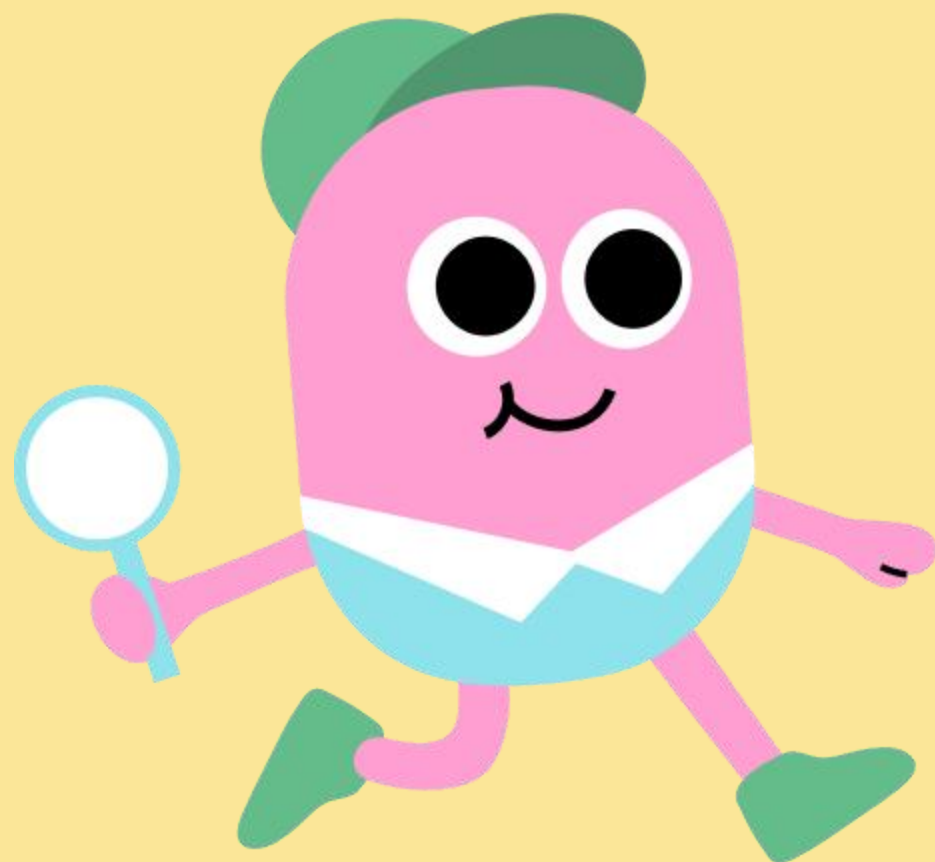


# HEAT EASE

ELECTRIC  
HEATING  
CONTROL  
APP



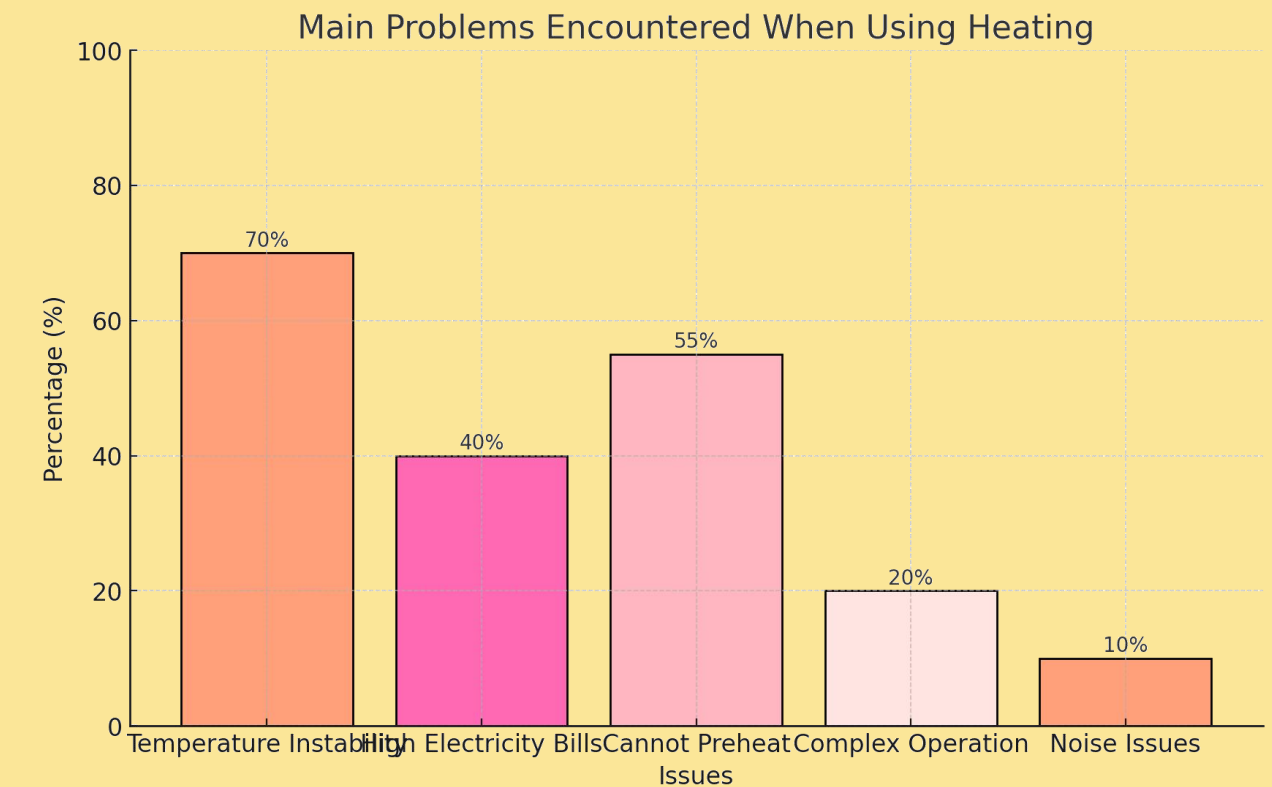
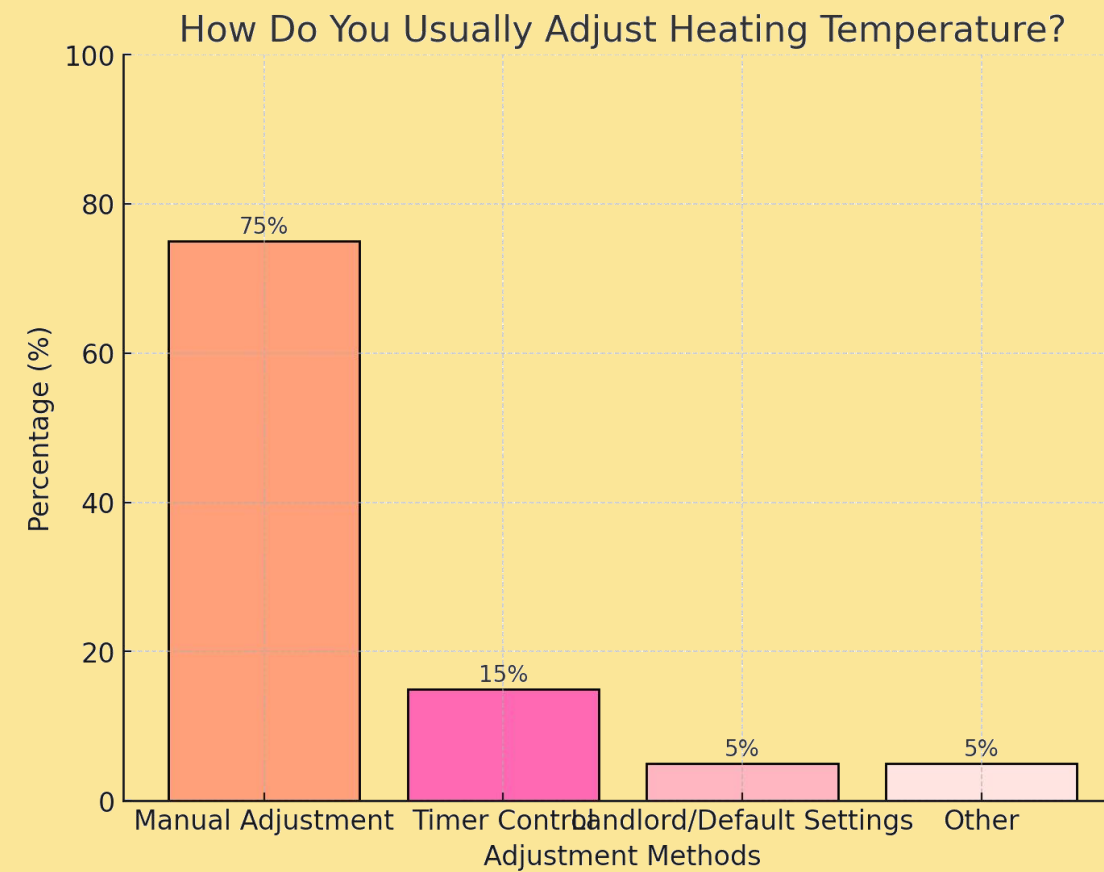
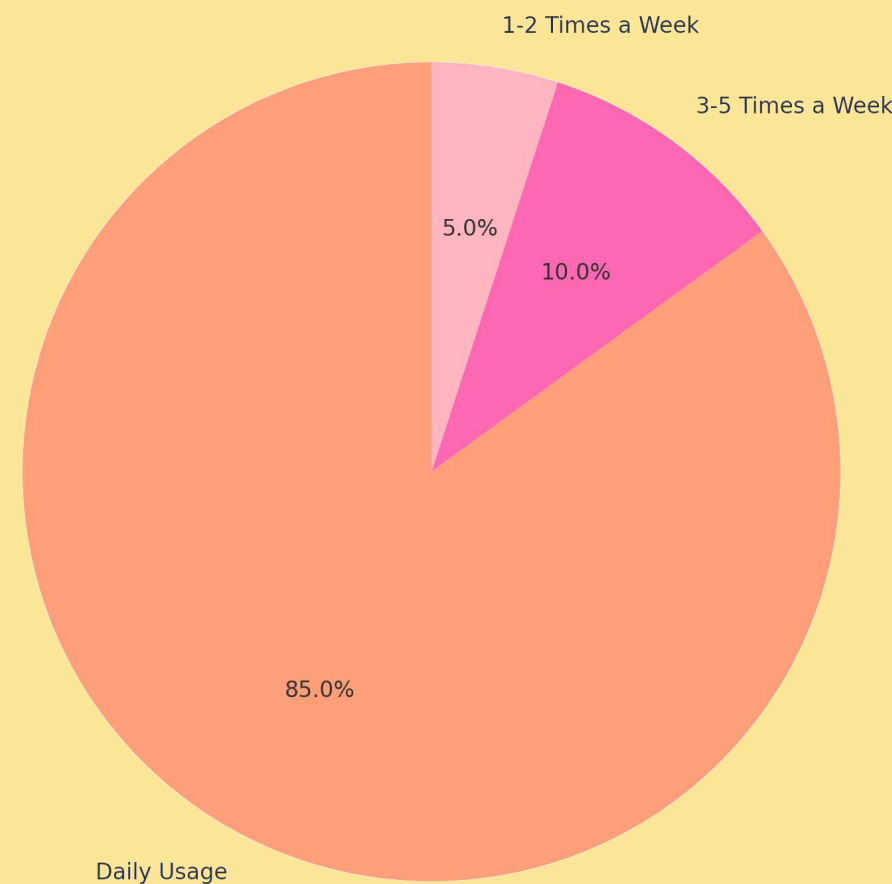
**Zixuan Zhang - 36036064**



# 1. RESEARCH (questionnaire survey)



How often did you use heating in the past week?  
Daily: 85%, 3-5 times a week: 10%, 1-2 times a week: 5%



**Summary:** Most frequently use heating daily, facing issues like unstable temp, high bills, and complex operation.



# 1. RESEARCH (interview)



Kangmin Jin

**Age:** 26

**Occupation:** British students (PhD)

**Daily use of electric heaters:** daily use

**Trouble:** 1. Unstable temperature of electric heater  
2. I'm worried about the energy consumption.

**Needs:**

1. Easier temperature control
2. Want to know energy consumption and electricity costs at all times



Haoyue Guan

**Age:** 22

**Occupation:** British students (PhD)

**Daily use of electric heaters:** 3-5 times a week

**Trouble:** It's cold when get home.

**Needs:**

1. Want to remotely control timed heating on/off



## 2. PACT (analysis)

### PEOPLE

**1.Age:** 18-30 years old predominantly

**2.Target audience:** International students in the UK

**3.Technical proficiency:** Generally familiar with smartphone operations and open to trying new technologies.

**4.Needs:** Convenience, Intelligence, Energy Efficiency

### CONTEXT

**1.Social Environment:**

- Shared rooms require heating coordination.
- Energy-conscious, avoiding high bills.
- Busy schedules need quick, efficient use.

**Task Environment:**

- Used in short intervals like commutes.
- Needs remote operation support.
- Simple interface for fast tasks.

### ACTIVITIES

**1.statues:** Outdoor, Indoor

**2.Main activities:** Adjusting the heating

**Habits:** Frequent switching on of heaters

**Challenges:** The temperature of the electric heating is unstable and cannot be switched on earlier.

**Motivation:** Easier use of heating, booking of switching times, checking of electricity meters

### TECHNOLOGIES

**Remote Control**

**Bluetooth Connectivity**

**Energy Saving Algorithms**

**Weather Monitoring**

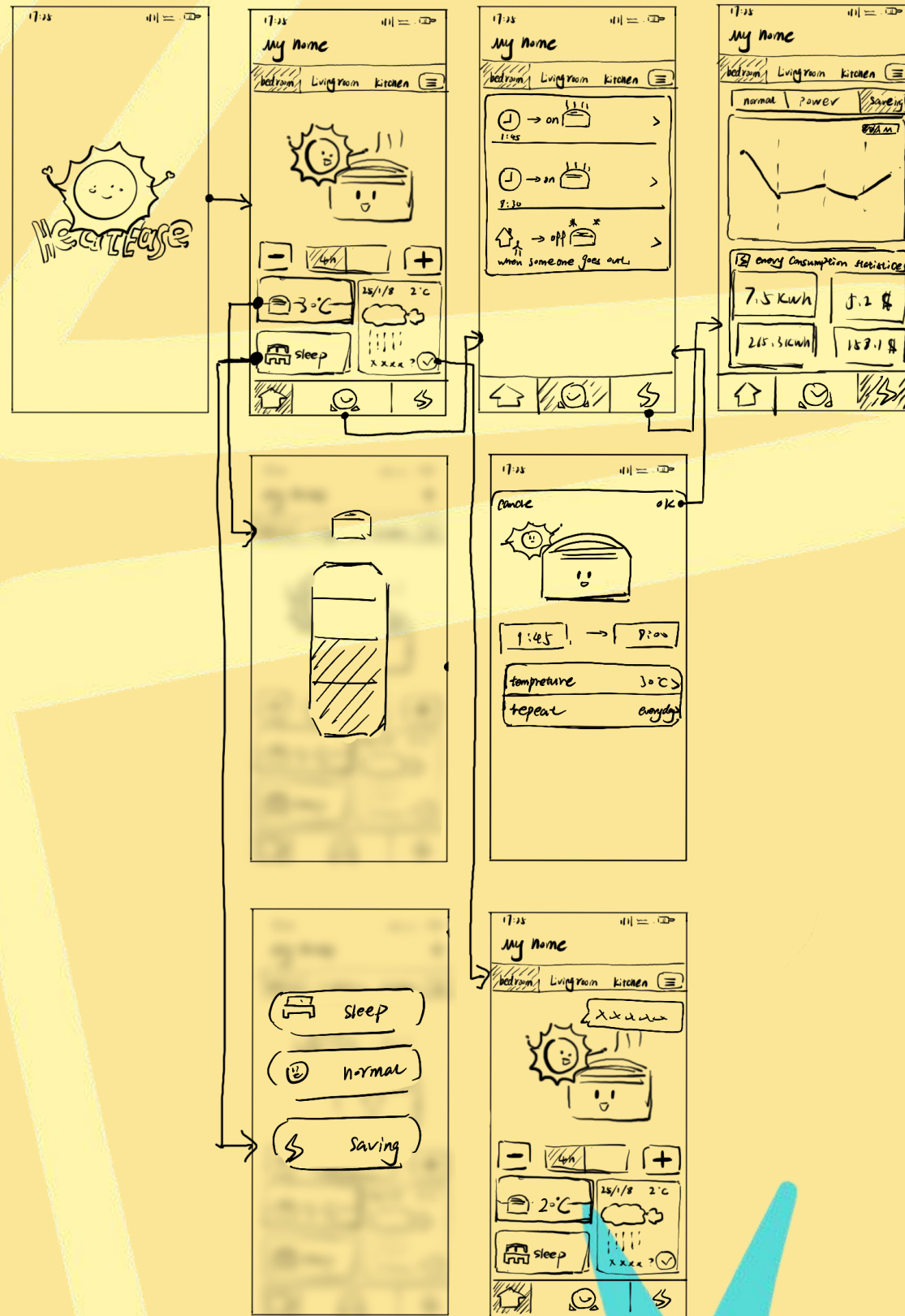
# 3. MINDMAP





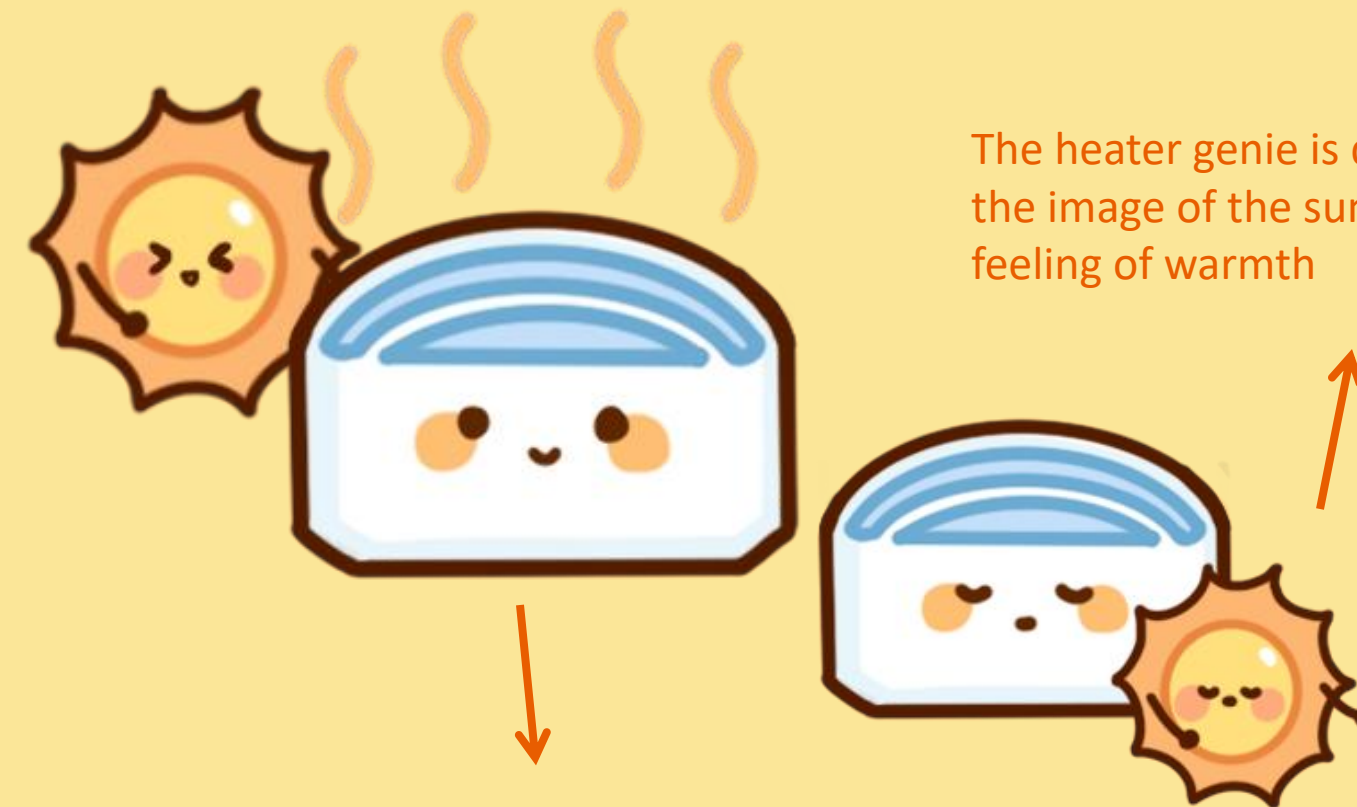
# 4. SKETCH, COLOUR AND CHARACTER DESIGN

## Sketch



## Character Design

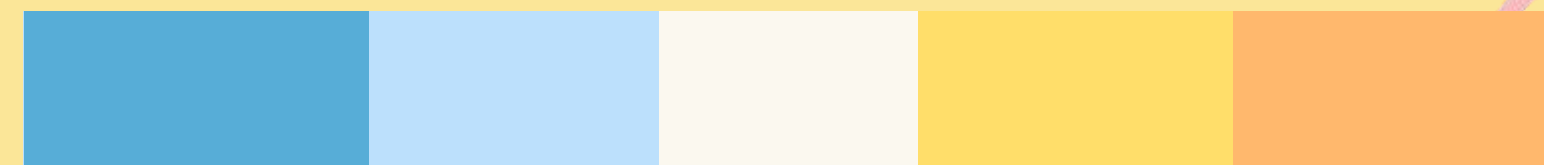
Heating and Heating Genie



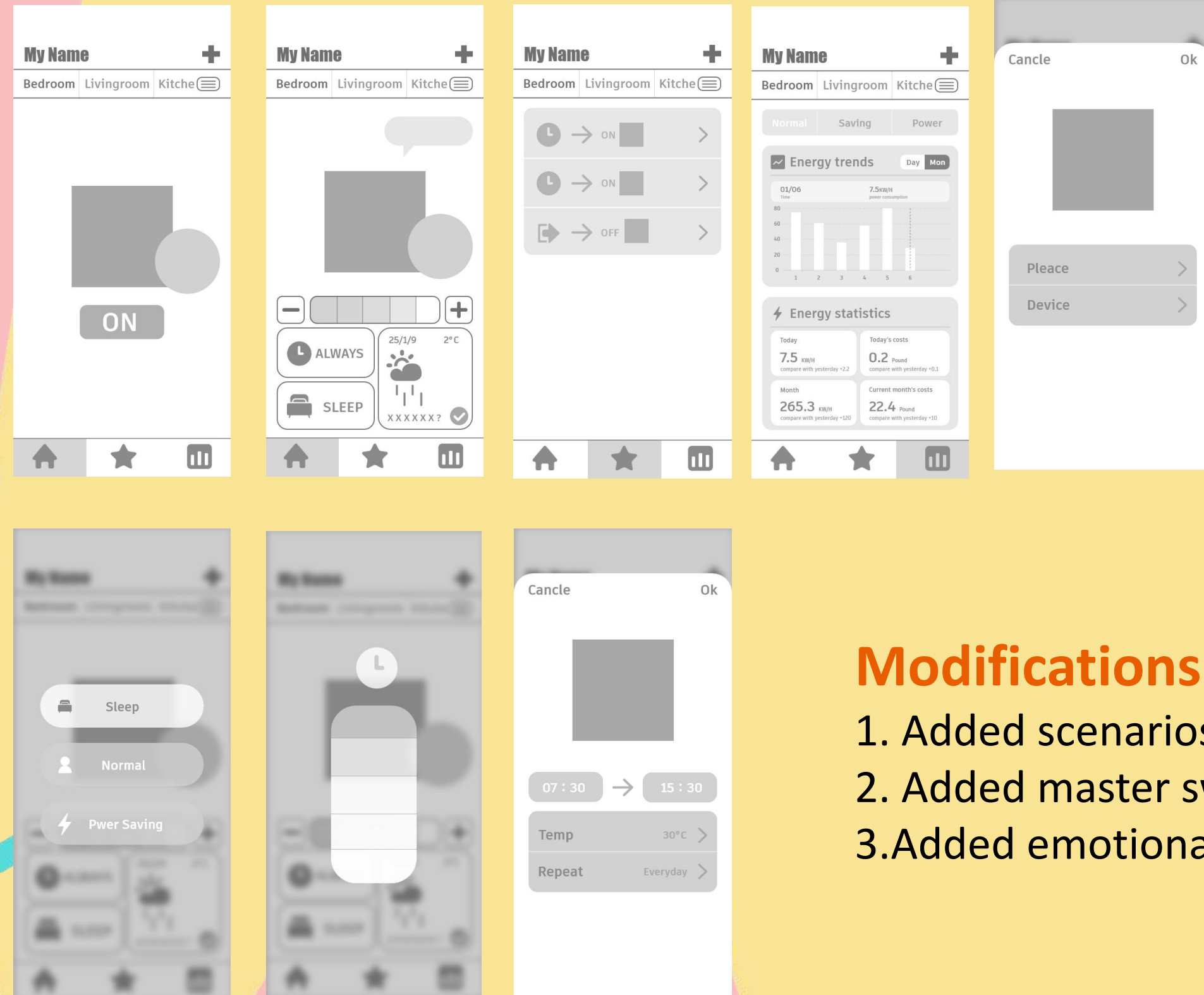
The heater genie is designed with the image of the sun to give the feeling of warmth

The design of the heater refers to the shape of the electric heater, and the main colour is blue and white, which gives the feeling of coldness

## colour scheme



# 5. LOW-FIDELITY MODEL

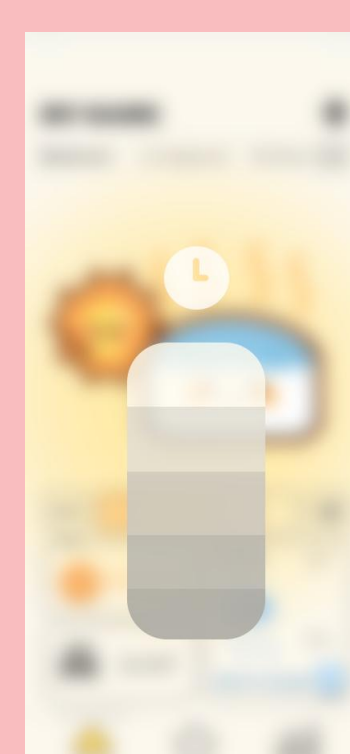
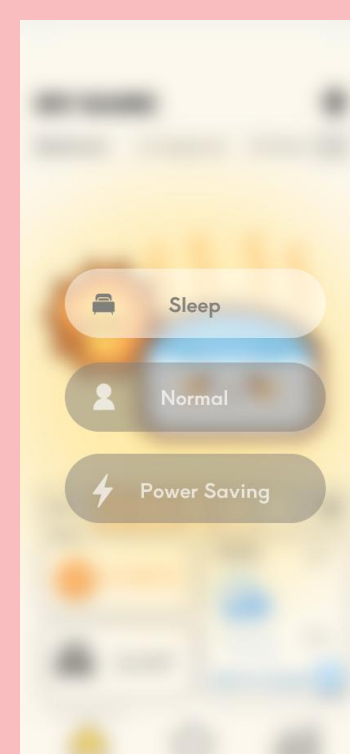
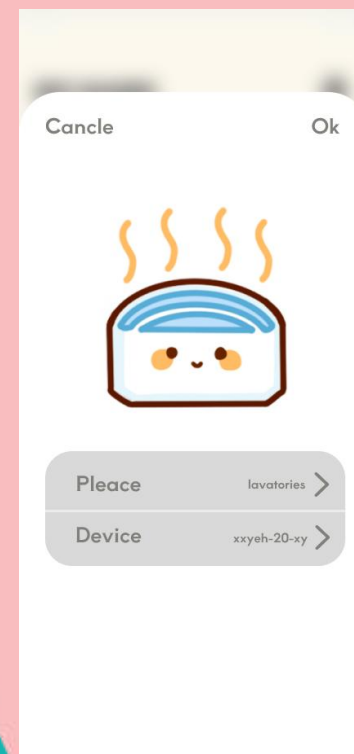
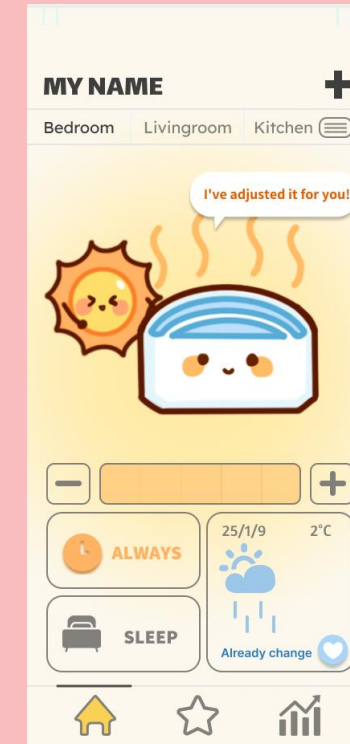
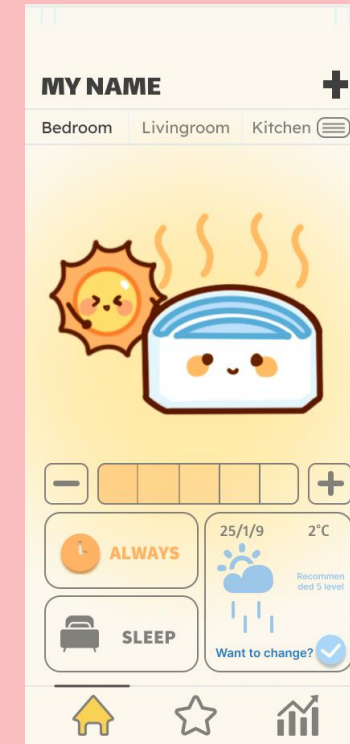
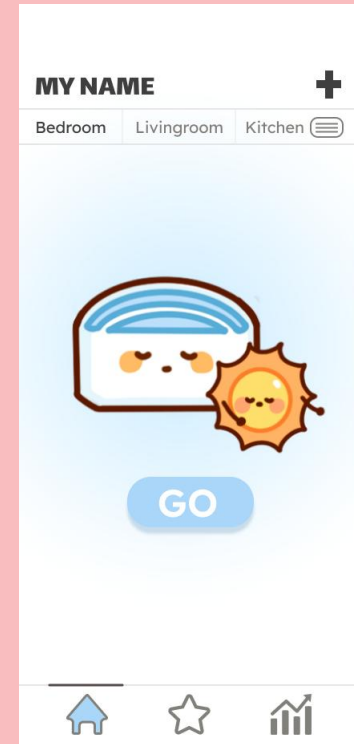


## Modifications:

1. Added scenarios and equipment selection
2. Added master switch
3. Added emotional temperature control feedback

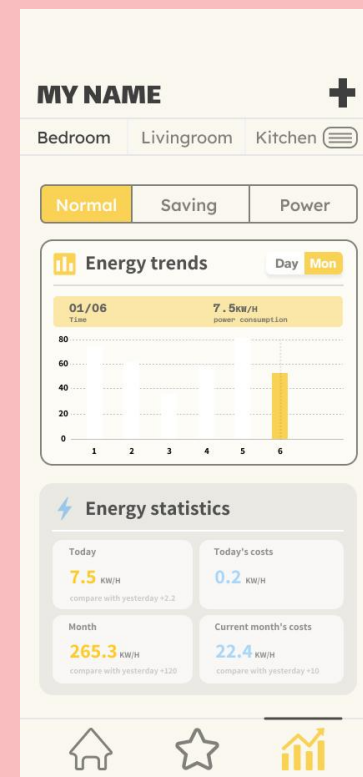
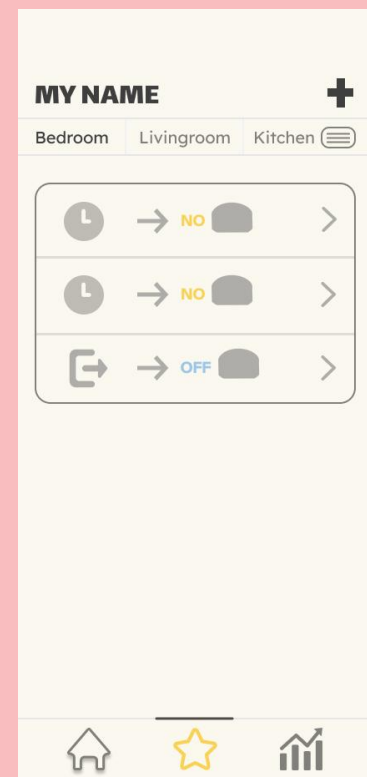


# 6. HIGH-FIDELITY MODEL





# 6. HIGH-FIDELITY MODEL

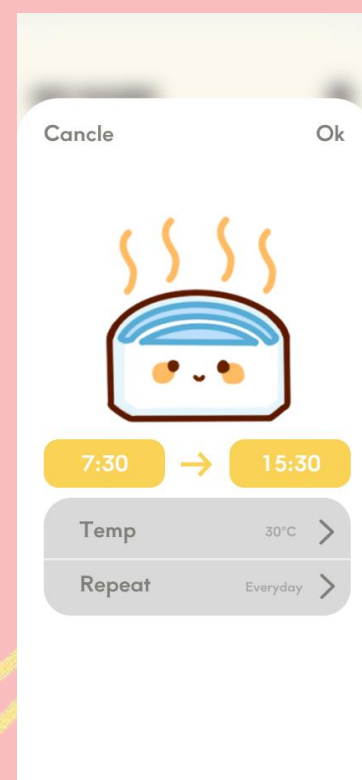


**User Testing:**

<https://youtu.be/3oZw3S0US4o>

**High fidelity interactive presentation:**

<https://youtube.com/shorts/tFrv4LKUzVg>





THANK  
YOU!

