

Coneics

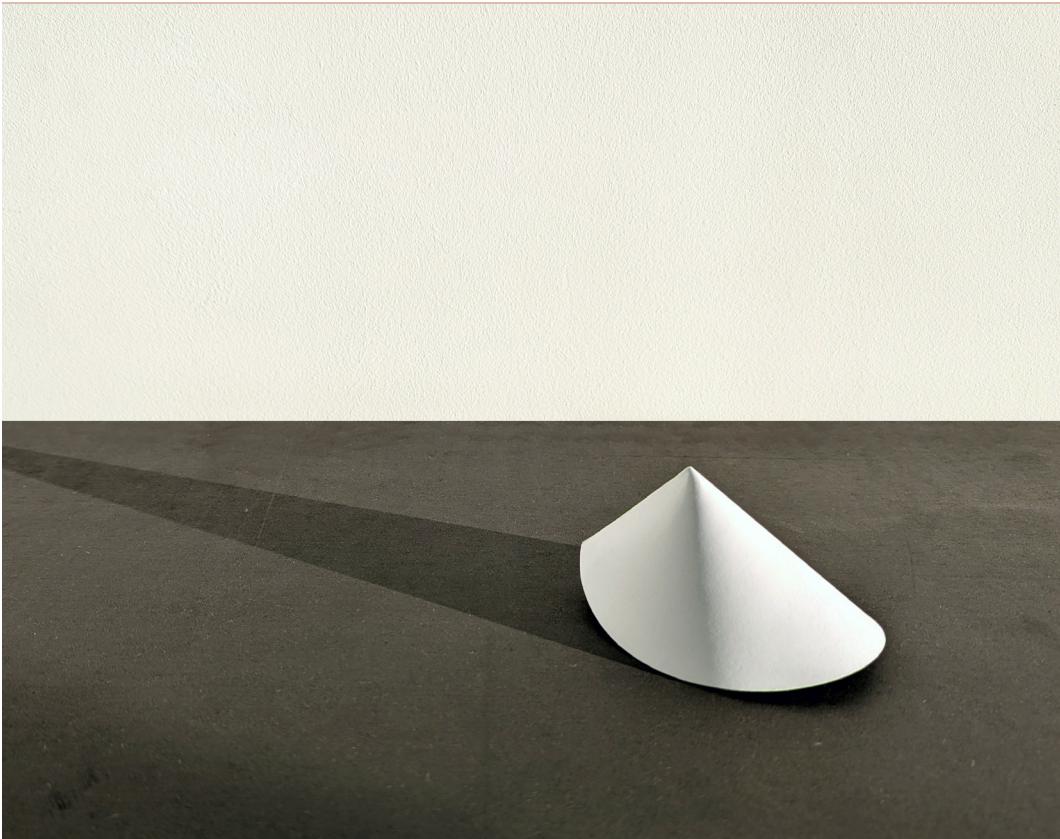
Play, Create, and Unite

Project Description

Coneics is a collection of soft, cone-shaped robots designed to inspire secondary creativity and interaction. These tactile objects respond dynamically to various human actions such as tapping, squeezing, and flipping. For example, one coneic would light up if sensing a gentle tapping, accompanying users on the bedside; the other grouped coneics would vibrate if one of them got flipped, connecting a family of users remotely. Intended for individuals in domestic spaces, Coneics encourage users to explore new, playful and unexpected usages that can be applied in various contexts.

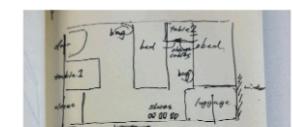
Rooted in the concept of open design, these robots evolve through user interaction and need. Coneics transforms everyday moments into opportunities for personal expression and co-creation by inviting personalized usage and storytelling.





Field observations

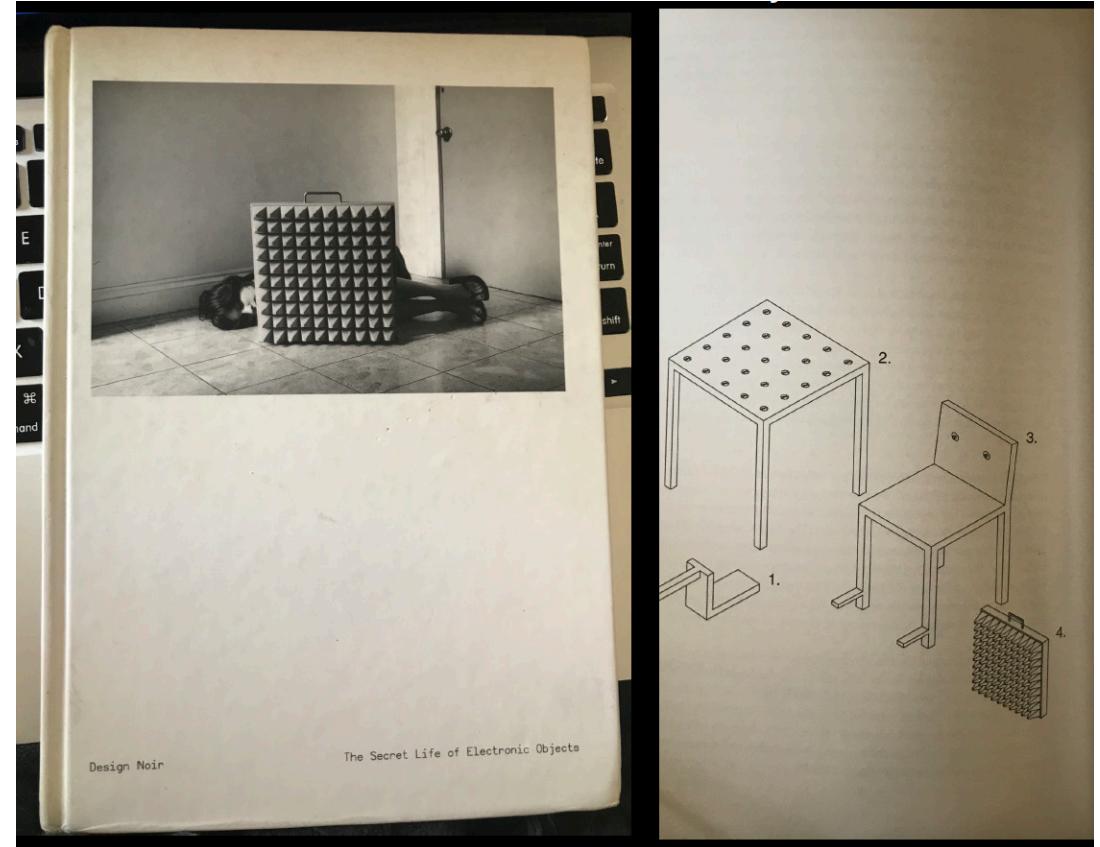
My field research stems from observation of my own room, the misbehaving objects caught my attention. Documenting how their original functions transform into personalized uses, and uncovering the reasons and relationships behind these reinterpretations attracts me to explore the power of secondary production in open design.

what	should be used to	but	where	why	pic
lamp	provides light to illuminate a room or workspace	a cup rat (rack)	on table beside the door	nobody works on the table; its close to door; the shape fits caps	
luggage case	to store and transport personal belongings during travel	an always open floor-mounted storage cabinet, storing some usual wear cloths, haven't takeout things	at the end of bed	the owner travel a lot; the owner hasn't been living in the place for a long time; the owner is lazy... and dont want to pack; it is big; it doesn't take too much place	
blanket	to provide warmth and comfort, typically during sleep or rest	a pillow	on bed	i like the blanket; i dont want to buy another pillow; pillows are so high, i like lower ones and the blanket is flexible; its an artwork made by my friend, i bring it here	
a sports bag	to carry athletic gear, clothing, and equipment to and from sports activities or the gym	another always open floor-mounted storage cabinet, storing some documents, cute little toys, accessories	bedside	bedside table is full; the bag is not often used (the owner dont have time to go to the gym); the bag is big; it doesn't take too much place; i like it and want to see it;	
structure of bedside table	/	organize the wires	bedside	close to bed; convenient for charging; the extension board is here; the wires are inorganised; wires are long	
table by the door	a flat, horizontal surface supported by legs or a central pedestal; a stable area for placing objects, such as food, books, or tools, and is commonly used for dining, working, or various activities	nobody is using it for work or study, just putting things	by the door	program is intense; two people living in the room but only one working table; owners prefer to work in bed or in school; full of things	
door handle	a mechanism attached to a	A place to hang	on the door	it rains a lot these days and i always	

Field observations

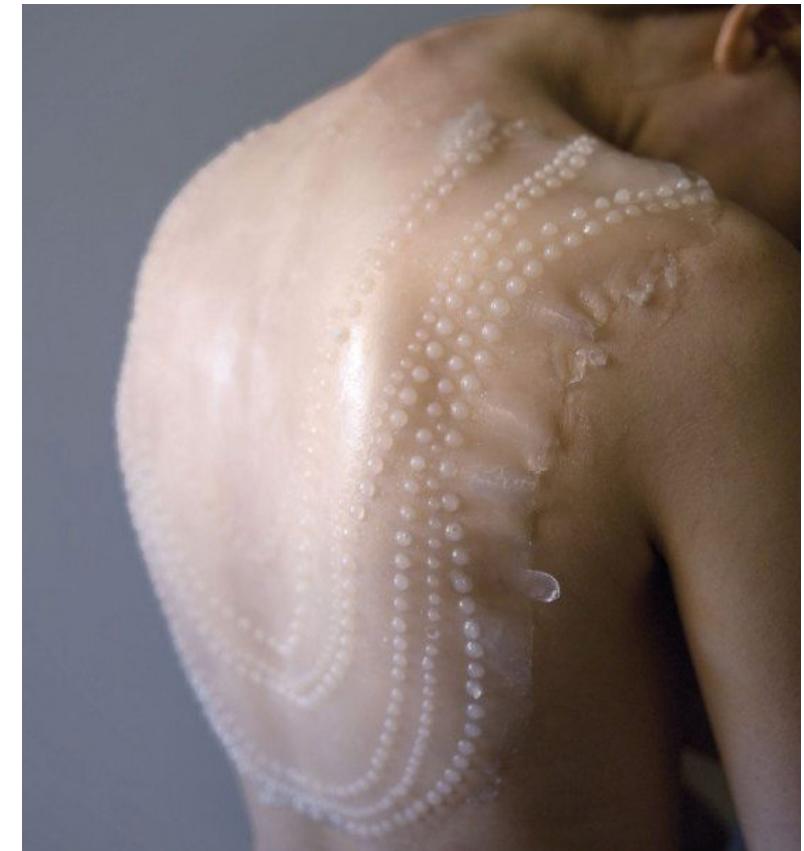


Jasper Morrison, The Unimportance of Form,
Published in Ottagono No. 100, 1991.



Design Noir: The Secret Life of Electronic Objects, Anthony Dunne & Fiona Raby,
Published 19 Sep 2024.

Visual and Material Moodboard

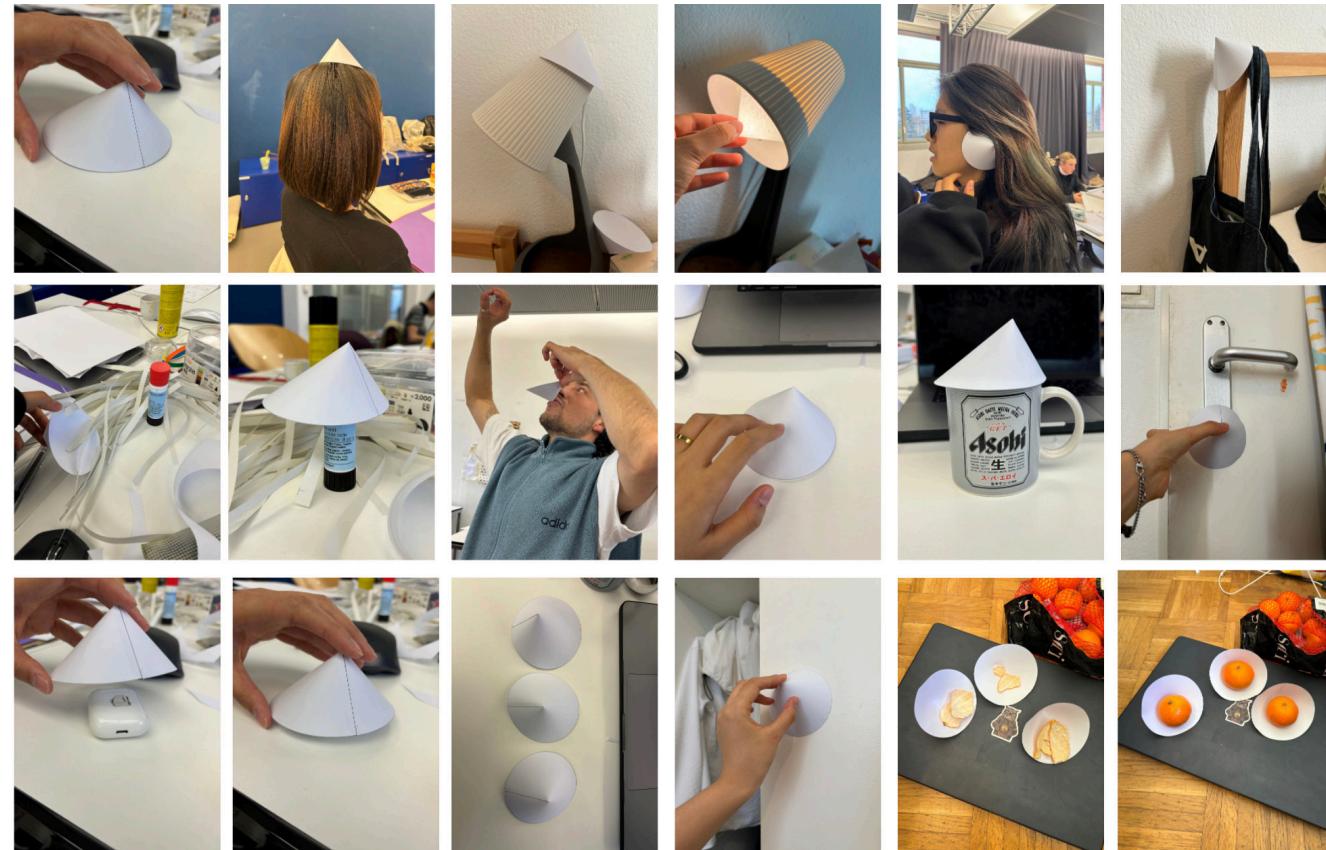
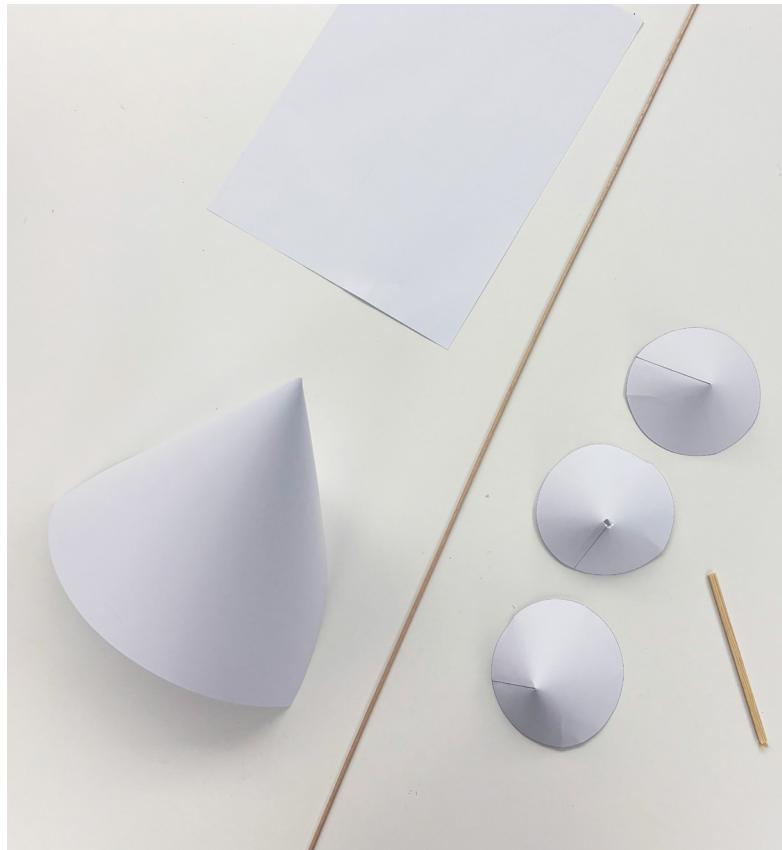


Shape research



Paper Prototypes

Noticing the frequent use and creation of bent shapes by users, I began a new experiment focusing on the possibilities of the cone shape.



User Journey

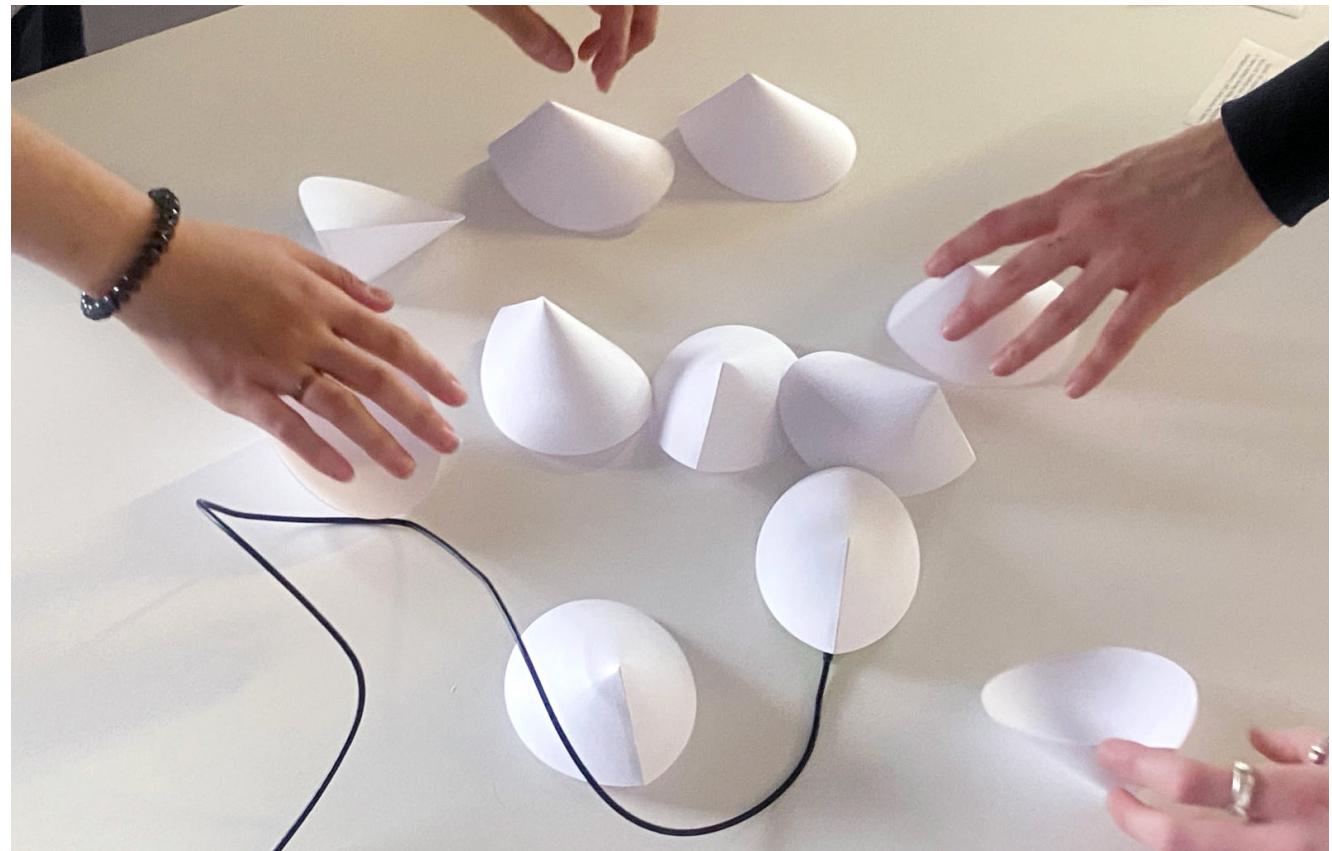
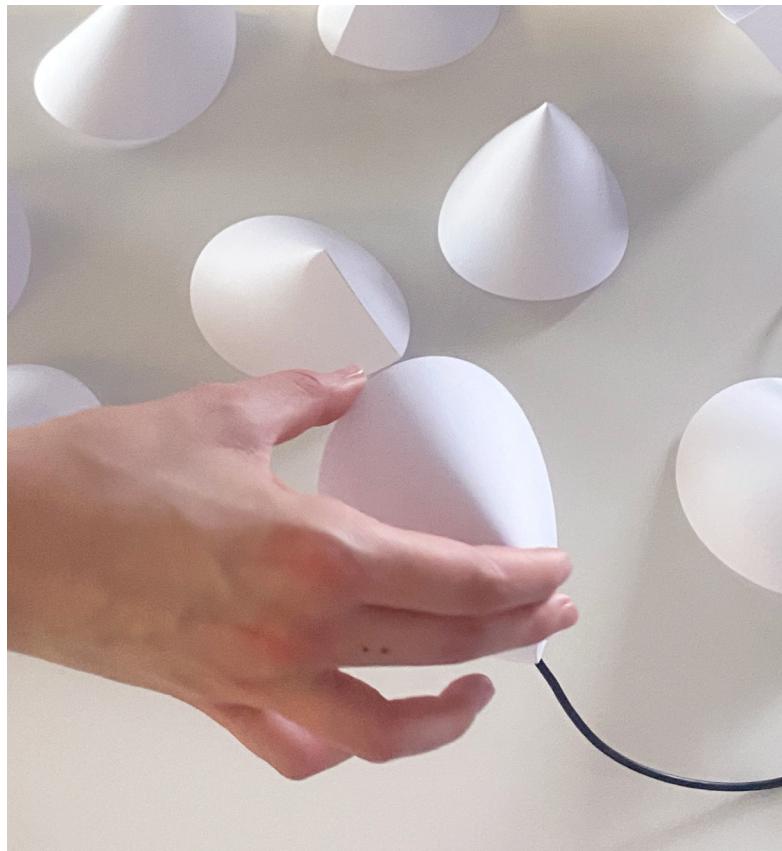
My design of interaction started by encouraging potential users to pair inputs with outputs and imagine further personalized uses.



possible interactions	possible feedbacks
Invert it	Light emission: light on, blink, light-code
Cover something	Color change
Tap it	Temperature change
Press it	Texture transformation
Spin/Rotate it	Elastic deformation
Stack it	Soft touch response
Balance objects	sound feedback
Slide/Move it	Self-balancing
Swing it	Wobbling
Throw it	Spinning
Wrap or decorate it	Weight redistribution
Put objects on/in it (Use it as	Scent release
	Mobile app connection

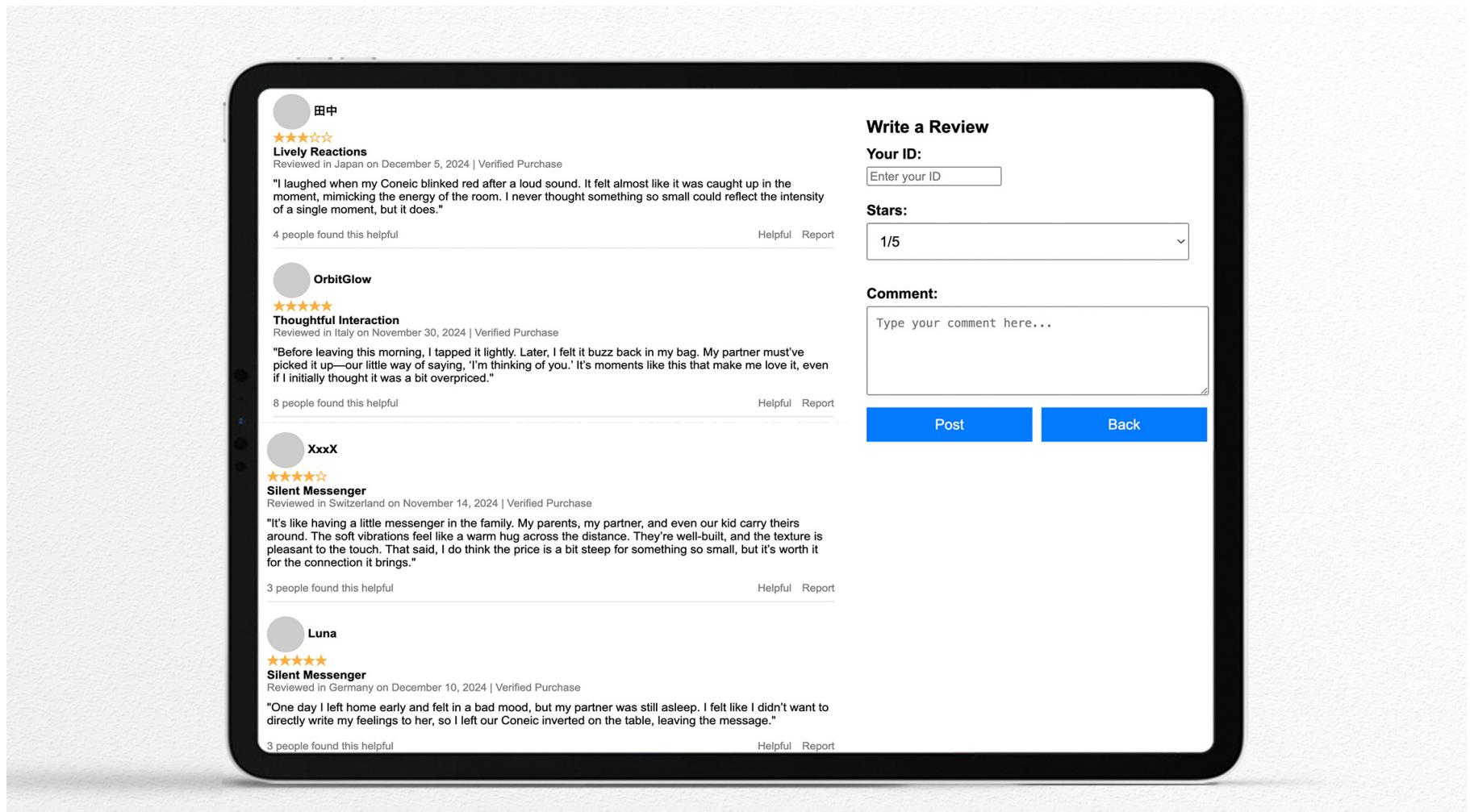
User Tests

One functional Coneic was tested alongside others in mid-process, where testers explored additional interaction methods and the potential to create a connective network.

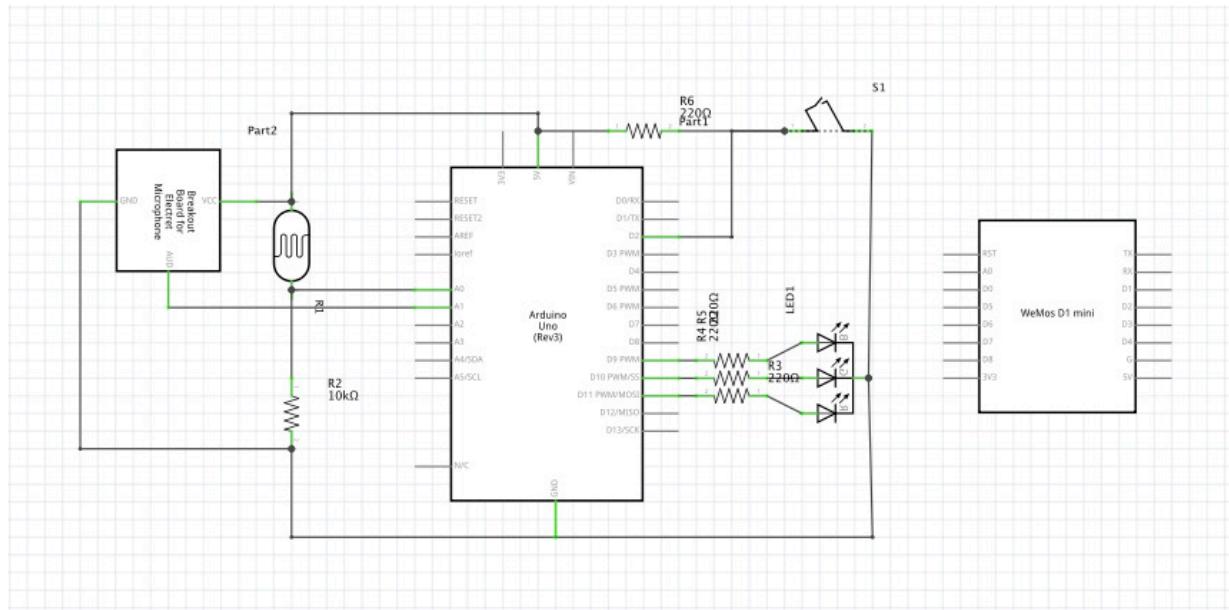


User Tests

I created a mock-up review page that previous users tell stories about their personalized usages of Coneics. This webpage provides an entry for understanding the open design and records new stories.



Electronics



Plan Drawings

Materials: White Silicone Rubber, Plastic

Scale: 1:2 in mm

