

Design Brief

Target Consumers: Mainly targeted towards women and adolescents who feel unsafe when walking around, but recommended for anyone who feels they need this product to protect themselves.

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Problem Statement: Due to the high crime rates of the 21st century, many men, women and young adults feel unsafe when walking alone.

Design Statement: This product is a bracelet that is mechanized and designed as a safety weapon to mark perpetrators. Its main purpose is to distract, not harm, the perpetrator to give the consumer more time to run away. The bracelet at first glance seems like an ordinary bracelet but with the pull of a string it can transform into a shooter. The blowpipe will be about 5 inches. Inside the blowpipe are ink cartridges which are to be used to explode and mark the perpetrator with ink. To activate and use the blowpipe you would simply pull the string attached to the bracelet which would turn into the blowpipe. You would blow into the blowpipe which would then shoot the ink out of the blowpipe.

Constraints:

- Time: Deadline for the product is May 18th
- Product must be feasible

Deliverables:

- Fusion 360 Model
- NetLogo Simulation for flight pattern
- Graphs and Data from Spring Tensile Tests
- Product Ad
- Online Presentation
- Online Documentation

