## **Description Template**

Entry details	
Design Name	The Loop
AM Technique	FDM
AM Material	ABS <i>Plus</i> Thermoplastic
For Shoe Competition *for submission information only, accuracy of size will not be evaluated	☐ Unisex (Size:) ☐ Women (Size:) ✓ Men (Size: 16cm x 16cm x 10cm )



## **Description (Please do not exceed 500 words)**

The Loop is a revolutionary eyewear design that breaks apart from the traditional eyewear without the presence of screws and hinges. The idea of Loop is to enhance the users experience through interchangeable lens.

The name Loop was derived from the concept of a continuous single-line looping to form the frame. Loop has an extensive feature of lens changing for the users. Users do not need to replace the entire eyewear if their eyesight prescription changes or wish to use it as sunglasses.

The design of the temples are in two planes. The gap between the two temples serve as the threshold to open and close the frame allowing the users to change their lens in the frames. We have considered the material thickness carefully so that the temples can be folded and stored in a casing.

The frame is designed with four snap-fit joints to keep the lens intact. The tolerance is also considered so that it fits and stays in place. This helps in the convenience and practicality of lens changing.

The Loop is printed in ABS*Plus* thermoplastic using FDM technology. It was printed with soluble support material. The support material was generated by the printer and it was removed by dissolving in a water-based solution, hands-free and unattended.