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Mini Project - 3

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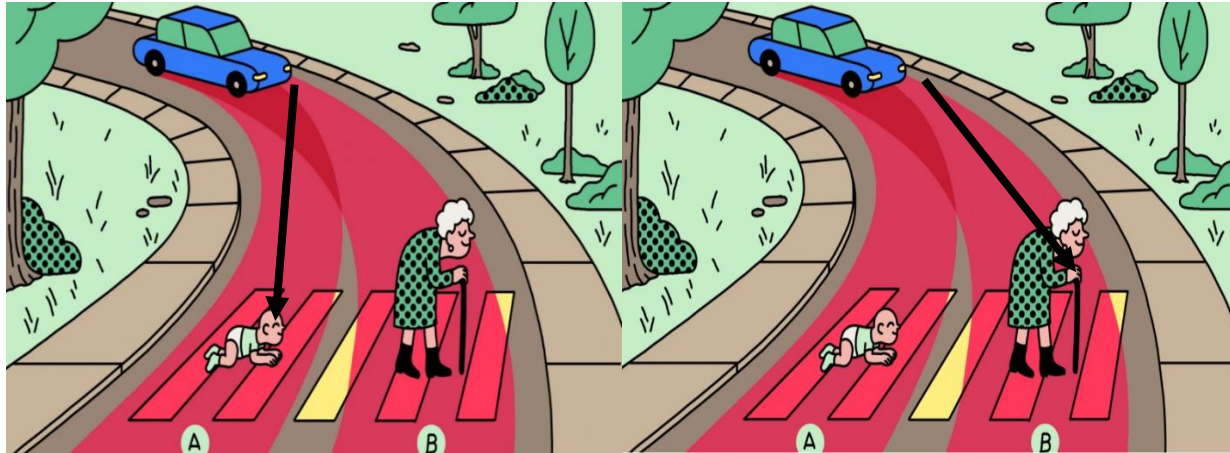
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Self-Driving Car Liability

Our Scenario: Suppose, Mr. Mainul was going to his office in his self-driving car. His car was on a one-way highway road and since the road was clear, the car ran very fast. A baby was there and an old lady was crossing the road. Everything was fine but all of a sudden, the baby tried to cross the road and came in front of Mainul's car.



CASE-A

CASE-B

Ethical Dilemma: Now if the self-driving car changes its lane to save the baby, it hits the old lady who is crossing the road too, so an accident will occur and the old lady will die, and if the car goes to save the old lady, then the baby will die. What would be the decision of the self-driving car?

Brainstorming phase:

- **Stakeholders:** In this scenario, we have plenty of stakeholders who are directly affected by our ethical dilemma. Our stakeholders are the autonomous car, the car owner, the old lady and lastly the baby.
- **Risks, issues, problems and consequences:** In this scenario we can see that all of a sudden, a baby came in front of the self-driving car and from the same route an old lady was crossing the road. So here, we can see two risks. Firstly, if the car changes its direction to the right, then it hits the old lady who is crossing the road and the consequence of the event would be, the old lady will die. Secondly, if the car moves for left direction, then the consequence of this event would be, the baby will die. These are the two risks, issues, problems and their consequences.
- **Who gets each benefit:** In this scenario, we considered two different possible events and if one event occurs then the other one event will not occur so, those events get benefited. For instance, if the car goes to the left lane and hits the baby then the baby will die but the old lady will be safe so here, the old lady will be benefited. On the other hand, if the car goes for the old lady and hits her then she will die but the baby will be safe in this case. So, the baby will be benefited.

- **Possible actions:** There are two options for dealing with this situation. The first case would be to go straight and kill the baby, ensuring that the owner of the car and old lady would survive. So, here by doing this the car owner will save the old lady. The other alternative for this situation is to turn right and have a clash with the old lady. The baby will be safe this time.

Analysis phase:

- **Responsibilities of the decision maker:** In our scenario, the decision maker is the autonomous or self-driving car. Actually, it's not the real decision maker, the ultimate decision maker is the programmer who made this system to function as autonomous. He has to make some decisions on the system, like when this car will stop or break, slow down speed, or taking decisions about traffic rules, and many more. To make these kinds of decisions, he has to consider some responsibilities by following general and professional ethics. Now as per general ethics, the programmer shall act consistently with public interest. He shouldn't be biased to a portion of stakeholders instead he should consider the minority of stakeholders. He should design in a way that he is not doing harm to the society and human well-being. He should consider everyone related to the system as stakeholders. He should be fair, honest, and trustworthy and can't discriminate against anyone. Now, from professional ethics, he should accept reviews, criticism from stakeholders and give back the comprehensive evaluation of the systems and impacts with all kinds of possible risks. Also, he should design and implement a system that will be usable and secure and can face any kind of situations.
- **Identify the rights of stakeholders:** In the given scenario, there are four stakeholders: autonomous car, Mainul, the baby, and old woman who was crossing the road. There are two consequences: (1) If the car moves to the right lane, an accident will be occurred and the old woman will be dead, (2) If it moves to the left, the baby will be dead. In this situation every stakeholder has the right to be alive. It's their negative rights. Sometimes we can think that we can go right and hit the old woman. But we can't do that. Because it is an old person and she was just crossing the road and does not have any idea about coming a car towards her also she is very old to walk fast as she is holding a stick with her, she is very weak too. We can't take her as a minority. Also, we can't kill the baby and the old lady because they are going through the road by following the rules and right directions. So, if anyone is killed, it's a violation of their negative rights.
- **Impact of the action options on the stakeholders:** From our scenario, first action will be, if the car goes to the other lane and hits the baby which is crossing the road then the negative impact of this action will be, our stakeholder the baby will die but the positive impact will be, the other stakeholder, the old lady will be safe. In the second action, if the car goes for

the old lady and hits the lady then the negative impact of this action will be, the old lady will die but the positive impact will be, the other stakeholder, the baby will be safe.

Analyze consequences, risks, benefits, harms, and costs for each action considered: There are two risks that arise in our scenario. The first risk would be, Case A: if the car goes from the child's side the baby will die, Case B: the car can go from the old lady's side and she will die. Here both cases demand the death of human life. As we have no options other than choosing case A or case B and choosing any case means the stakeholders will die. In this case, we will choose case B and as a result, the old lady will die. The reason for taking this decision is everyone has a soft corner for children. If we think in a regular flow of human life then the child has it all to live in the future. But the lady is already very old and she has a very short time to live also cannot do any kind of work. As we must have to kill one human, we will choose the old lady for the benefit of both sides.

- **Kant's, Mill's, and Rawls' approaches:**

- In Kant's "**Categorical Imperative**" theory, he says that one should always respect the humanity of others, and that one should only act in accordance with rules that could hold for everyone. Kant believes in Absolute moral rule. Absolute moral rules mean the rules that everyone must follow in order to act morally. They are the rules that hold under any circumstances universally. Such as, we should never lie and we should never kill innocent people. In our scenario, if the self-driving car changes lane, then it hits the baby which is crossing then the baby will die and if the car moves for another lane, then it hits the old lady and she will die. In every case in our scenario, an accident will occur and kill someone but Kantianism does not allow killing someone to save others. This is because the decision to kill another rational being is always immoral in the eyes of Kantian ethicists.
- Mill's "**Utilitarian Theory**", focuses on the results or consequences of our actions which produces the greatest good for the greatest number. In our scenario, in the first case, the baby will die but the old lady will be safe. In the second case, the old lady will die but the baby will be safe. Hence, we know, utilitarians would favor whatever option in which the greater numbers of lives are saved. And we see, the last case saves greater numbers of lives because the baby can be a resource for the country as he can do many works and can improve the future. But the old lady will not survive after some years and she cannot even work for the betterment of the society or for the country that is why Utilitarians kills the old lady and saves the baby for the betterment of the future.
- Rawls's "**Theory of Justice**" says, everyone in the society 'holds equal basic rights whether someone is from a minority group, but it does not matter. They also have equal rights and no one should deprive them. Based on Utilitarian theory, we agreed to kill the old lady and save the baby because it produces greater good for greater numbers but based on the theory of justice, we cannot kill the old lady too. Just because an old woman is not capable to work or she can die after some days, we cannot take her as a minority

here and think that her life is less valuable than the baby's life, Rawls's "**Theory of Justice**" does not allow killing the old lady.

- **Categorize each potential action:** The term "ethics" refers to a set of moral ideals. They have an impact on how a person makes choices and lives their lives. "Ethically obligatory" means that it is ethically essential to do the right thing and not to do the wrong thing. In our scenery, we have two options and none of them satisfy the ethical obligatory class. What is "ethically accepted" refers to what the majority approves. And the term "ethically prohibited" refers to activity that is expressly forbidden under an Ethics Code. In our dilemma, we have to kill the old lady, if not then the car has to be lifted on the baby and get killed. Only these two possibilities are available to us, and all of them are **ethically prohibited**.

Decision Phase:

In the above dilemma, we have to choose between two cases. Case A: the car can go from the child's side, Case B: the car can go from the old lady's side. Here both cases demand the death of human life. As we have no options other than choosing case A or case B and choosing any case means the stakeholders will die.

In this case, we will choose case B and as a result, the old lady will die. The reason for taking this decision is everyone has a soft corner for children. If we think in a regular flow of human life then the child has it all to live in the future. But the lady is already very old. As we must have to kill one human, we will choose the old lady.

As per Kant's theory, the self-driving car cannot hit anyone but this is not possible in our scenario because our scenario does not have other options.

Also, the Theory of Justice by Rawls is not practical for our case. Because anyone who is innocent or minor cannot be deprived of justice and cannot be a victim of a situation.

So, we have a chance to choose an option by following "**Utilitarian theory**". Because here we choose an option which is less bad than others. If the car hits the baby, then the baby will die whose life is more valuable than the old lady. Because the baby could turn into an asset in future for the country but the old lady can less contribute to the society. So, the amount of damage will be greater in this case. So as per our consideration of all the possible incidents, hitting the old lady is a better option for the car than any other option.