

Needs Identification - Benchmarking

User statement	Needs Identification
Used at Music festivals / high schools	<ul style="list-style-type: none"> • Loud enough to be heard • Target young adults
Will be used in multiple locations	<ul style="list-style-type: none"> • Relatively fast to set up • Simple to setup • Compact • Not complicated/ minimal instructions • Not effected by surroundings
Convince the public LAWS are bad	<ul style="list-style-type: none"> • Emotional impact • Things go “Wrong” during the game • Players lose or feel like they lost even if they won
It needs to be an Interactive game	<ul style="list-style-type: none"> • Quick, simple game • Engages player • Players will feel like they lost/confused • Series of rounds • Difficult to reverse engineer the targeting logic
The game should be safe for all	<ul style="list-style-type: none"> • No religious, cultural or racial biases • No harming users • Trigger warning for lights, sounds and stress • Does not represent any certain country
The game should outline 3 of the nine ethical concerns	<ul style="list-style-type: none"> • The game should outline 3 of the nine ethical concerns
The game should be quick from start to finish	<ul style="list-style-type: none"> • 5-10mins 10 mins MAX
The game must be compact	<ul style="list-style-type: none"> • Everything needed to run the game except robot and batteries must fit inside a carry-on suitcase
Benchmarking <ul style="list-style-type: none"> • One project built human centered robots to demonstrate the benefit of keeping human decisions implemented with robots 	<ul style="list-style-type: none"> • Create a lack of human behaviours so people feel like there should be humans involves/wrong decisions were made. •

<ul style="list-style-type: none"> • https://www.cbc.ca/news/science/anti-robot-1.3666667 	<ul style="list-style-type: none"> •
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Grouping/Prioritization

Group	Need	Priority (1-5)
Game	<ul style="list-style-type: none"> • Multiplayer • Trigger warnings • No cultural, religious, country or racial bias • Quick games, multiple rounds • Difficult to figure out the system • Target young adults 	4 5 5 4 4 2
Setup	<ul style="list-style-type: none"> • Quick setup/transfer • Easily transported long distances • Set up in various locations • No effected by surroundings • Simple setup instructions 	5 5 5 5 5
Impact	<ul style="list-style-type: none"> • Feel like participants lost and confused as to what happened • Outline 3/9 ethical concerns • Participants should end the game with new knowledge of autonomous weapons • Create a lack of human behaviours so people feel like there should be humans involves/wrong decisions were made. 	5 5 5 5

Unknowns

- Character Cards
- Storyline

Problem Statement

Design an interactive game to showcase the dangers of LAWS by highlighting some ethical concerns and ensuring users do not leave feeling successful after interacting with the Robomaster S1 over multiple rounds. The game should be easy to set up and transport, while still functioning in various settings.