

# Design Thinking Project

Smart Retractable Canopy



# Agenda

Introduction

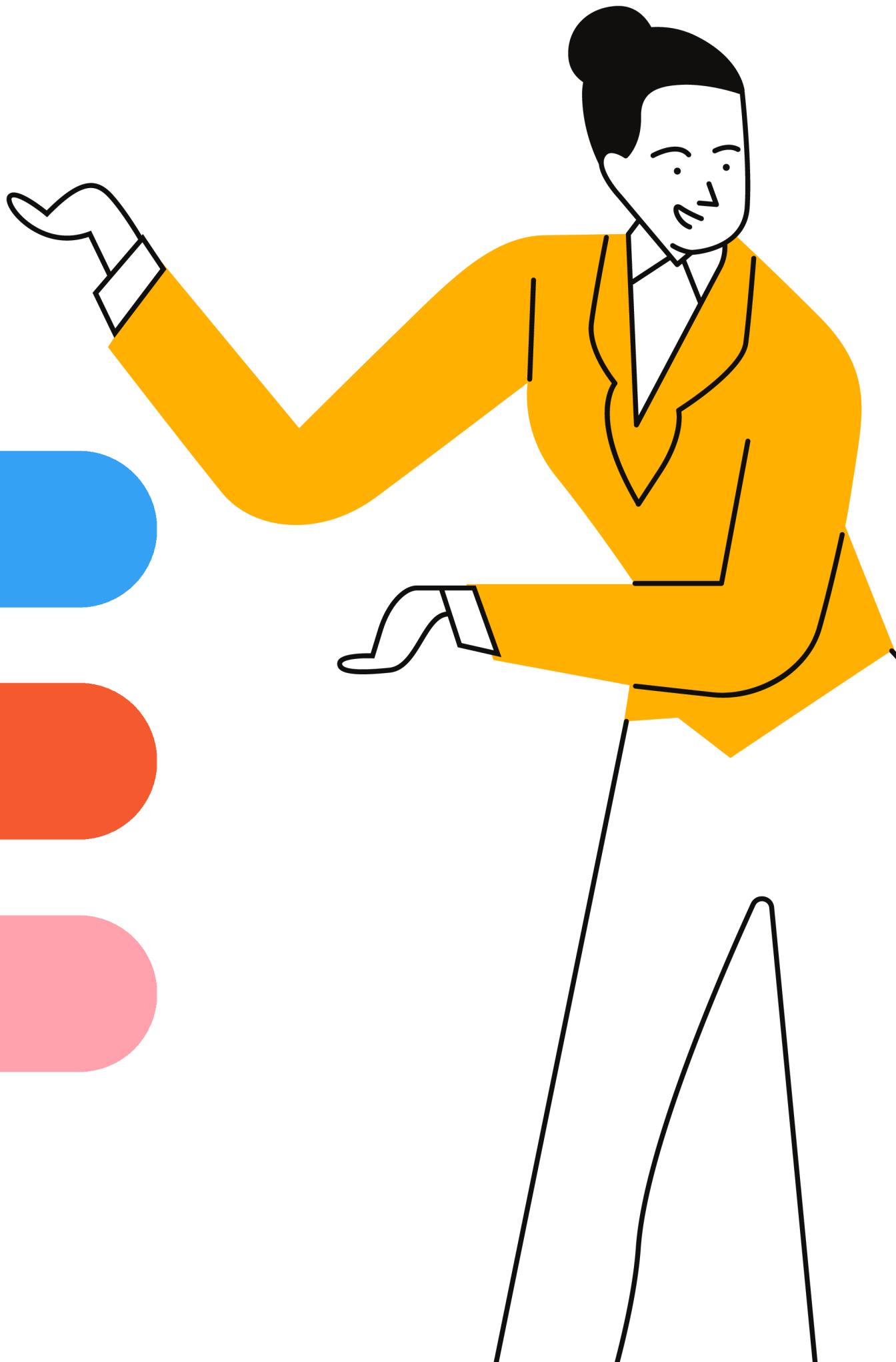
Empathy

Define

Ideate

Prototype

Demonstrate



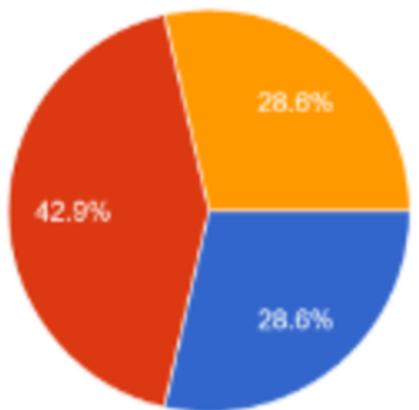
# Introduction

This presentation outlines the process of our final product which is the “Smart Retractable Canopy”. We came up with this project because we find out that a canopy is usually in its permanent position and not flexible. Some landed-house doesn’t include an extended canopy. If the weather is raining, people might get wet when they get out of the car. If the weather is hot, the housing area will also be hot. Our project innovates a canopy to be more flexible and controllable anywhere, anytime with the aid of Internet of Things(IoT) and Artificial Intelligence(AI). Our target user is a landed-house owner with a car poach.

# Empathy

Your age

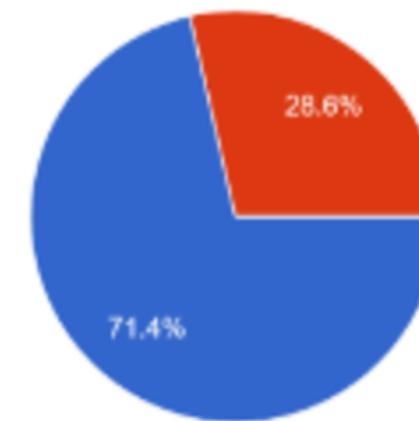
7 responses



- 13-19
- 20-39
- 40-64
- 65 and above

Employment Status

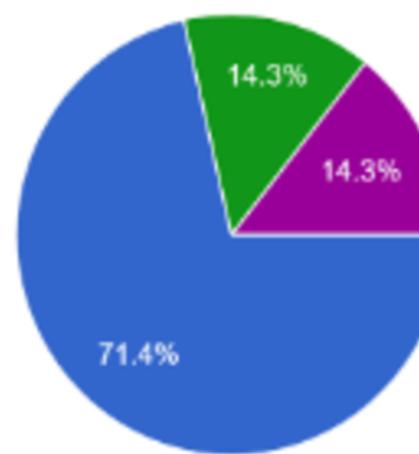
7 responses



- Employed
- Unemployed

Type of residence

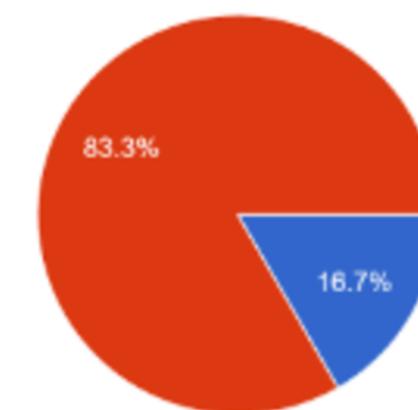
7 responses



- Terrace House
- Semi-D
- Apartment
- Bungalow
- Condominium

Are you living alone or with family?

6 responses



- Alone
- With family



**Q: During what occasion will you usually use your car porch area?**

**A: I usually use my carpoach area to do gathering such as barbecue or washing my car.**

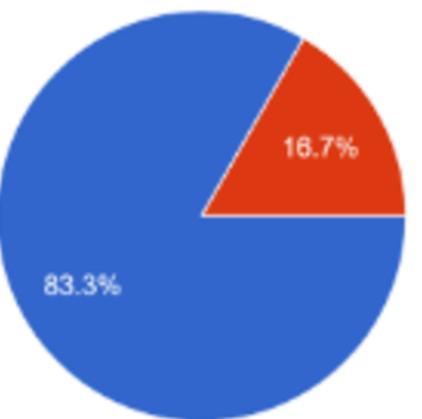


**Q: Have you ever encounter situations like entering your house from the gate to door, you get wet because of rain**

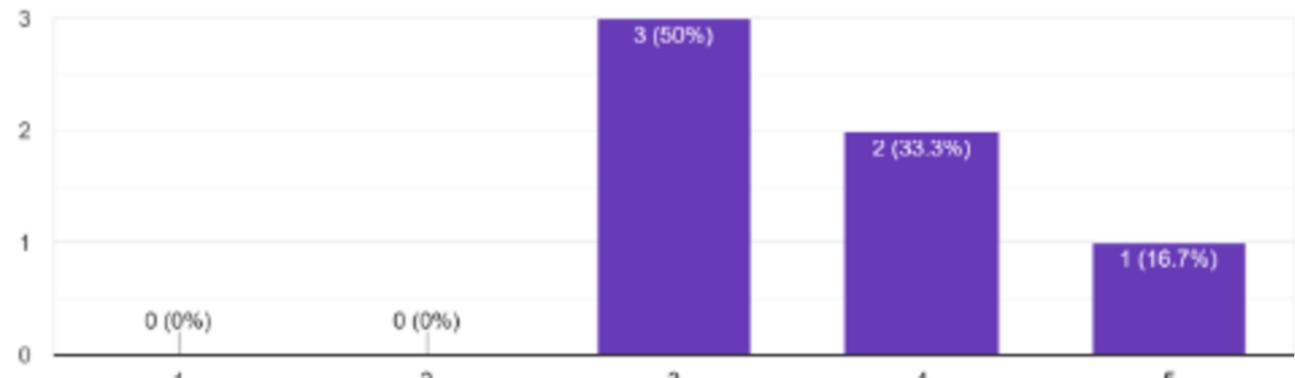
**A: Yes, I am frustrated about that, especially when I am carrying something.**

# Define

Does your car porch come along with a canopy?  
6 responses



How often do you use your car porch for activities other than parking (e.g., gatherings, storage, or leisure)?  
6 responses



If yes, does it need any improvement? What kind of improvement can we make?  
6 responses

No

I need a foldable canopy so that I can open or close the canopy based on the weather

reflexible

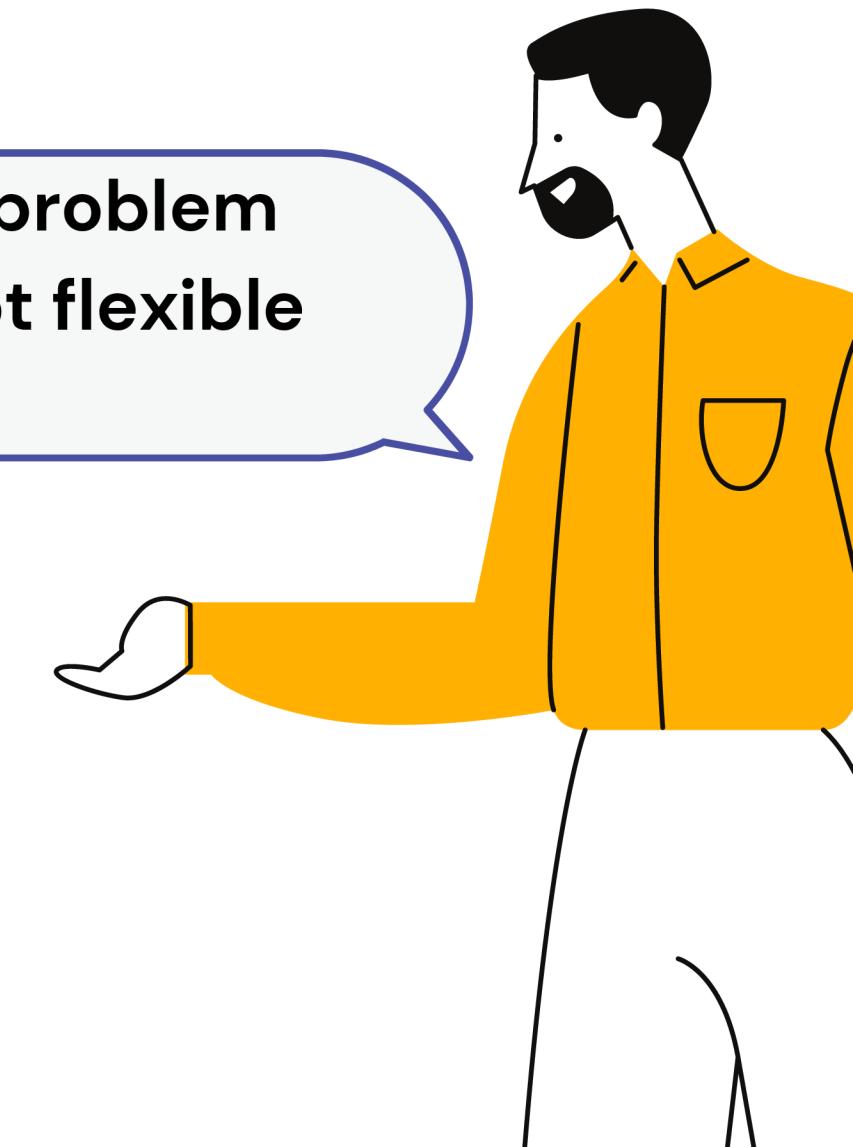
don't have canopy

Maybe the material can be more durable

Yes



**From our survey, we can define the problem which is the traditional canopy is not flexible and lacks of the aids of technology**



# Ideate

If our retractable canopy has the technology of Artificial Intelligence, will it attract your interest to experience our canopy?  
6 responses



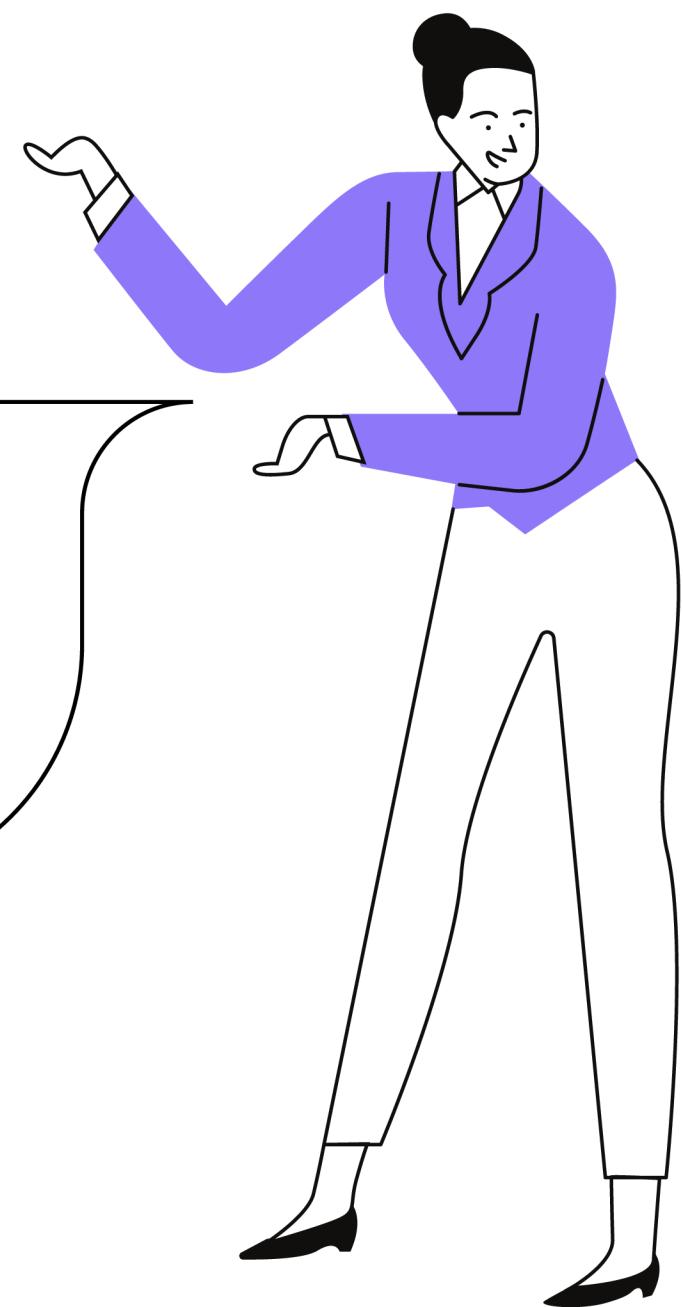
If yes, which smart features do you prefer? (Can choose more than 1)  
6 responses



Would you prefer a car poach with additional smart features besides AI?  
6 responses

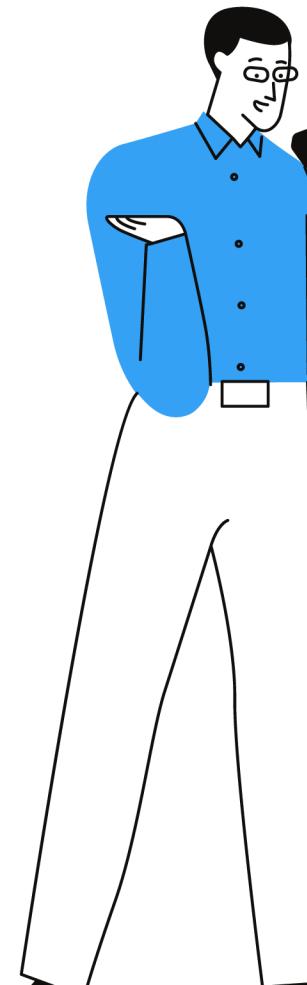
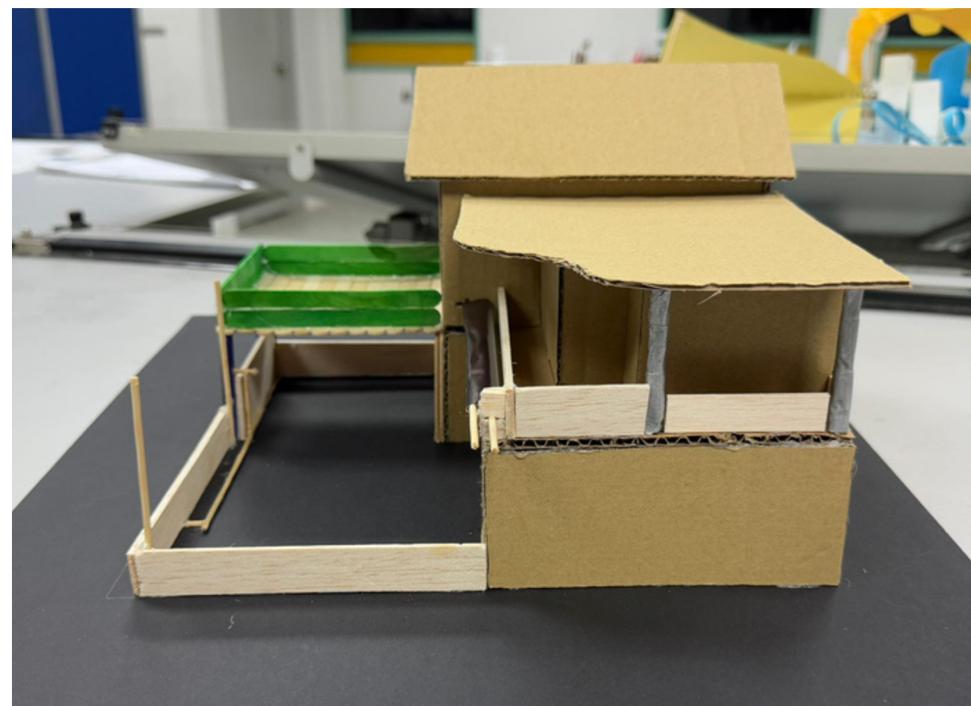
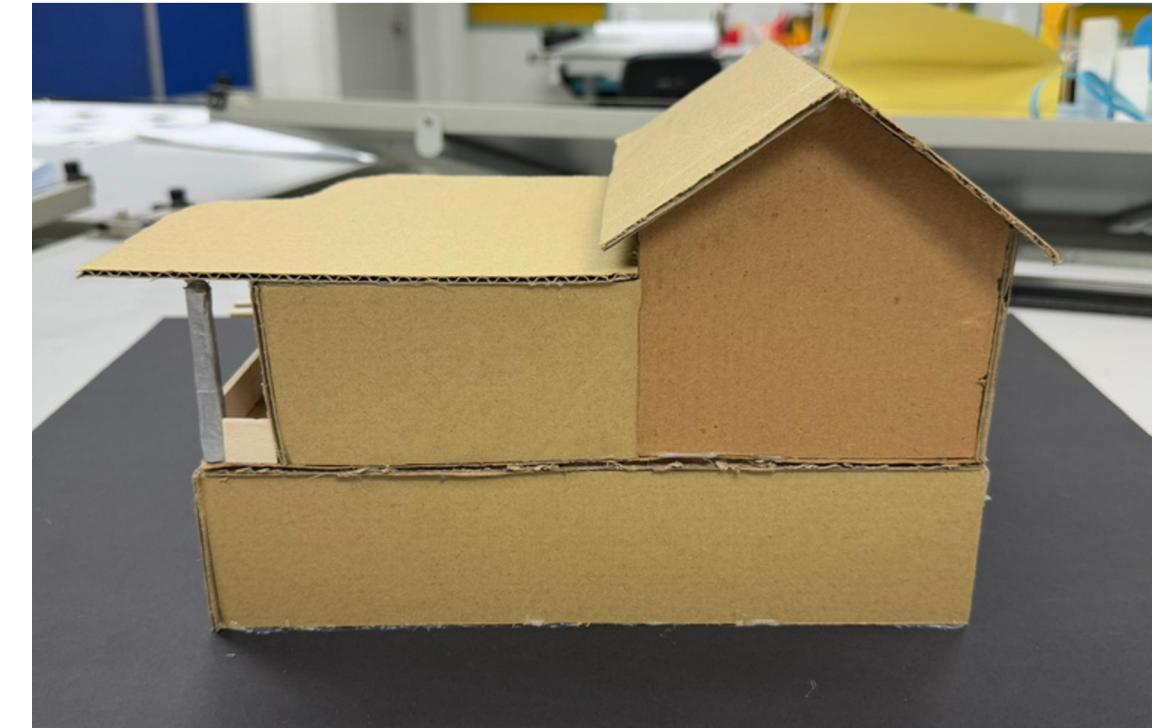
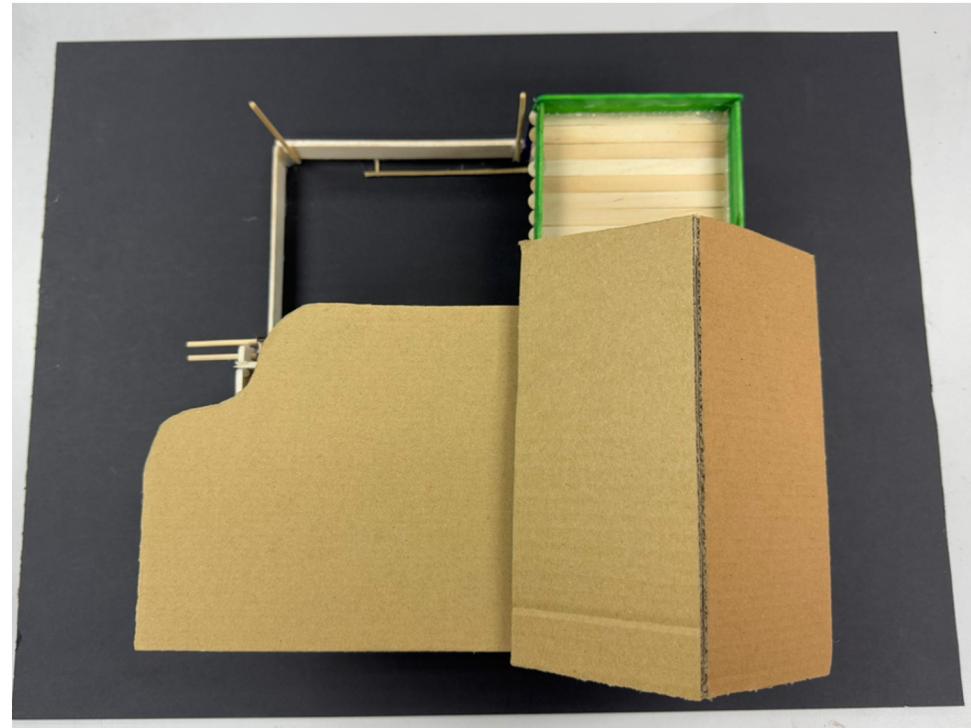


We came out some  
features that can  
innovate on a canopy



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# Prototype

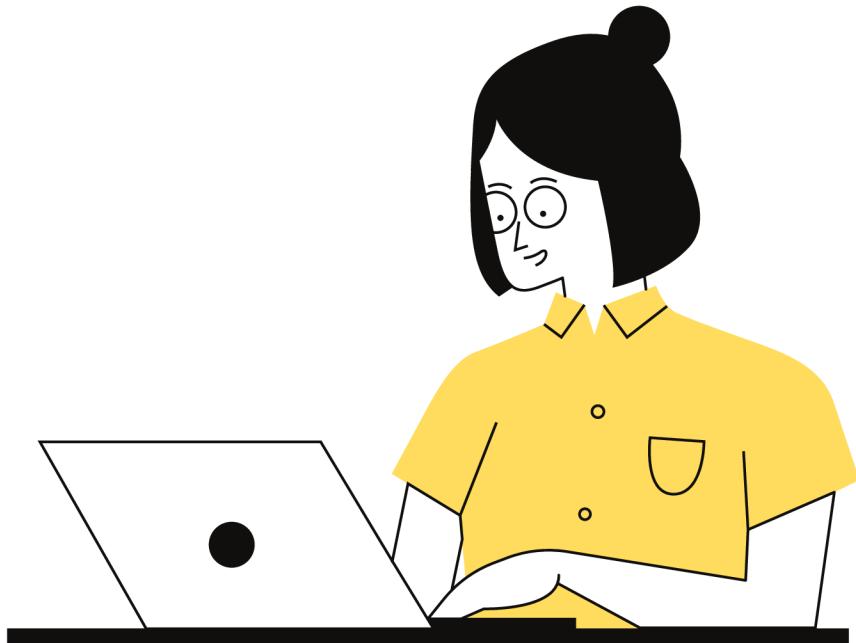


This is every  
angle of our  
model



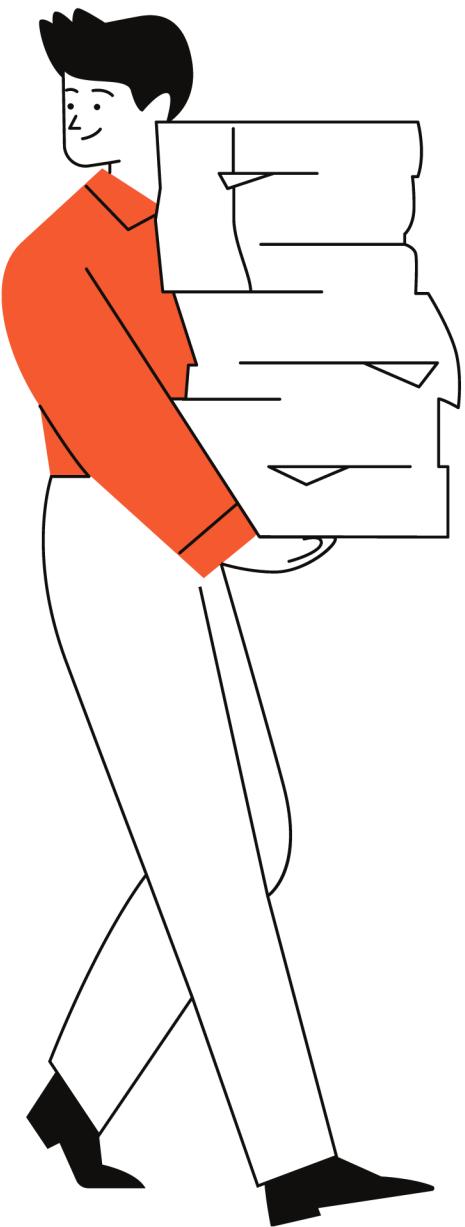
# Demostration

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# THANK YOU



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