**The Hong Kong Polytechnic University**

**Department of Computing**

**AI Ethics Assay**

Course code & title : COMP 3511B

Legal Aspects and Ethics of Computing

Session : Semester B 2023/24

The assay pages are limited to **2 pages** (excluding this cover page and reference). The submission of assay in word file and named “***Student ID\_Name\_Assign1\_Assay***”.

Purpose:

1. Perform the MIT Moral Machine testing to understand your judgement about difficult moral dilemmas during self-driving vehicle accident

2. Describe the reasoning about your chose and refer to ethical theories.

3. Propose the pre-programming ethical logic for the self-driving vehicle.

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**COMP 3512 – AI Ethics Assay**

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| 1. **Start the MIT Moral Machine Testing at** [**https://www.moralmachine.net/**](https://www.moralmachine.net/) **and select “Start Judging”.** |
| Please download the pdf file and renamed as “***Student ID\_Name\_Assign1\_Result of Testing***” |
| 1. **Description of possible reason for your selection: (Including Ethic Theories or others reasoning)** |
| 1. **Saving More Lives**   This is based on does the people on the car or not, if people not on the car, this car will just care about the people in front of it. If the people on the car, the car need to care about people more. |
| 1. **Protecting Passengers**   For me in choose, the protecting passengers will be the first choice if the people are sitting on the car. Because protecting the passengers is the principle of loyalty for car or car program to obey. |
| 1. **Upholding the Law**   For me in choose, the law is always can’t be break, but if the emergence things happen, the law can be break in somehow. |
| 1. **Avoiding Intervention**   For me in choose, the program can’t because of the front have the people, just go to another way, that’s not fair to another side people, just let it go by determination to choose. |
| 1. **Gender Preference**   For me in choose, the gender preference is not considered, because all the people are a live, if the program I designed need to consider the gender of a person, that is inhuman. |
| 1. **Species Preference**   For me in choose, the species will be the human first, because the program is developed by human, as a auto car, the human need to be put in the first way than other species. |
| 1. **Age Preference**   For me in choose, the age preference is not considered, because if program choose to kill the older people and save young people, but this is not fair to do so. If the program I designed need to consider the age of a person, that is inhuman. |
| 1. **Fitness Preference**   For me in choose, the analysis report is said I more to the fit people. But this is just more random to check so, if the fitness people just in front of auto car, the program I designed still do that, as I said in before question. |
| 1. **Social Value Preference**   For me in choose, the analysis report is said I more to the valuable people. But this is really depends on the case in front of the auto car, if the car have the people sit in, the car need to protect the people in car, and kill the people in front of them, it shouldn’t consider the people is valuable or not, every people have their own value, just follow the nature. |
| 1. **Propose the pre-programming ethical logic for the self-driving vehicle if you are programming designer** |
| 1. Safety: The car should follow the law or rule and keep the people alive or safety under the maximum. 2. People: The car should not be considering the people regions, age, gender, race, it need to be fair to any species. 3. Learning by Car: The car needs to learn the environment and the object identify, to avoid the current environment and the map is not matching, and also the algorithm needs to be self-improved. 4. Ethical Decision-making: When the car into the problem that need to hurt someone, the car needs to keep passenger save, the passengers alive is the first things to think. But usually when this kind of things happen, the driver needs to take the control from car. 5. Simulate all environments and dangerous situations as much as possible and change the logic if the car makes the unstable or inhuman solutions. 6. Ensure the hardware and software security of your car to avoid being attacked by hackers and related parties or modifying the algorithm. |
| **Reference if any: (e.g. books, articles, journeys, etc.)** |