅✅ |
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List and explain 2 actions (PIC: Ming Jun)

| 1. **Implement a plan to identify all possible system hazards (e.g. bugs) and carry out corrective action** to prevent the likelihood of such hazards causing accidents in the future. A comprehensive system safety audit should be conducted in which the policies and procedures governing the safe operation of the system are considered and reduced to written form to act as a guideline or reference. 2. **Establish a documented procedure for accident reporting and investigation**. Workers should be encouraged to report “close calls” so that the circumstances of such events can be investigated. This information is critical in both revising and improving existing policies, practices and procedures, and in establishing in court that the employer has been acting with due diligence.   <https://www.automationmag.com/793-the-defence-of-due-diligence-five-ways-to-protect-employees-and-avoid-conviction/>  ✅✅ |
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