



Wave Haven

Provide a cat-friendly living environment for the design of the animal home space.

Project Type

Individual Project

Tools



Date

September 2024 - December 2024

Background Research



Interview Agency

Taipei Animal Shelter

Responsible for the shelter, adoption, adoption, sterilization, medical treatment, regular screening and management of stray animals and wild animals in Taipei

Adopt about 300 cats and 700 dogs.

About 6 dogs are kept in a space with only basic food plates and water basins.

About 4 cats are kept in a cage with a cat house, cat scratch board, cat litter and an easy jumping platform.

Interviewees

Animal Handlers

Interview Highlights



Cats and dogs have different personalities, cats are more sensitive and need clean spaces, and psychological problems are more difficult to detect; dogs are more optimistic, and they can relieve stress when they go out. Due to the lack of manpower, it is difficult to take care of the psychological needs of each animal.

Rain Pings

- Psychological problems in cats are not easy to detect and deal with
- There are too many animals to observe and care for individually
- There is a lack of effective methods to deal with animal psychological problems

Volunteer, Lee

Interview Highlights



Cats are prone to wear and tear tops and facilities, need a safe rest space for long-term sleep, and it is difficult to fully install monitoring equipment, because of the high cost and easy to be destroyed by cats, resulting in health abnormalities that are difficult to detect in time.

Rain Pings

- Cats are confined to their cages for long periods of time and have insufficient space to move
- It is difficult to balance safety and observation in the design of cat houses
- Cat scratchers and cat houses are easily damaged and have high maintenance costs

Volunteer, Hu

Interview Highlights



Existing facilities can be redesigned to improve durability and convenience due to the small space and inconvenient cleaning of cat cages, the rapid wear and tear of cat scratchers, and the fragile structure of cat houses that are vulnerable to water and difficult to withstand impacts.

Rain Pings

- Cat scratchers have a short service life and produce a lot of debris garbage
- The space of the cat cage is narrow, which affects the care and circulation arrangement
- The material of the cat house is not durable and is easily damaged by moisture

Design Concept

How to solve the needs of users in interviews?

Description of the Product Design Objectives

The use of modules to make full use of the space, can be adjusted according to the size of the cat's space to adjust the number and configuration of the cat cage, hoping to provide a comfortable living space for cats, so that the overall appearance of the cat cage is not as cold as a prison, but the use of color and material to make the cat relax, more according to the state of the cat in the animal home to arrange the cat's living space, the use of transparent materials to make it easier for volunteers to observe the state of the cat, and add intelligent monitoring, to reduce the chance of cats dying due to unnoticed.



•Feature Requirements

The design of the cat house should take into account the needs of the cat to hide and rest, play and grind its claws, and at the same time facilitate the observation and cleaning of the manager, with good ventilation and flexible adjustment of the configuration according to the needs.

•Technical Needs

The design of the cat cage should have the characteristics of transparent observation, modular combination, vibration detection, easy replacement of cat litter, low debris cat scratching board, quick assembly and impact-resistant structure.

•Availability Requirements

This product aims to improve the living space of cats in the animal house, the function is mainly to improve usability, and through modular design, it can meet the activities and living needs of multiple cats under limited space.

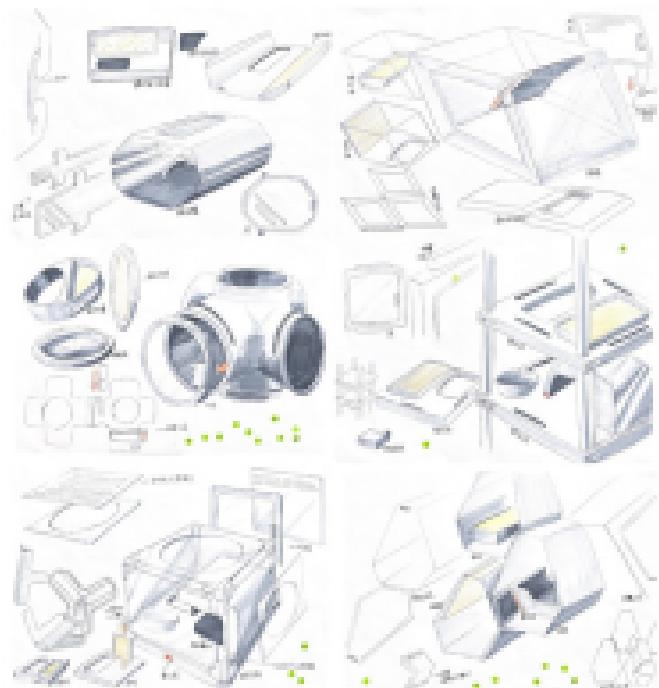
•Environmental Needs

Due to the limited space of the animal home and the high demand for cat cages, the design should aim to improve the use of space and use low-cost and sustainable materials.

Sketch

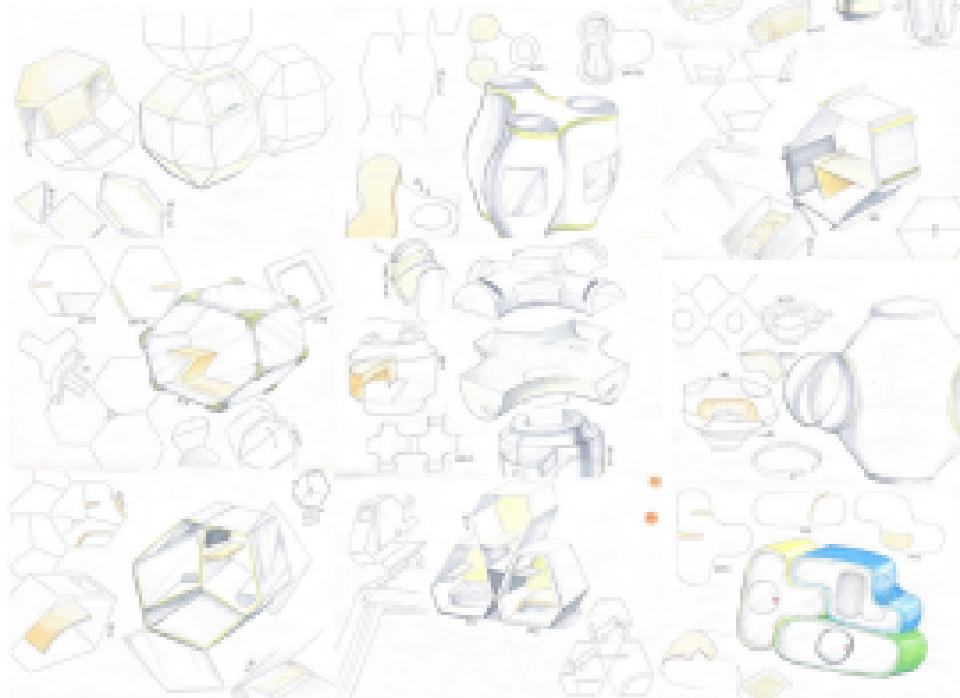
Six Concept Sketches

Think with a modular structure



Ten Sketches

Extend the idea from the selected concept sketch



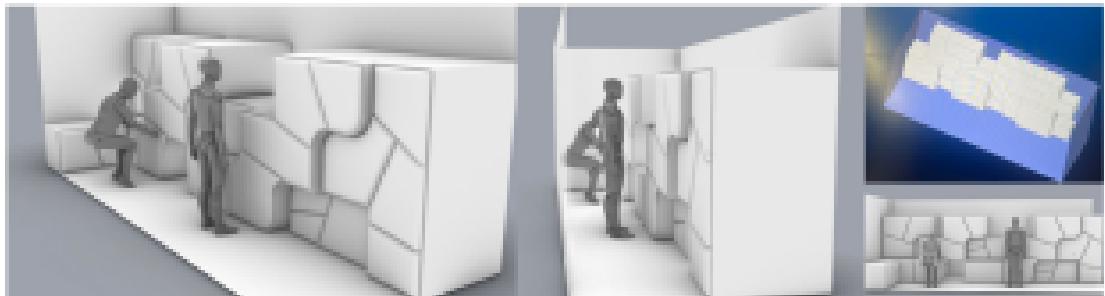
Three Extended Sketches



Rough Model



3D Modeling



I want to show the feeling of bubbles filling the cabinet and create a feeling of combining soft and hard.

Found that the current design still makes the space feel oppressive

The Design has a Twist

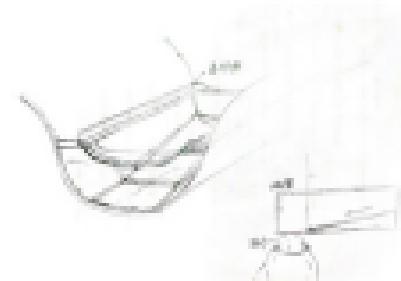
Facing Problem

The space of the cat house will be affected by the small room, so that the environment is still crowded and oppressive, such a design can not fundamentally solve the goals set before the design, so if you want to connect the cabinets together, in a broad sense, it is a huge cat jumping platform space, and the design of three spaces to place according to the state of the cat can also increase the space for cat activities and reduce the sense of oppression of the space, and combined with technology, so that the staff of the animal house can more easily observe the cat.

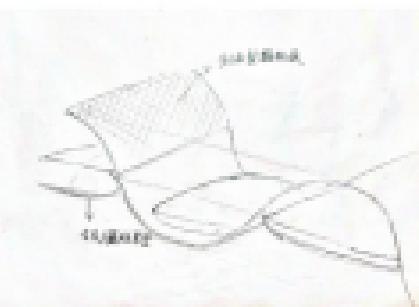
Adjust the Orientation

I adjusted the direction of my original sketch to use the open cat jump platform as the new design direction, and the wall as a canvas to choreograph the design, so that the wall creates a relaxing view for the volunteers and cats.

New Sketch



Attach the angled bowl to the shelves to prevent tipping and reduce pressure on the neck.



Surf with less debris is used as a cat scratching board to reduce the burden of cleaning.



Cat Collar - Learn about the physical and psychological state of cats.



The shelves of the entire wall are arranged with the theme of ocean waves.

Function Description



Fragrance Machine

The use of the scent of southern aloes and pink lighting can soothe the cat's mood, while the fully enclosed area can give the cat a greater sense of security and remind the public not to touch them.



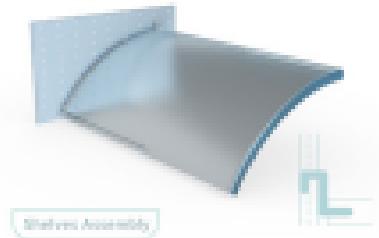
Cat Bed

The low-level is threaded to lock on the shelf to prevent the level from slipping, and the tilt of the bed can reduce the pressure on the cat's neck when eating.



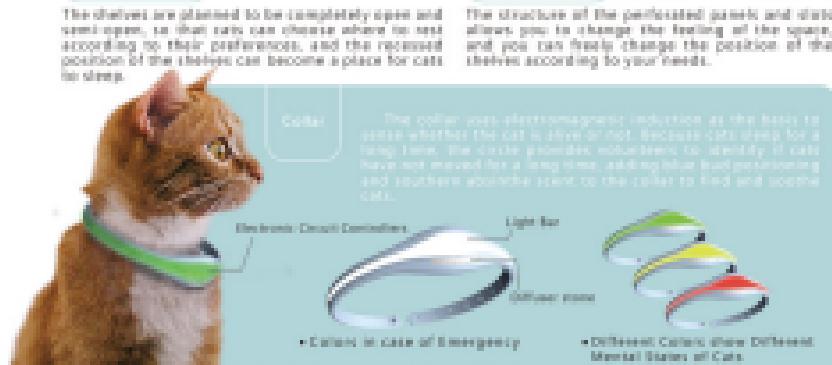
Shelves Design

The shelves are planned to be completely open and semi-open, so that cats can choose where to stay according to their preferences, and the recessed position of the shelves can become a place for cats to sleep.



Shelves Availability

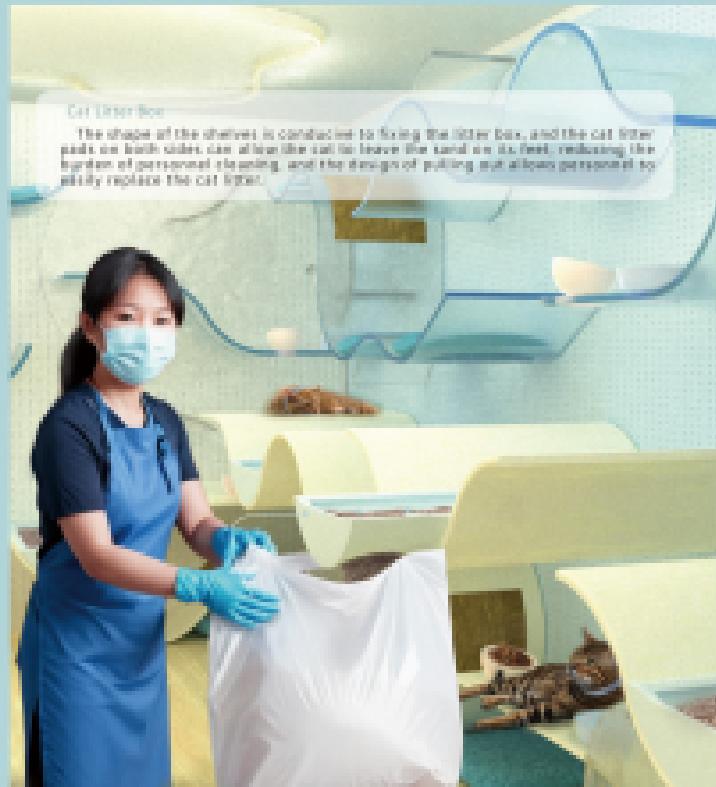
The structure of the perforated panels and slots allows you to change the feeling of the space, and you can freely change the position of the shelves according to your needs.



Wave Haven

Design Concept

The space of the cat shelter area of the Taipei Animal House was redesigned, designed from the pain points of the narrow activity space of the cats in the current Animal House and the difficulty of cleaning the staff, and then optimized the user experience according to the behavior analysis of the cat and personnel, hoping that Wave Haven can become a space that makes people happy and friendly to cats.



Cat Litter Box

The shape of the shelves is curved to fit the litter box, and the cat litter pads on both sides can allow the cat to leave the sand on its feet, reducing the burden of personnel cleaning, and the design of pulling out allows personnel to easily replace the cat litter.