

# APP 360



- Pet odor detection
- air purification
- health status alert

## Phenomenon:

Pet owners often overlook changes in their pet's environment odour, which may signal health issues and impact indoor air quality.

## Pain point:

odour affects the environment and also threatens the health of pets.

## Solution:

Design an APP to monitor air quality in real time to protect pet health and purify the air to ensure a fresh living environment.

# Target Market Analysis

## UK "Pet Food" pet population data

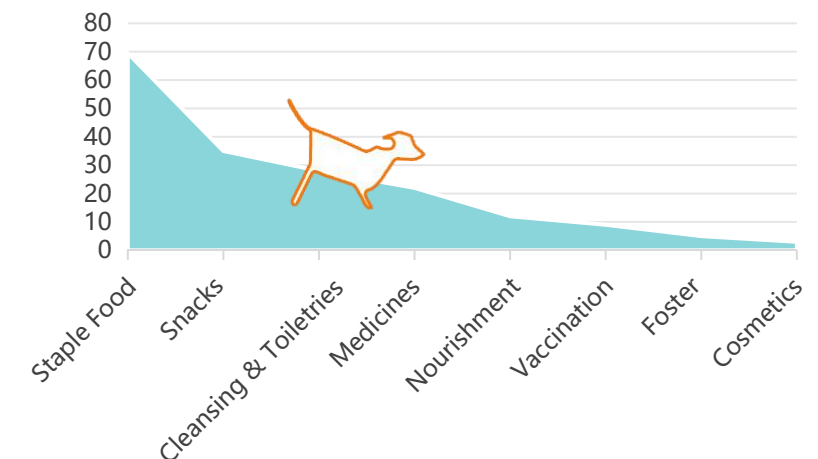


1	13.5 MILLION DOGS	36% Households	
2	12.5 MILLION CATS	29% Households	
3	1.5 MILLION INDOOR BIRDS	3% Households	
4	1.3 MILLION DOMESTIC FOWL	1.6% Households	
5	1 MILLION RABBITS	1.6% Households	
6	700,000 TORTOISES & TURTLES	1.6% Households	
7	700,000 HORSES & PONIES	1.5% Households	
8	700,000 GUINEA PIGS	1.2% Households	
9	600,000 HAMSTERS	1.5% Households	
10	600,000 SNAKES	1.3% Households	

Note: All figures are rounded to the nearest 100,000.

21% OF HOUSEHOLDS HAVE INDOOR FISH TANKS	
13% OF HOUSEHOLDS HAVE OUTDOOR FISH PONDS	

## UK spending on pets



**61%** Of UK households keep pets



**£ 70k+** Pet owners household income



**54 %** Female  
**46 %** Male  
**49%** 35-43 yo people



**£ 500** Spend a year on pet treats  
**12%** Growth in spending on pets

\* "Lots of people in the UK have pets, so pet apps sound like a great idea."

\* Pet market shows strong growth potential.

\* Increased investment in pets' well-being.



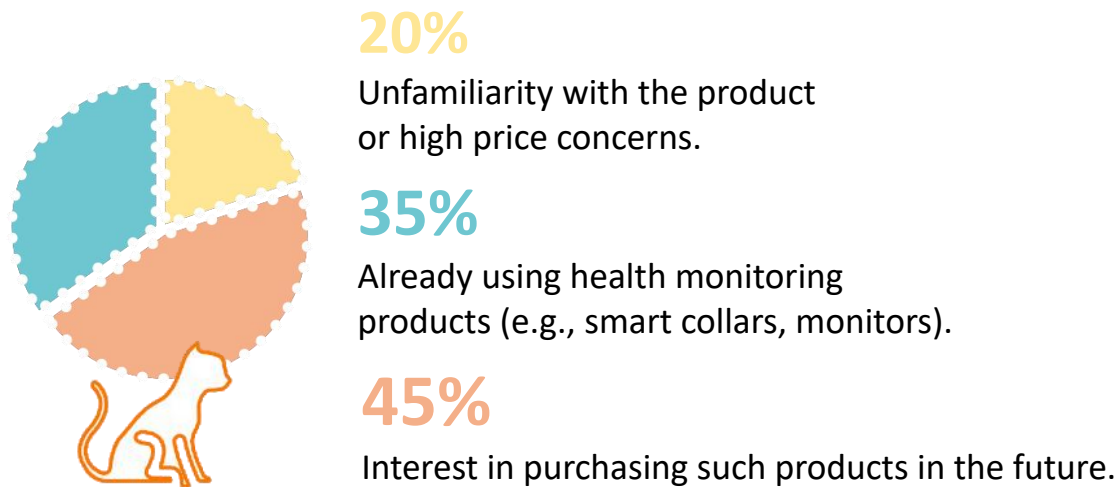
# User Interview



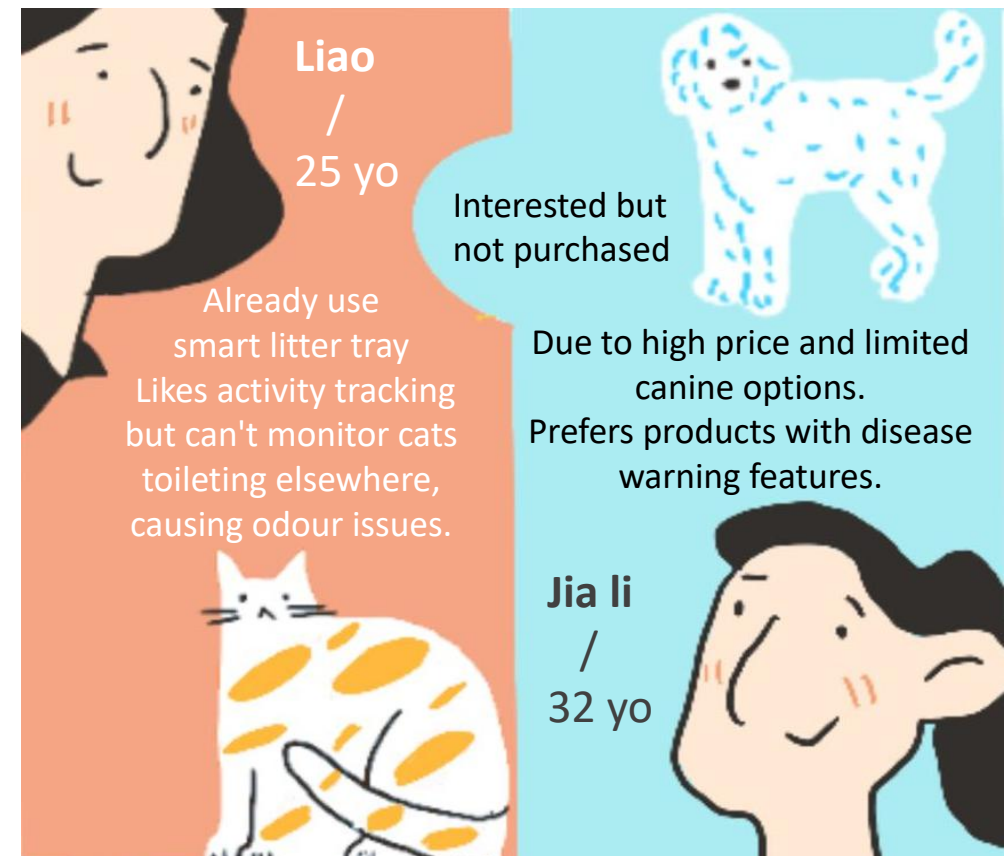
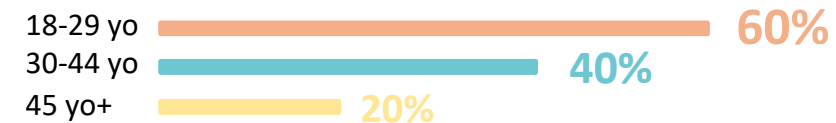
- What are pet owners' concerns about odour cleaning?



- How receptive pet owners are to health monitoring products. Are there smart pet devices being used in the home?



- What is the level of acceptance of smart products and what are the functional requirements?



# Scientific Data



Pet ownership often comes with challenges:



## The link between odour and pet health:

Problem	Source of odour	What it smells like
Dermatology		Bitter Herbs
Ear infection		Mouldy or smelly feetGum
Gum disease		Rotting, fishy smell
Digestive issues		Sour egg smell
Diabetes		Caramel or rotten apple
Excretory infection		Ammonia, rotten egg
Old and weak		Greasy smell
		<div> <div></div>Breathing                 <div></div>Sweat                 <div></div>Secretion                 <div></div>Saliva             </div>

## The impact of odours on pet health



Leftover food

Easy to breed mold or bugs, pollute the air.



Dander and hair

Allergies in the air can trigger asthma.



Urine and excretion

Releases ammonia, which can cause headaches and sore throats.



Cleanser

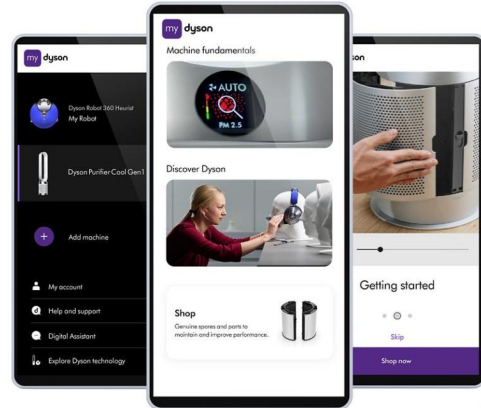
May release harmful substances and pollute the air.



# Pain Points Analysis



## Market Competition



Air Optimisation



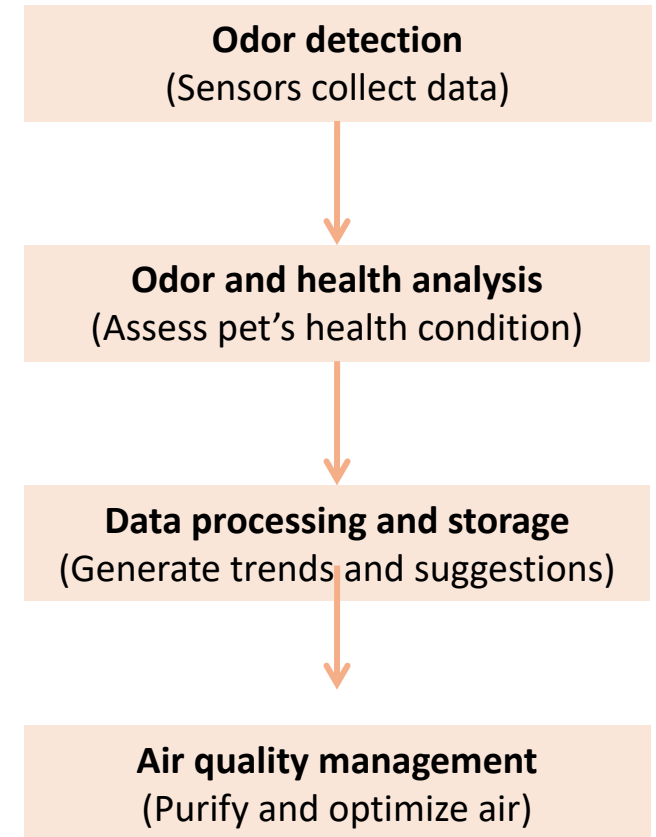
Pet Health



**Dyson Pure Hot+Cool:**  
Focuses on air purification,  
*no pet odour detection or health analysis.*

**Litter-Robot:**  
Features auto-cleaning and odour control,  
*no odour composition data or health alerts.*

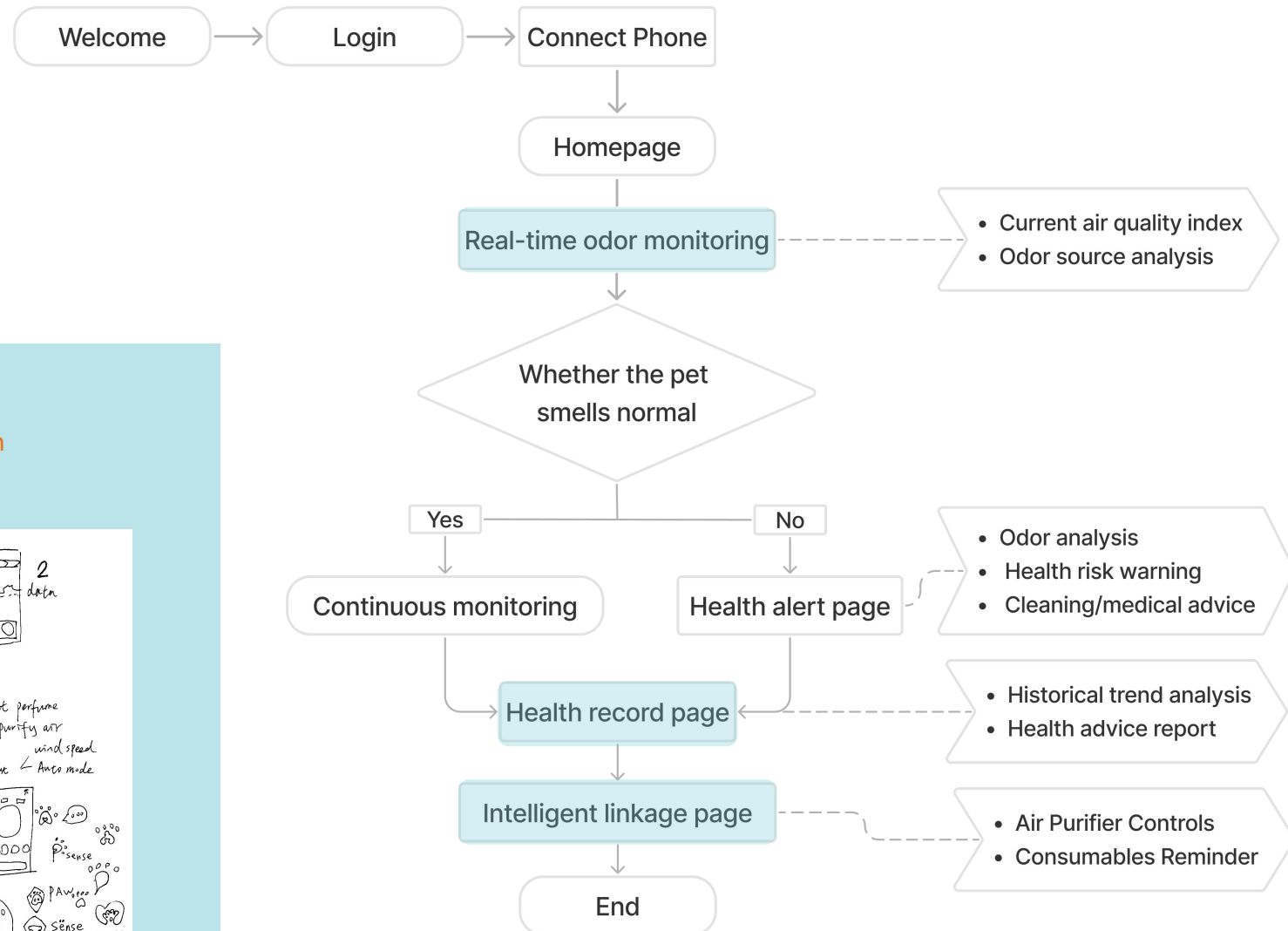
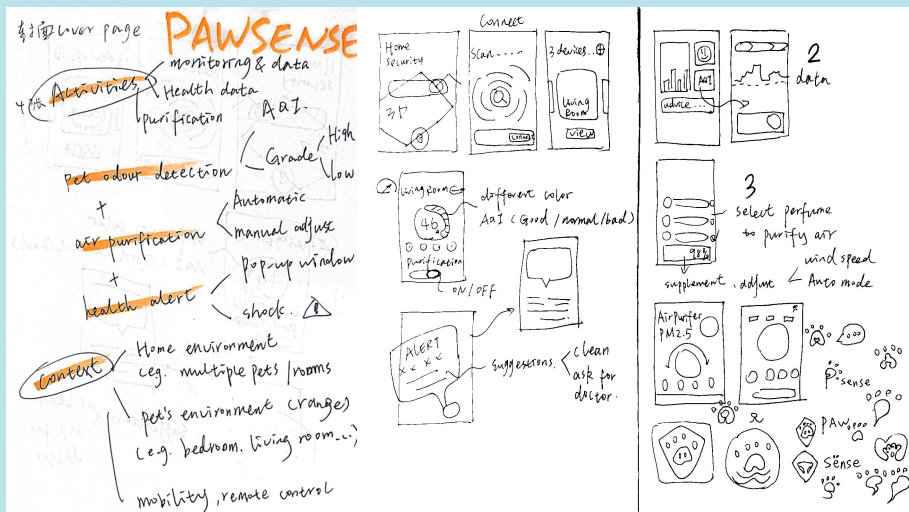
## "PawSense" APP basic workflow



# Sketches & Wireframe



Monitors real-time AQI to safeguard pets' health and ensures fresh air with odour purification.



# User Test & Feedback

## User Testing 1 - View

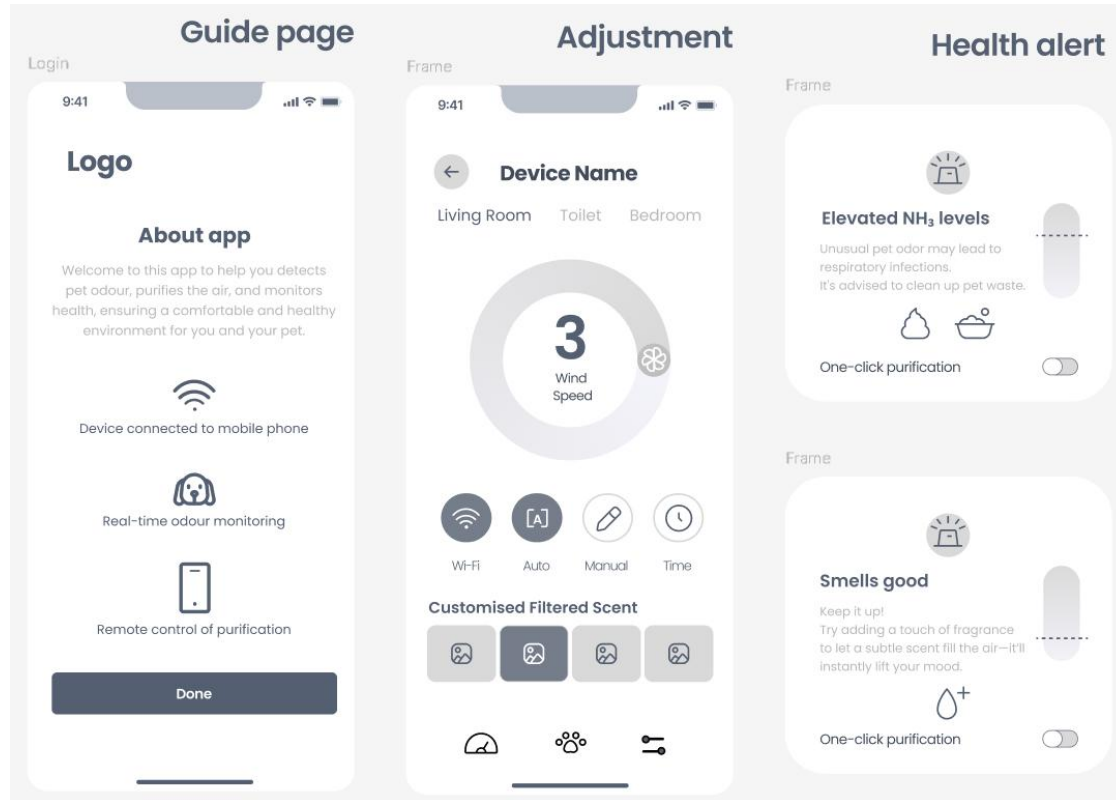
First user test feedback shows complex information and excessive functionality cause confusion.

- Need a preliminary introductory screen about the app.
- Is it possible to set a reminder if the AQI is bad?
- Can the specific purification function be a little more comprehensive regarding this device that its for identification? For example, selectable fragrance, or wind speed, etc.
- The pet health interface needs more data related to pet odour.



# Modification & Visual elements

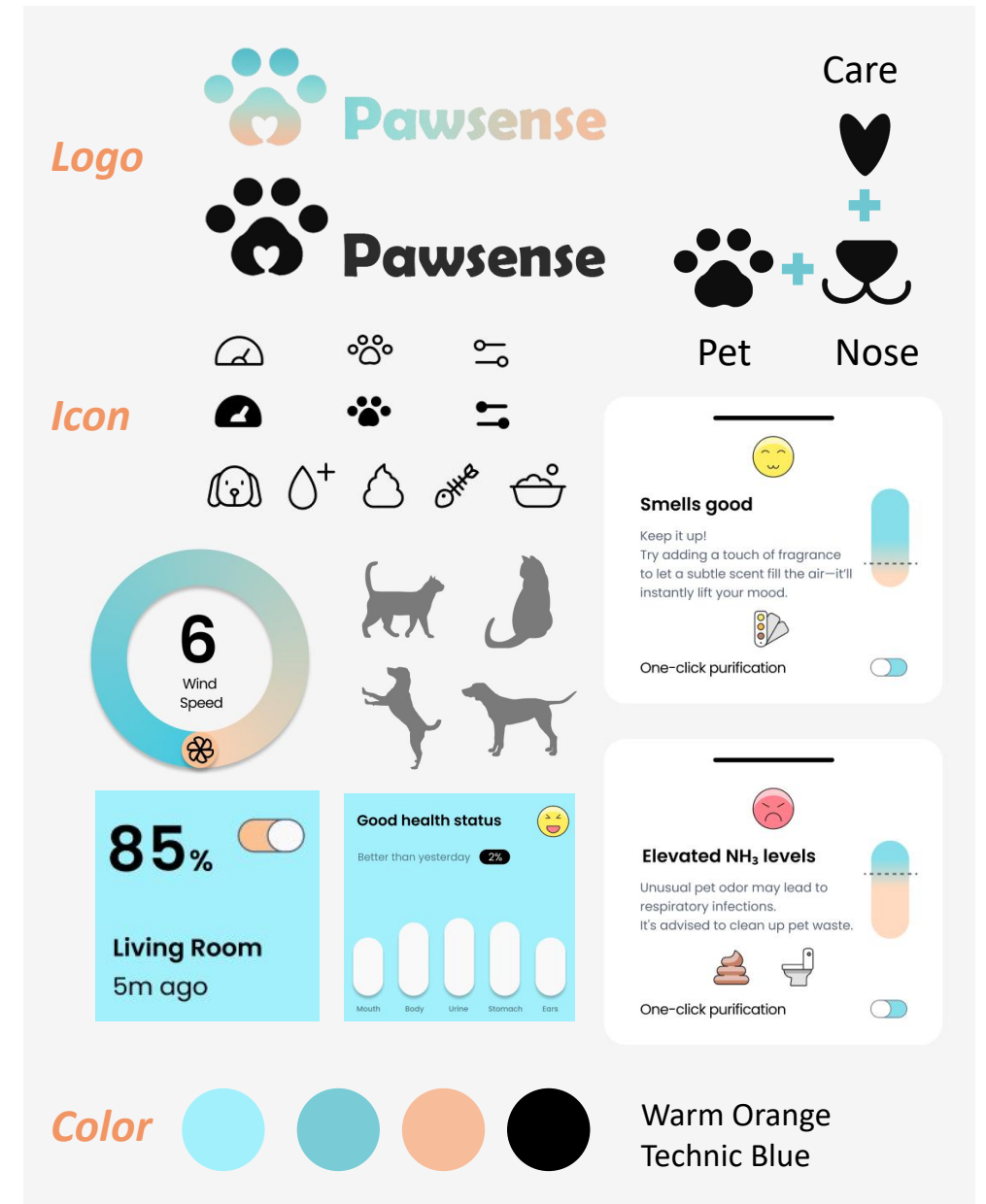
## User Testing 2 - View



Added an introductory screen for the app

Added interface to set device options like auto/manual purification, fragrance, wind speed, etc.

Set up a pop-up to view AQI analysis (good or bad) and a quick one-click purification option.

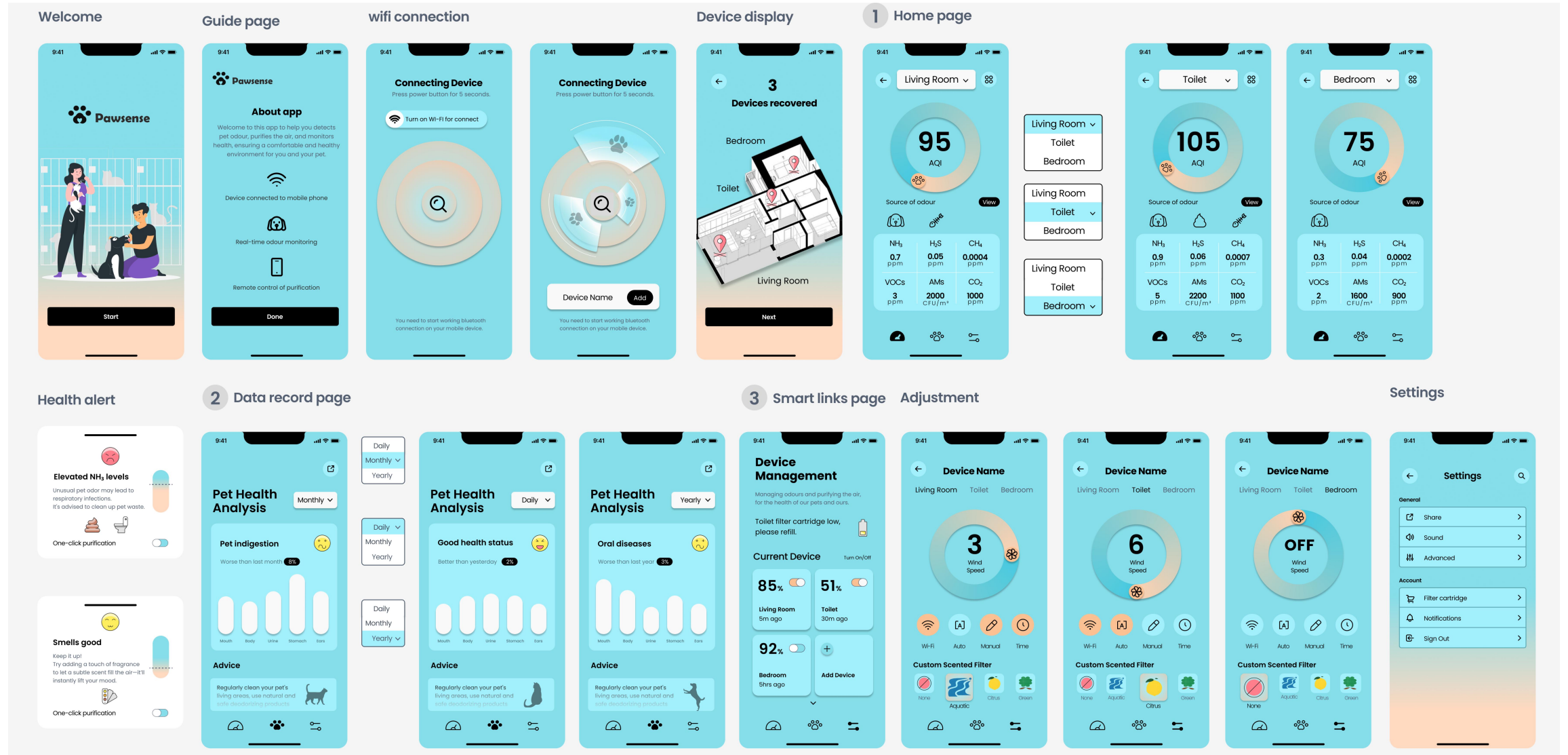


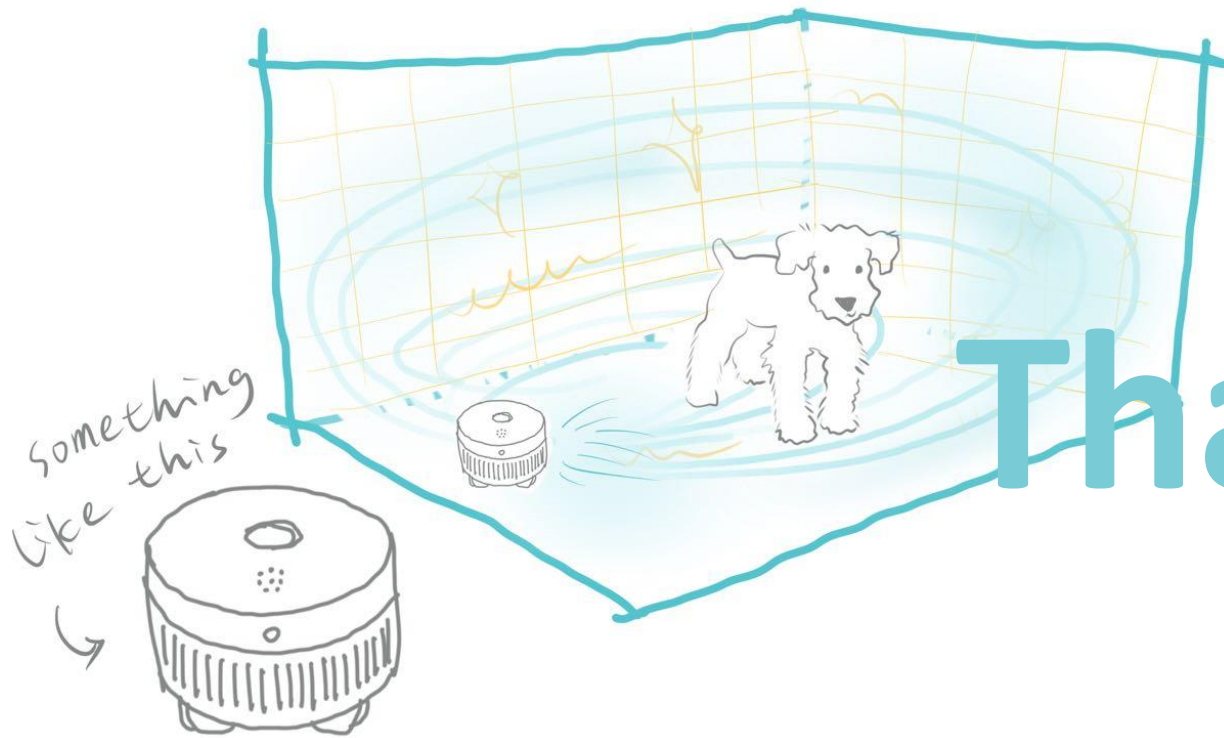


# Outputs



## Simulation Video - View





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