

**SCHOOL OF ENGINEERING**  
ENGG660: MSc (Eng) INDIVIDUAL PROJECT 2021-22  
**ETHICS AND SUSTAINABILITY STATEMENT**

**Ethics**

*The creation of this product places a high priority on the health and safety of its final users, in addition to ensuring the observance of all relevant legal requirements and a sense of responsibility in its approach to the design process, all with the goal of producing an original product.*

Some of the things that count to provide safety and take their wellbeing into account are: high safety factor; ability to assemble without the need for power tools; absence of sharp edges; absence of offensive content; the provision of good customer service; Providing multiple functionality to its users; and the fulfilment of all performance specifications. In addition to considering the aforementioned considerations during product development, it is essential to adhere to all applicable safety and environmental laws and regulations, as well as to avoid infringing on any existing patents or intellectual Property rights. During the development phase, it is crucial to exercise caution by picking the right materials and proportions for the product.

The concept that the simulator platform can offer varied capabilities, in addition to its mobile nature, which already makes it stand out from the competition, could serve as a good unique selling point for the product.

The dangers linked with ethics are rooted in the functioning of the product, which consists of an exterior shell with a surface that may be used to show logos and patterns for commercial uses. However, marketing a product with unsuitable information might cause consumers to doubt the company's ethical standards.

To be in compliance with the ever-evolving environmental regulations, we need to give serious consideration to the worsening environmental situation and experiment with new environmentally friendly solutions.

**Sustainability**

*When developing the product, the effect it has on the environment is taken into account. The cradle-to-cradle methodology considers all potential outcomes before settling on one with the smallest environmental footprint.*

When working toward the goal of sustainable design, it is important to use materials that have a minimal effect on the surrounding environment without sacrificing the product's overall quality. Utilization of recycled materials whenever it is appropriate, adapting a product to be used over an extended period of time, identifying substance by marking, Simple to disassemble and requiring a less amount of composite material that is bonded together.

In spite of the fact that there is a danger involved, one strategy for reducing the weight of a product is to employ a significant number of plastic components. The vast majority of plastic components can be recycled, which makes them friendlier to the environment.

Experimenting with different environmentally friendly solutions like wood, bioplastics, cork, and so on is essential for the progression of future growth. Utilizing compliant mechanisms and regenerative design are two ways that may help increase the sustainability of a product even further by cutting down on the total number of parts and the amount of material that is used. Because this is a new ground in the market, the input from customers might be very helpful in further streamlining the product's design and making it more environmentally friendly.