

TOUCHIE

*Haoyue Guan*

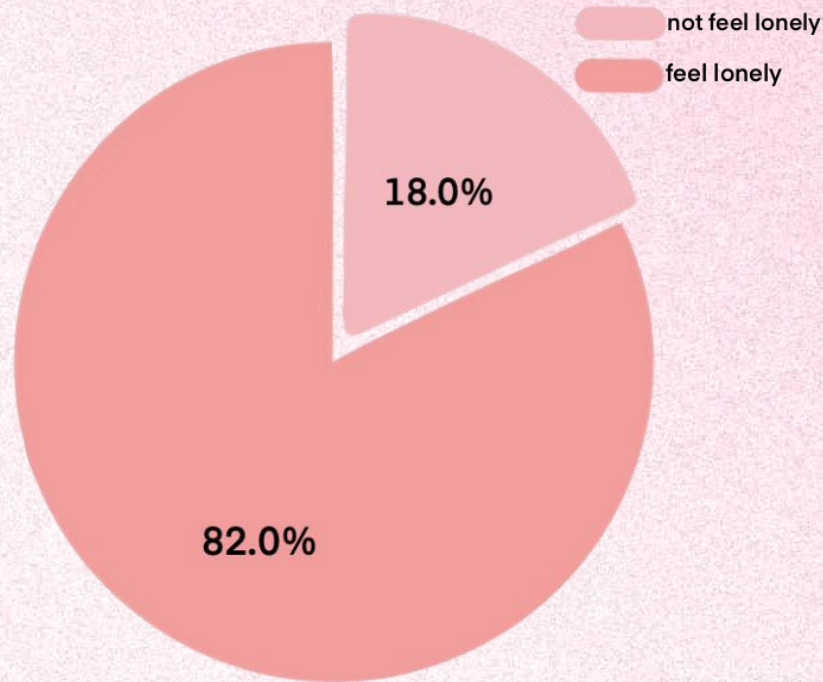
BUNNY

PINK BUNNY  
Smart pillow control system



# Data Investigation and Analysis

Visualisation of the results of the survey on feelings of loneliness during study abroad



41 out of 50 respondents said they would feel lonely while studying abroad.

Different reasons for feeling lonely while studying abroad



This indicates that a large part of the loneliness felt by students is due to a lack of companionship from family members or friends. Weather conditions are also an important factor.



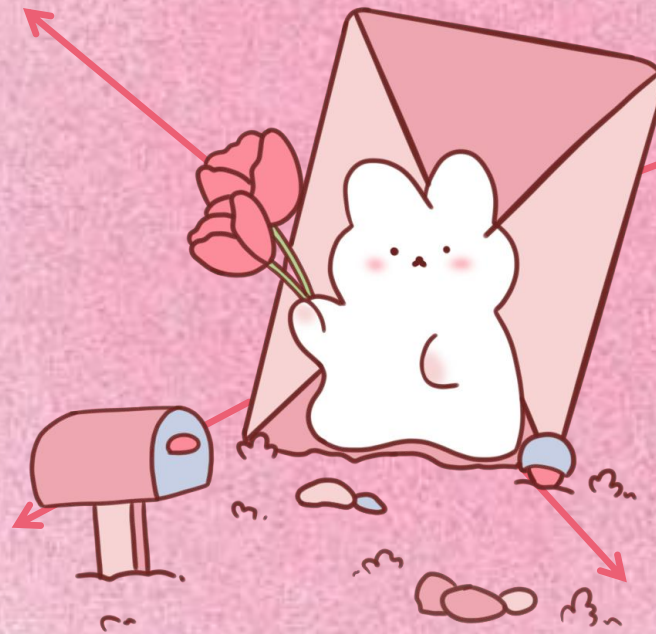
# PACT Analysis

## P(people):

International students living in the UK, especially those who live alone and are prone to feeling unaccompanied.

## A(activities):

International students use pillows when they are stressed or need help sleeping at night. The basic operation is simple. It soothes the user's emotions.



## C(content):

Tactile simulation settings, white noise library, social square content, users save their own preferences.

## T(technology):

Infinite Bluetooth link technology, pressure sensor + vibration motor, embedded heating module + temperature control sensor, built-in speaker. Multi-language switch.



# TOUCHIE

TOUCHIE



Kang Kang

Chemical engineering undergraduate student  
often feels lonely  
mostly due to academic pressure  
and occasionally due to cloudy weather, which  
makes her feel anxious and lonely.



ZOE

communication design research institute  
Sometimes you feel lonely  
when it rains in the UK  
when there is too much homework  
when you miss your family at night

User Analysis User Analysis User Analysis

On JANUTARY  
10th

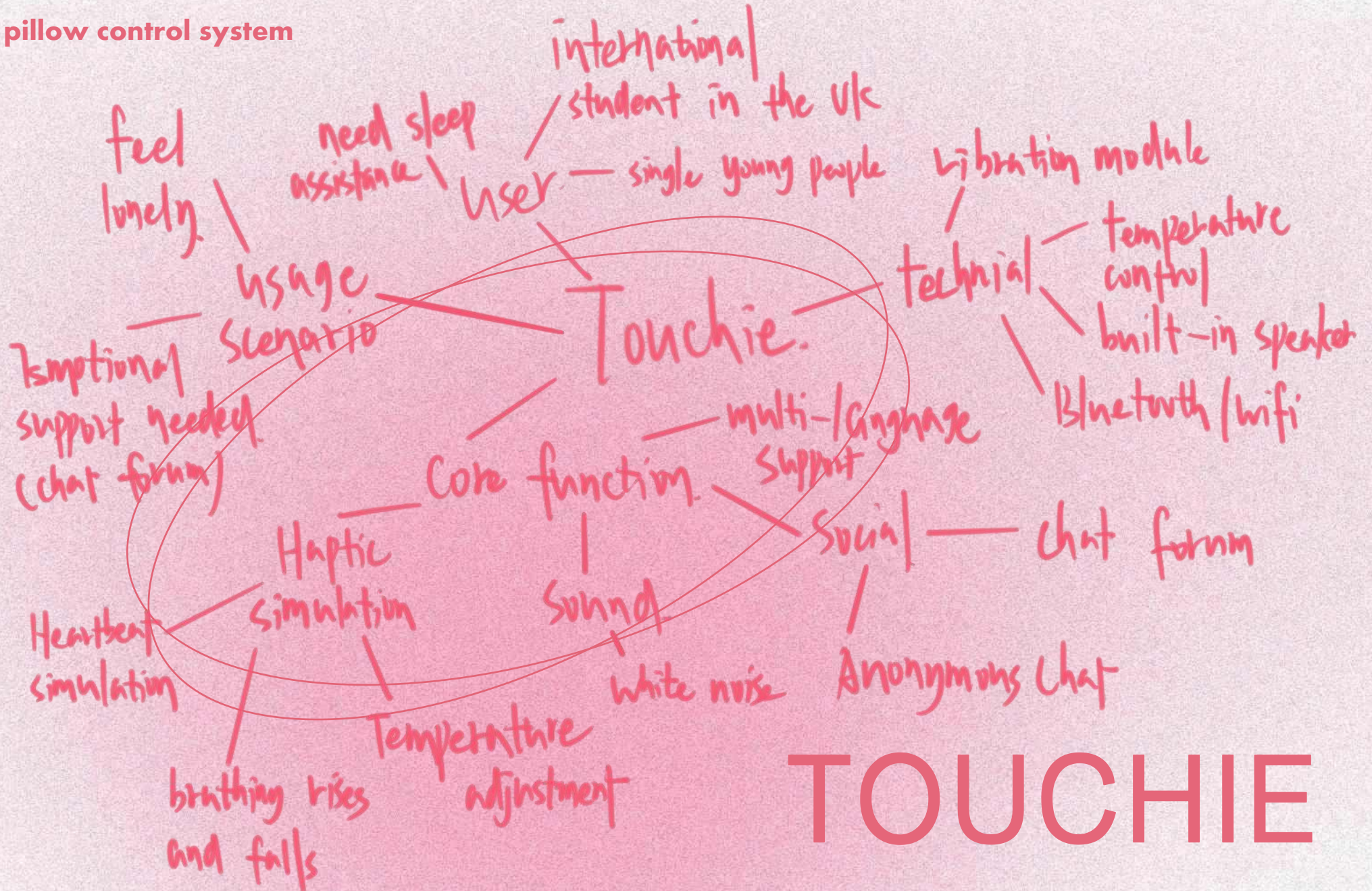
On JANUARY 10th  
TPOUCHIE

TOUCHIE



# MINDMAP

Smart pillow control system



# TOUCHIE



# Q&A

## Source of Inspiration

I need to hug a quilt or pillow when I feel lonely, and white noise can also make me relax. I think it would be more convenient to combine the two to create a smart hugging pillow.

## THEORETICAL BASIS

. Polyvagal Theory  
proposed by: Stephen Porges  
Hearing a low-frequency, steady rhythm similar to the sound of a heartbeat can reduce sympathetic nerve activity and trigger a calming response.

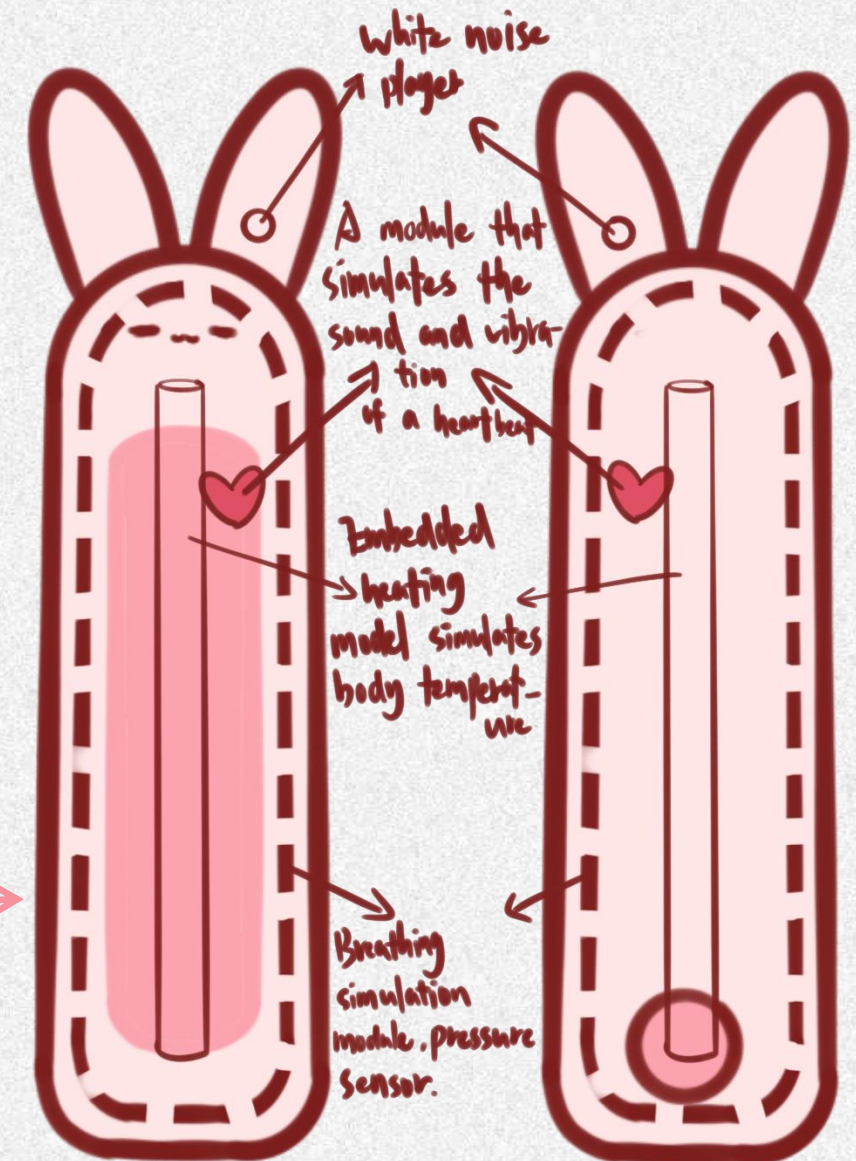
## Design of Pillow

Different blocks are set up inside the pillow to achieve the desired design effect (white noise, simulated heartbeat, breathing, temperature).

BUNNY

Smart

Pillow





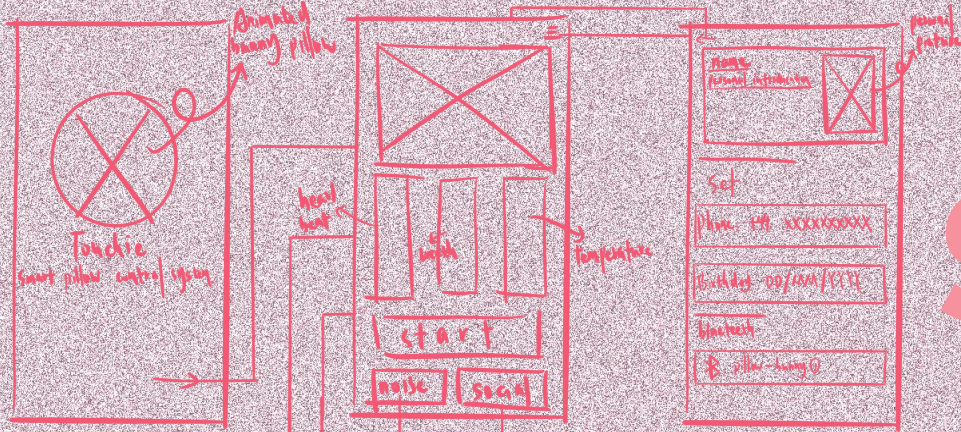
# Sketch

## First draft

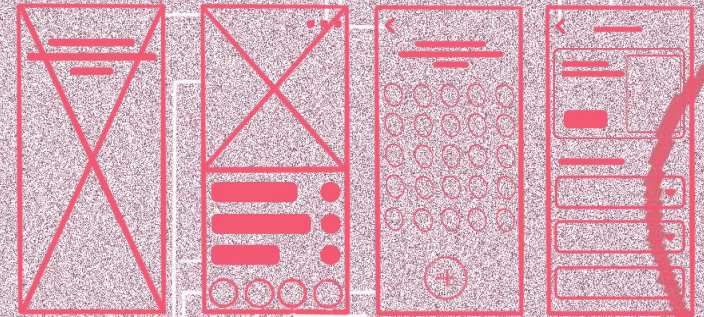
The logic is not clear enough and the interaction cannot form a closed loop. The adjustment control page is not aesthetically pleasing.

## Second draft

The logic of page clicks has been optimised. The functions are more clearly distributed. A login screen and a homepage have been added.

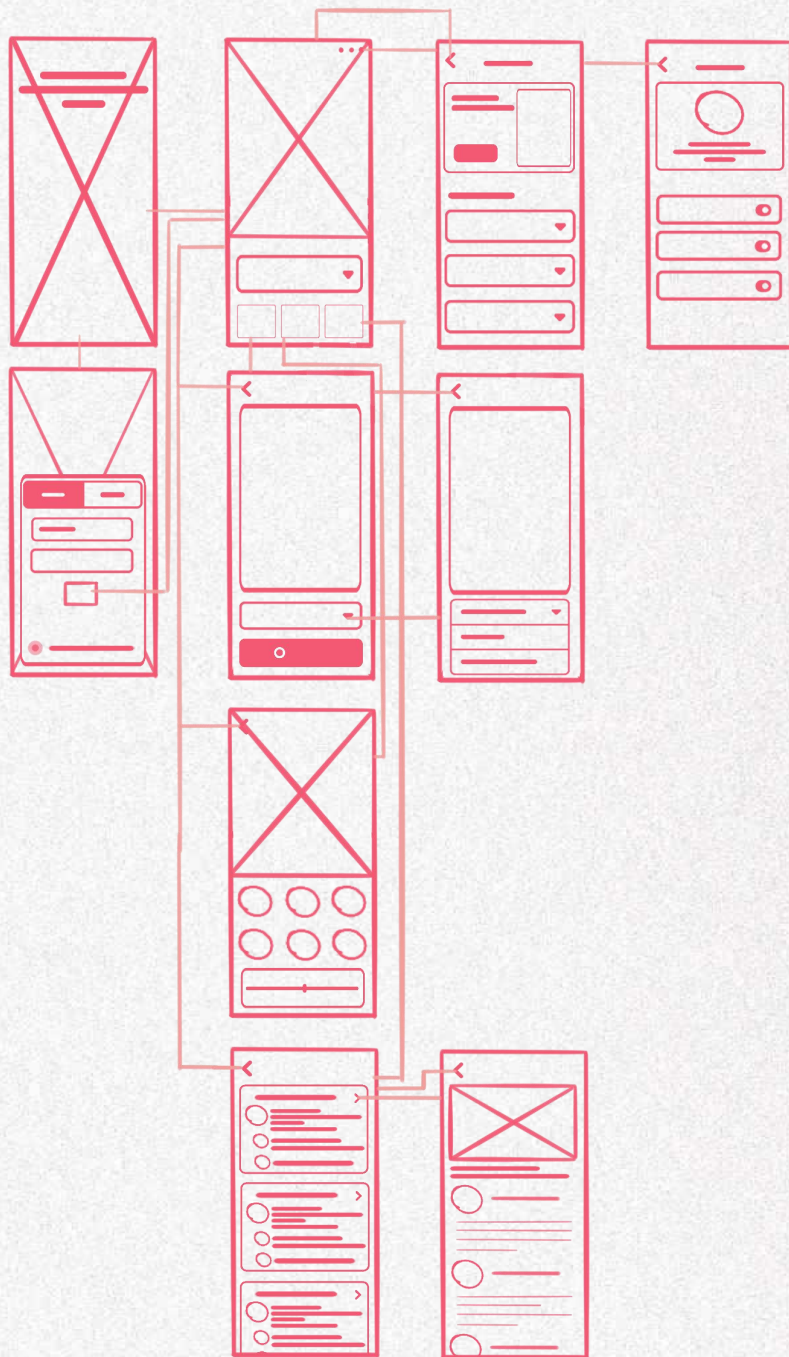


TOUCHIE TOUCHIE TOUCHIE TOUCHIE



**TOUCHIE**  
SMART PILLOW  
CONTROL SYSTEM





Compared with the previous two versions, the final version:  
has the clearest interactive logic.

The interface for detailed information on social functions has been improved.

The settings page is divided into an app settings page and a personal settings page, which provides clearer and more concise information.

The design of the white noise page has been optimised to make it more aesthetically pleasing and stylish.

# LOW-FIDELITY DESIGN



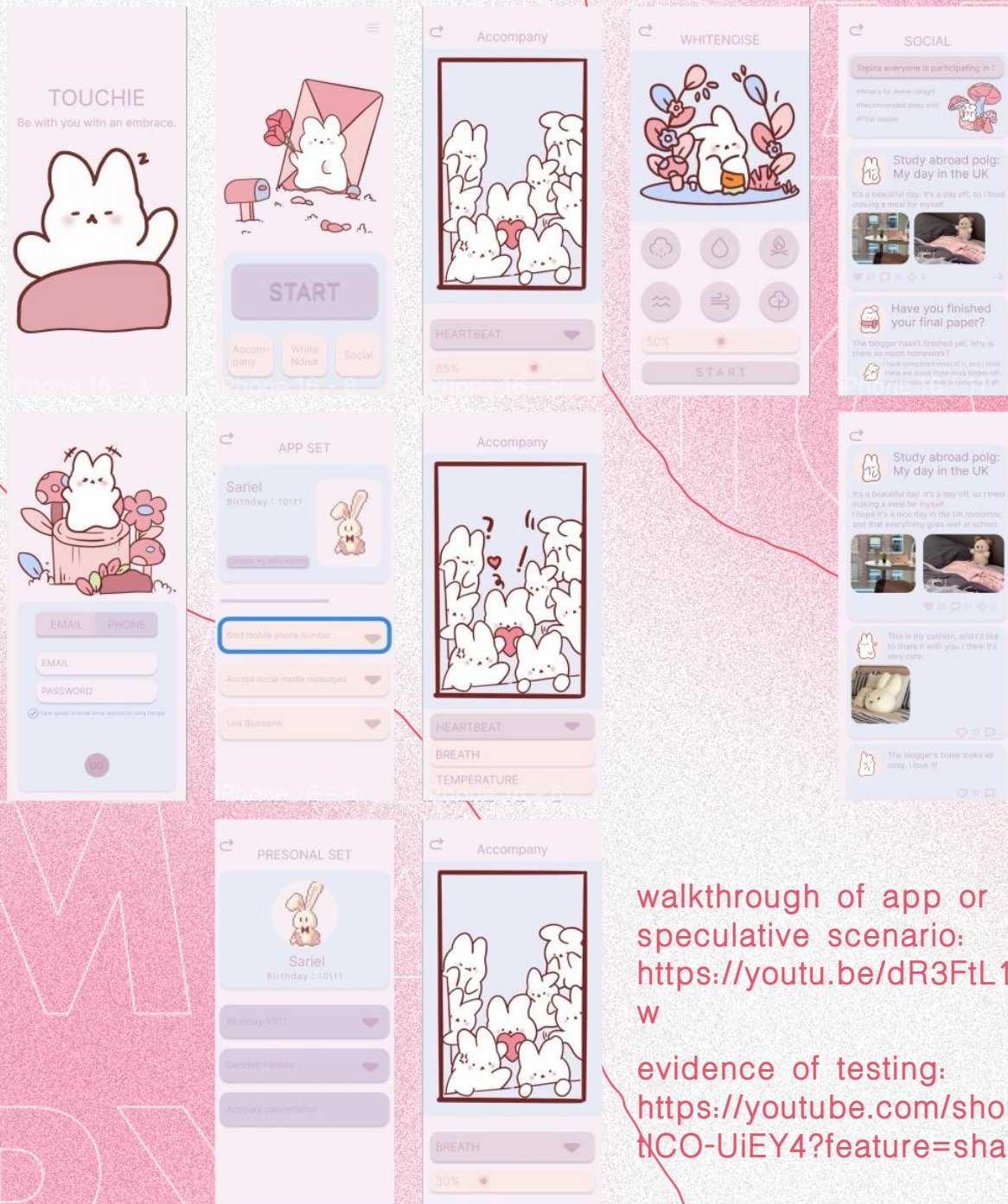
# High-fidelity Design

The design of the app is based on the rabbit shape of the pillow and features a rabbit theme.

The colour scheme uses cute pinks and blues to add a sense of warmth.

The pages clearly distinguish between the breathing, heartbeat and temperature control sections and the white noise section.

The social media section allows users to find friends with similar interests, reducing feelings of loneliness.



walkthrough of app or  
speculative scenario:  
<https://youtu.be/dR3FtL1860w>

evidence of testing:  
<https://youtube.com/shorts/uNCO-UiEY4?feature=share>



BUNNY

HAOYUE GUAN 

THANKS

TOUCHIE

Smart pillow control system