

Project Deliverable B: Need Identification and Problem Statement

The information presented here was gathered from the first client meeting on September 24, 2021. Our client Mansour Kharoub made a call to action to prevent the increasing deaths around the world of children forgotten inside hot cars.

Needs for the Product

Number	Need	Importance
1	The device is easy to use.	4
2	The device is reliable.	5
3	The device is low-cost.	3
4	The device can be used in any vehicle.	5
5	The device works where there is no cell phone service.	3
6	The device must prevent death from heatstroke or toxic pollutants.	5
7	The device is easy to install.	2
8	The device requires low maintenance.	2
9	The device should not reduce vehicle theft protection.	3
10	The device will notify the owner if a child is left in the car unattended.	5

Problem Statement

A need exists for parents to remind them if a child is left unattended in a car and in a worst-case scenario maintain the internal car temperature low enough to ensure the survival of the child. The device must prevent death, be reliable, installable in any vehicle, and be easy to use.

Benchmarking

Product Name	Sense A Life	AutoKool Solar Powered Ventilation	Driver's Little Helper Sensor System	Car Windshield Sun Shade
Company	Sense A Life Team	Koolatron	Driver's Little Helper	EcoNour
Brief Overview	The device alerts parents to remove their child from the car. In case of no response, emergency contacts are notified.	A window-mounted solar-powered fan extracts hot air and draws cool air from the outside.	A sensor goes under the seat where the child sits and detects movement.	Sunshield protects against UV rays that increase car temperature.
Features	-Geolocation -Long-lasting Lithium-Ion batteries	-Leakproof -Solar-powered	-Sensor detects movement -Links sensor and phone using Bluetooth	-Easy to use and fold -Available in a wide range of sizes
Price	\$100 (USD)	\$55.99 (CAD)	\$54.54 (USD)	\$15.99 (USD)
Weight	N/A	1 lb	2.08 ounces	4.8 ounces
Material	Durable ABS case	Weatherproof material	N/A	Polyester

Questions that Need Clarification

- Is the \$50 budget for the prototype or the price of our proposed device?
- What should be the maximum temperature tolerated by our device?
- Can we have different tiers and price ranges for our product?
- Does our device have to work with cars and buses? Or can they be two different devices?
- Can the installation be done by a professional?

References

[1] <https://www.indiegogo.com/projects/babyproof-your-car-never-ever-forget-a-baby-in-car#/>

[2] <https://www.koolatron.com/CA/en/autokool-solar-ventilation>

[3] <https://abcnews.go.com/US/technologies-designed-prevent-hot-car-deaths-work/story?id=47991074>

[4] <https://www.amazon.com/Car-Windshield-Sun-Shade-Windshields/dp/B01KIFISX2?th=1>