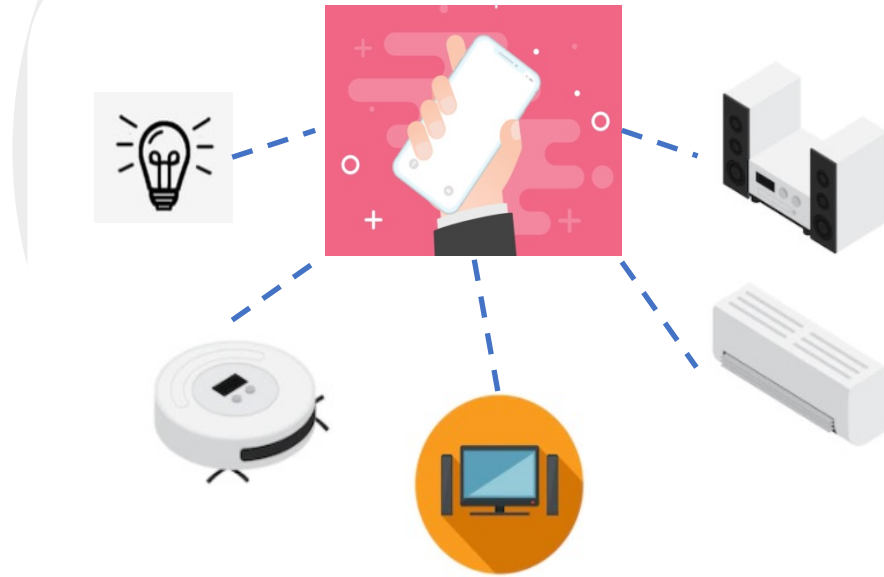
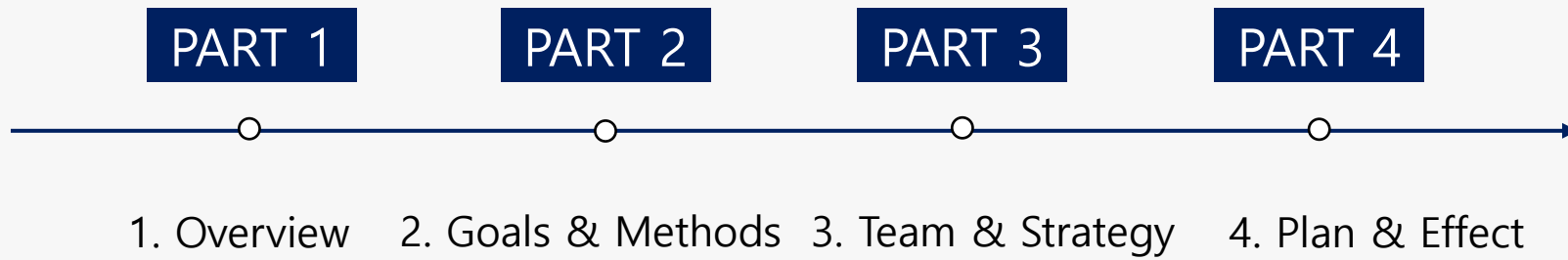


Smart Remote Control



Connect home appliances with single app

CONTENTS



PART 1 Overview

- 1 Problem
- 2 Goal

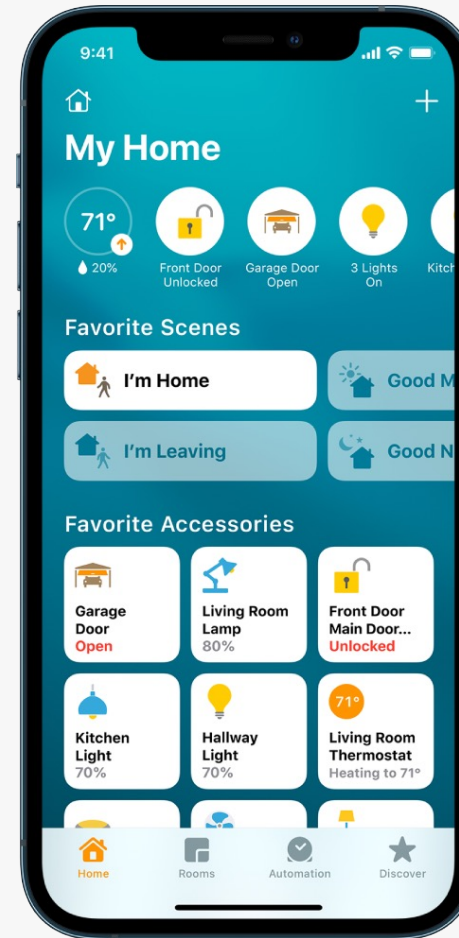
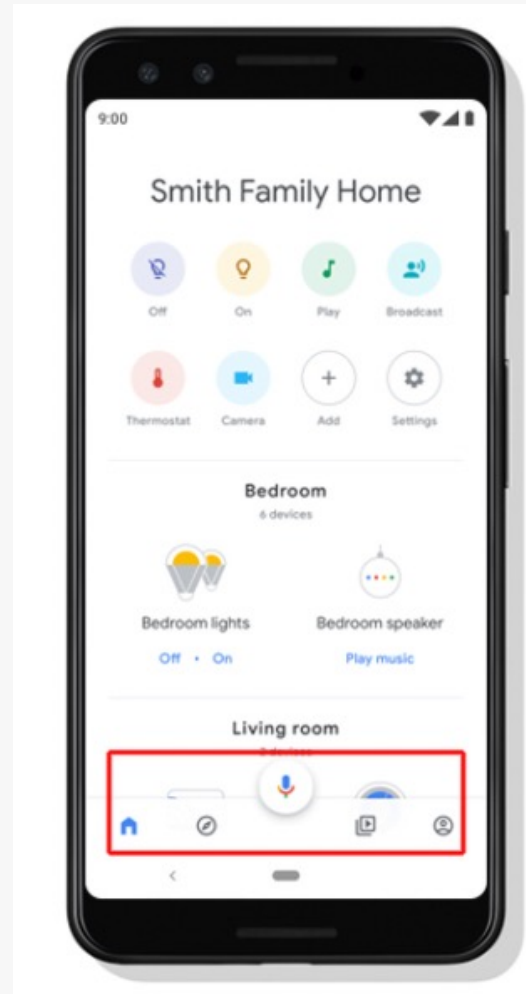
01 Overview

Problem 1



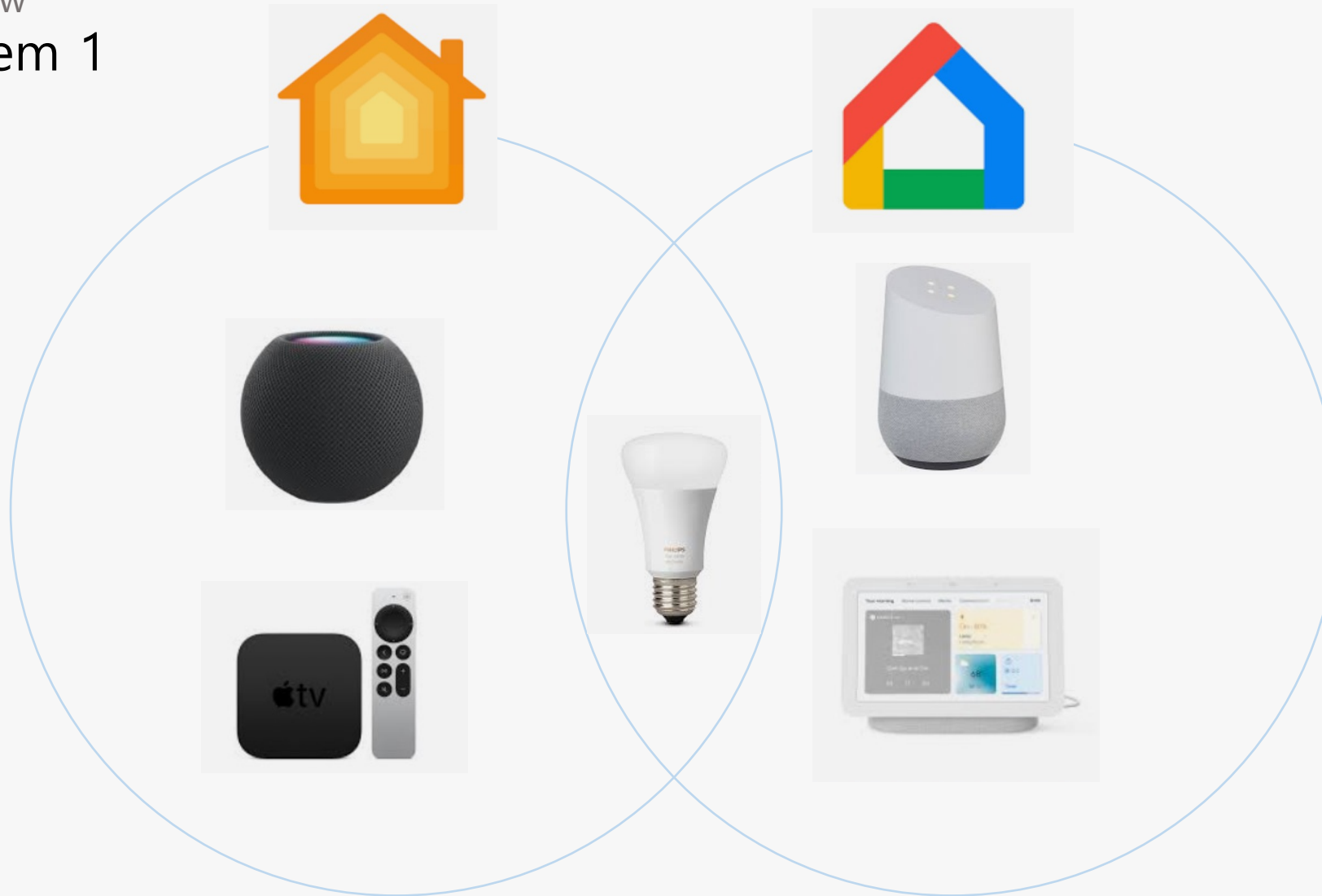
Apple homes and google home are two major smart home applications in the market.

01 Overview Problem 1



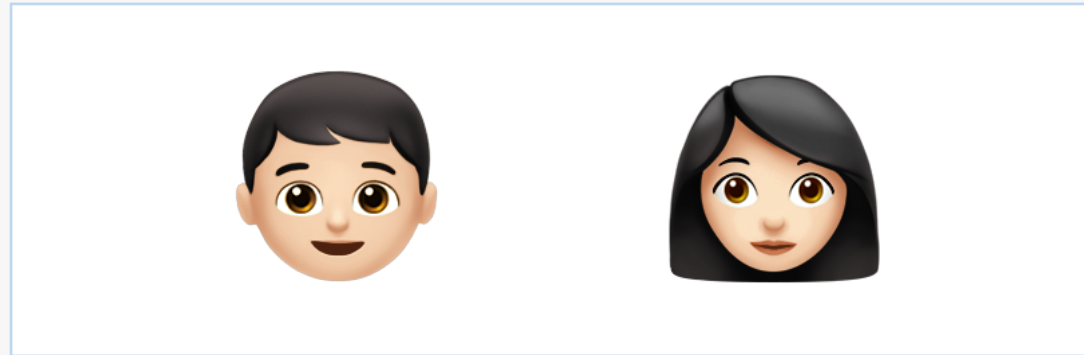
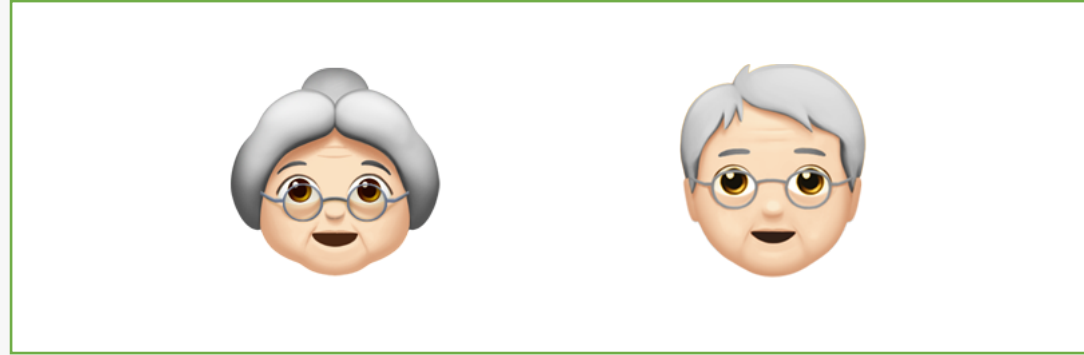
Apple homes and google home are two major smart home applications in the market.

01 Overview Problem 1



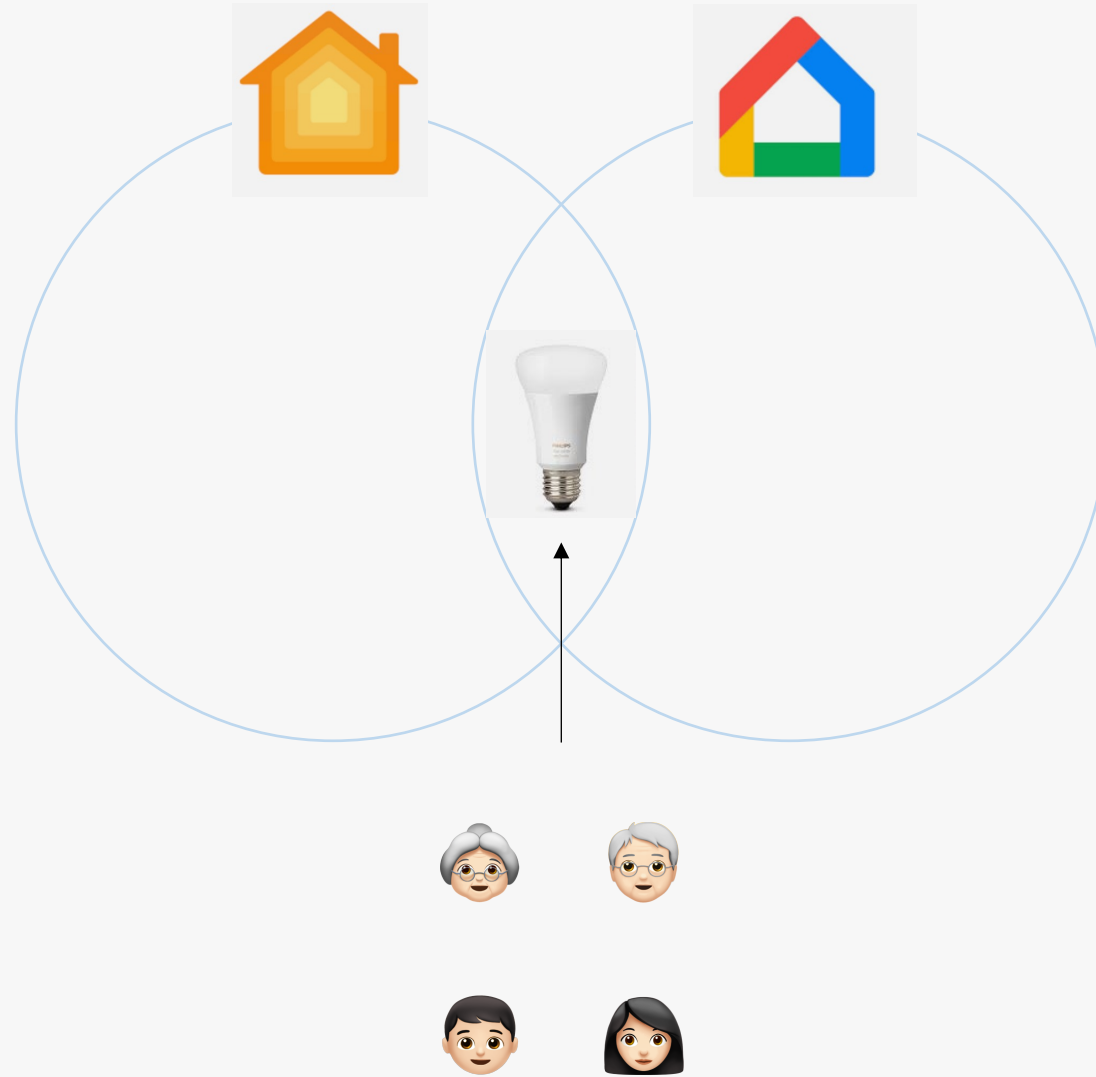
There are various devices that each apps support. But there are not much devices that is supported by both apps

01 Overview Problem 1



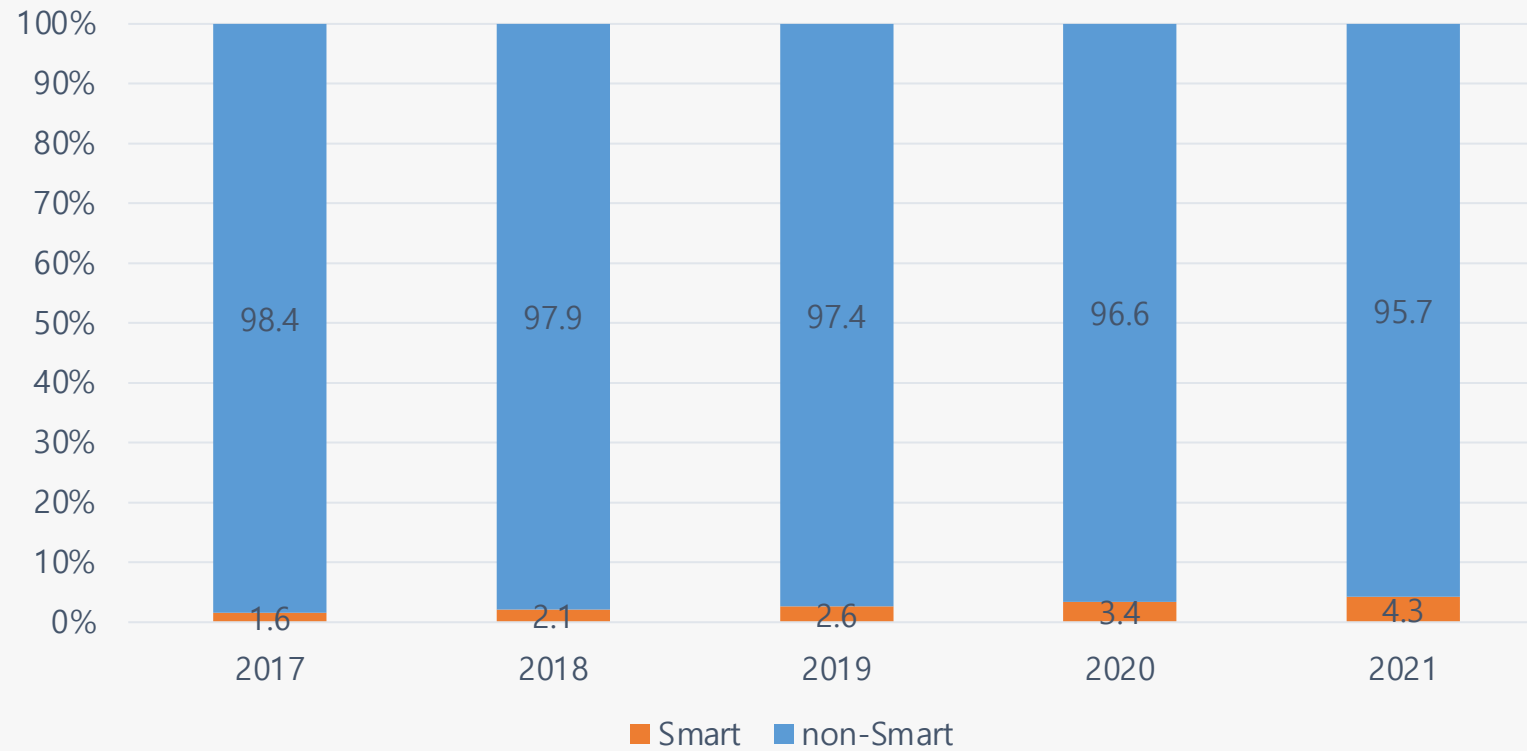
Family who have mixed use of Android phones and iPhones get limited choices.

01 Overview Problem 1



Family who have mixed use of Android phones and iPhones get limited choices.

Smart/Non-smart Penetration Rate



Smart home appliances market share is still very low. Most of the households use regular home appliances.

01 Overview

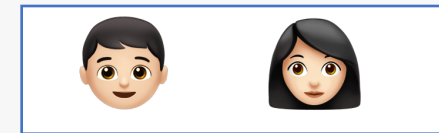
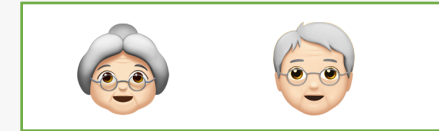
Goal

Using non-Smart home appliances



smart non-smart

Using both Android/iPhone



Our product target families who 1) use regular home appliances and 2) have both Android and iPhones

PART 2 Goals & Methods

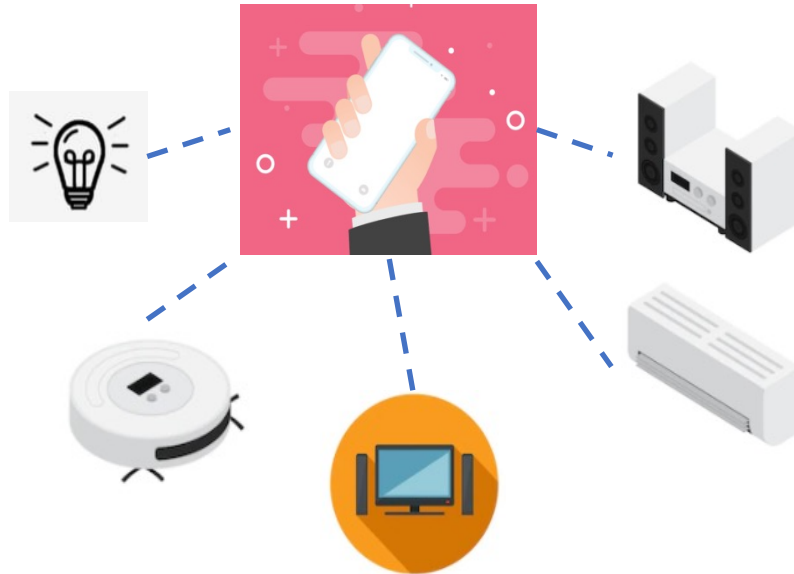
1 Goals

2 Methods

1 System Flow

2 Development tools

“ Smart Remote Control ”



Use multiple products with smart phone



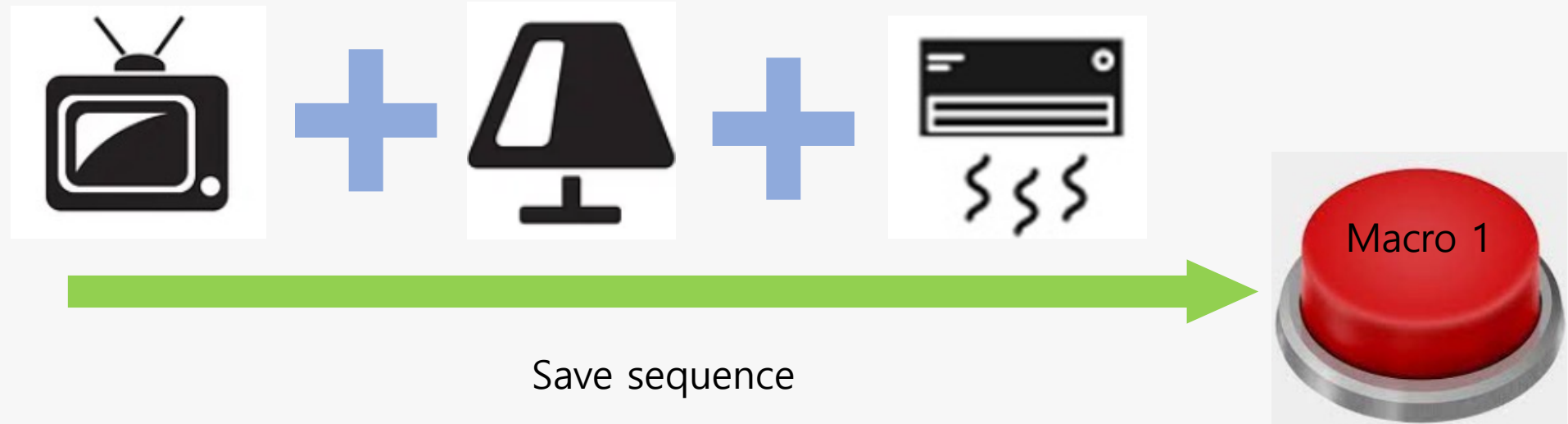
Macro & Combination



Reinforcement Learning

“Macro & Combination”

Example



Save your control actions as a single button!

“ Reinforcement Learning ”

The app learns the user's behaviors and recommends control in a specific environment.

- Users usually turn off the lights at 12pm.

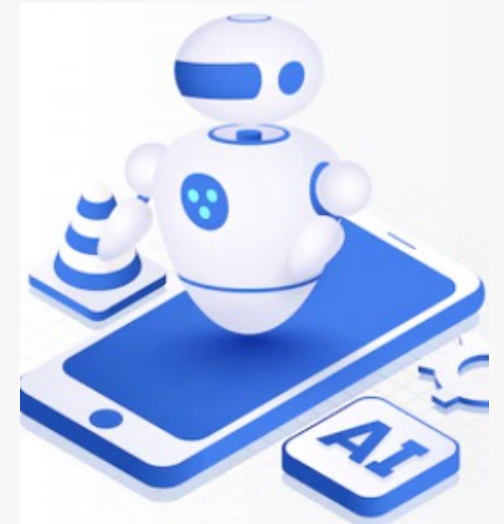
Will you turn off the light?
Click Here!

12:00 PM

Recommends the common behavior of the users who installed the app.

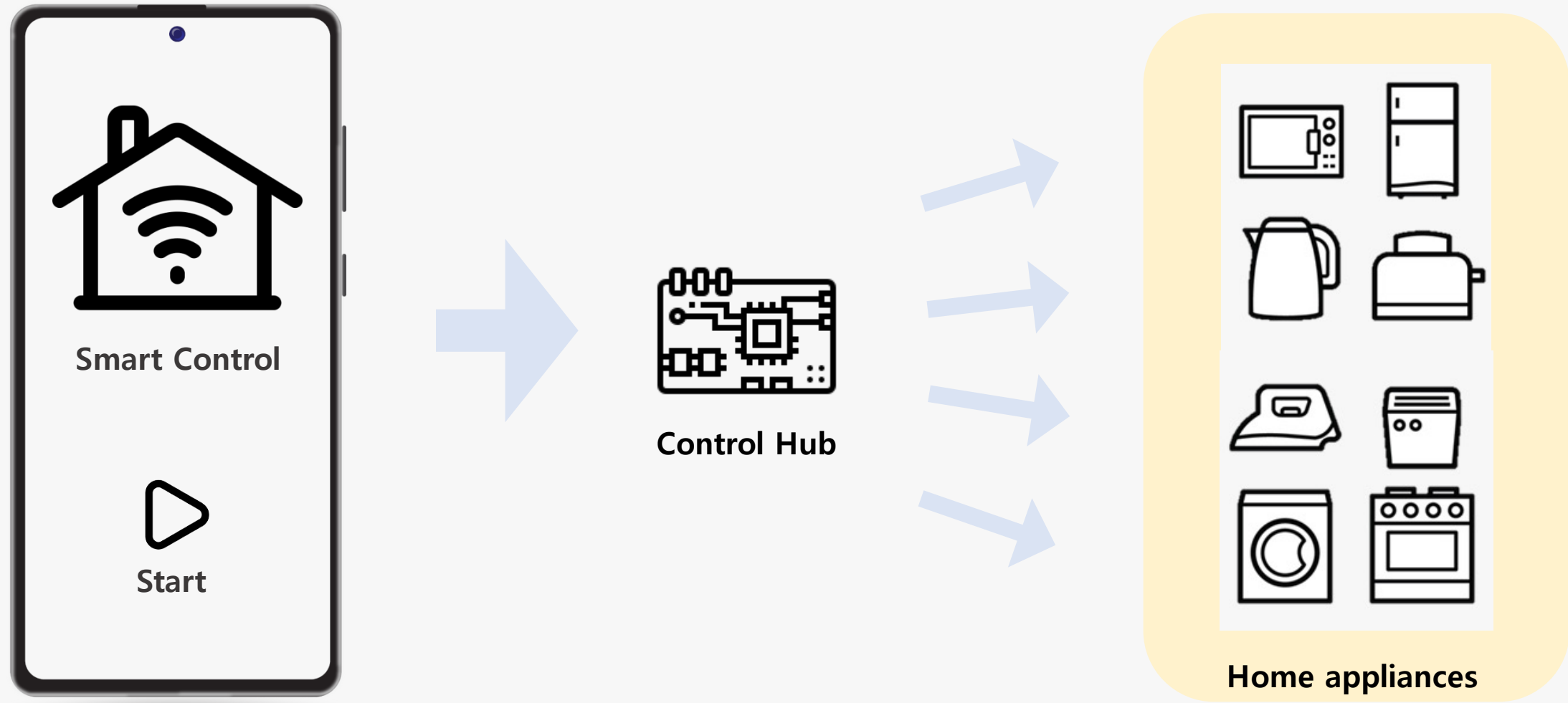
- Extremely humid weather-> Most user control air conditioner

Will you turn on the air-
conditioner?



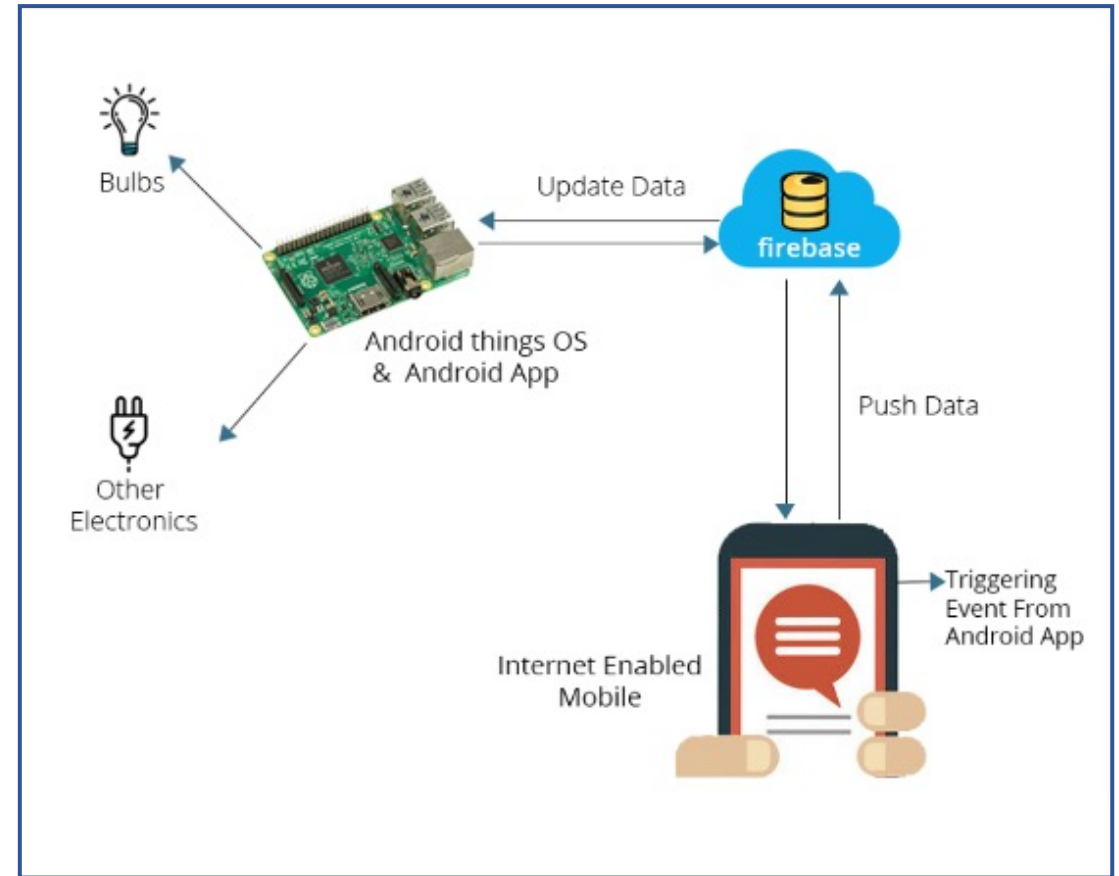
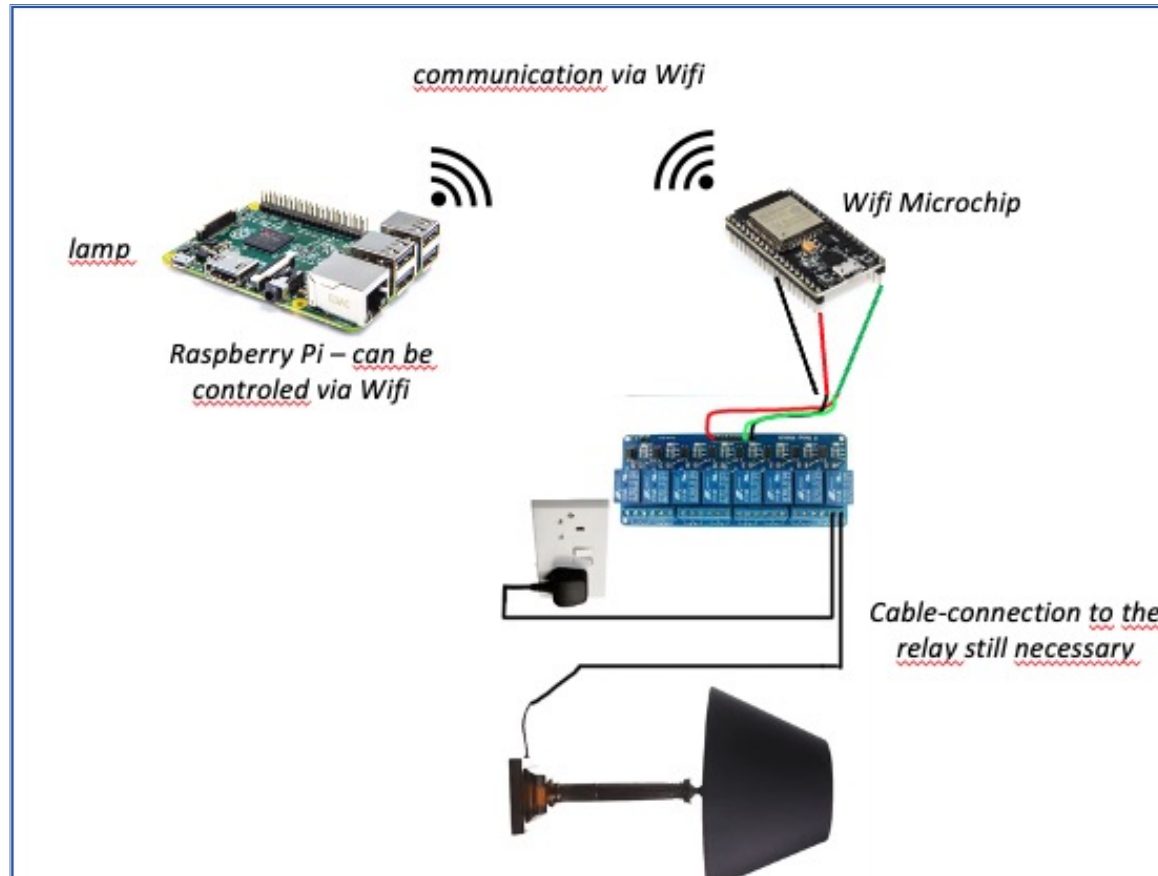
02 Goals & Methods

Methods – System Flow



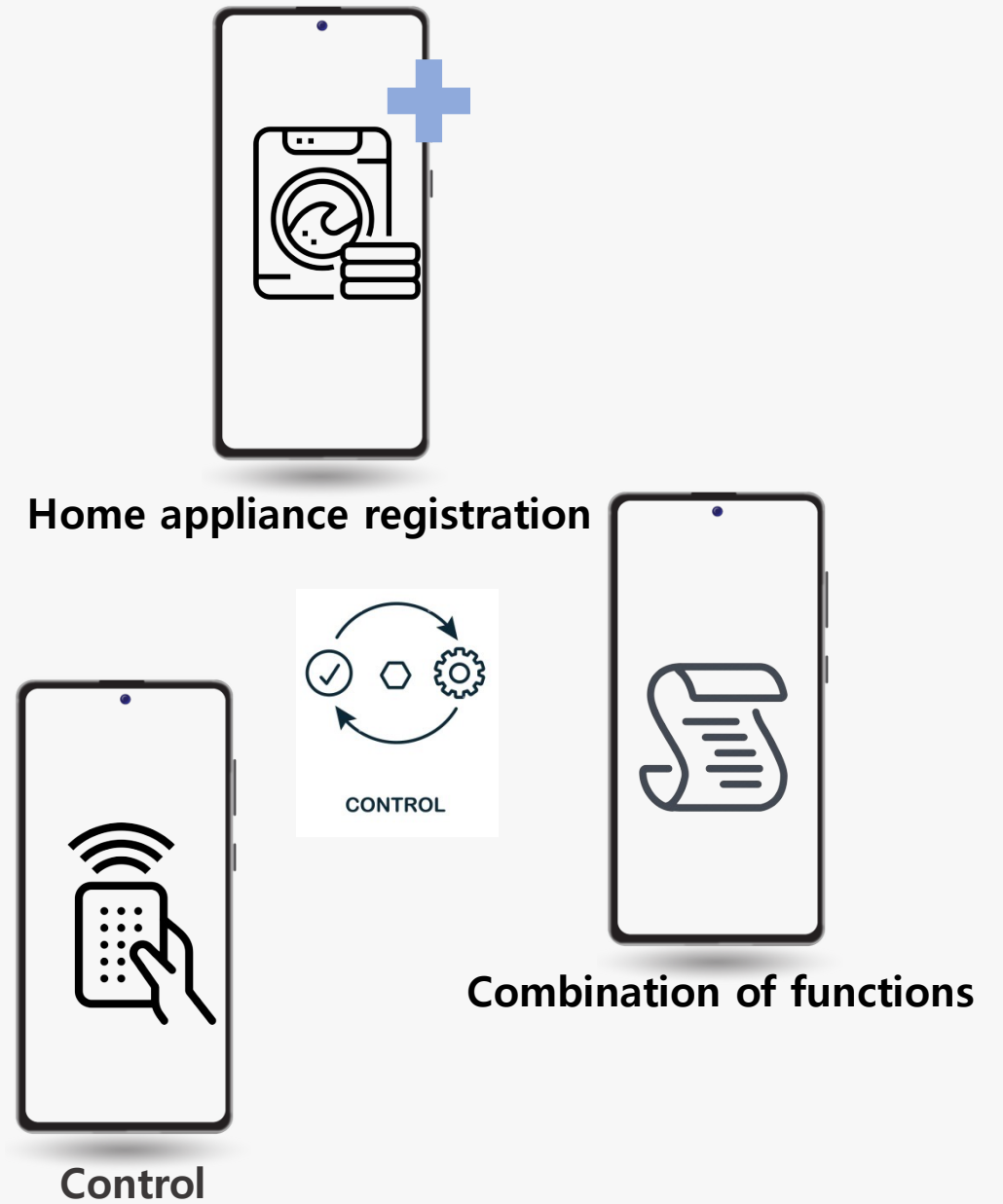
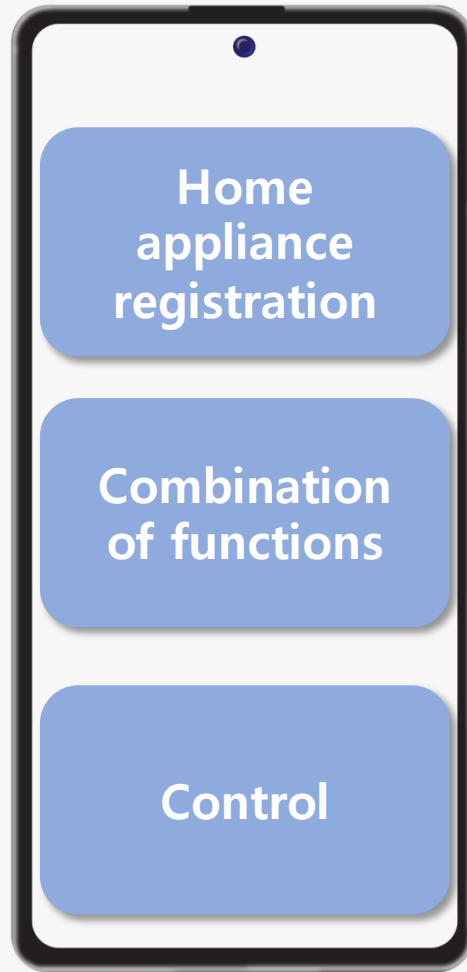
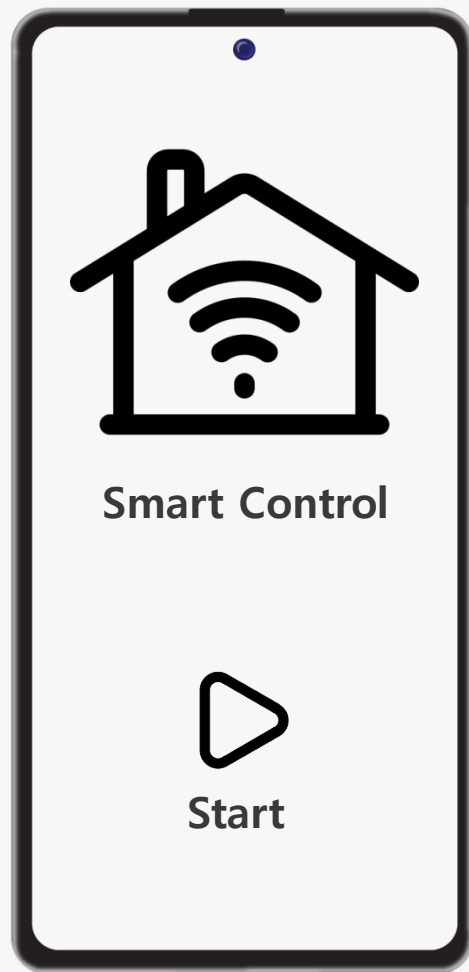
02 Goals & Methods

Methods – System Flow



02 Goals & Methods

Methods – System Flow



02 Goals & Methods

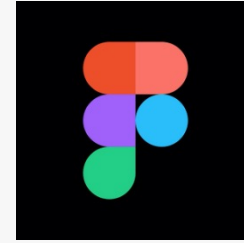
Methods – Development Tool

UI/UX design

Design prototyping



Adobe Xd



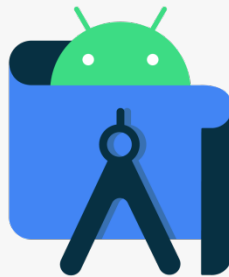
Figma

Design component



Adobe Photoshop

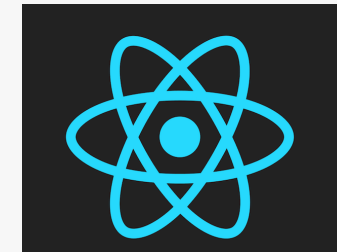
Application



Android Studio



Xcode



React Native

02 Goals & Methods

Methods – Development Tool

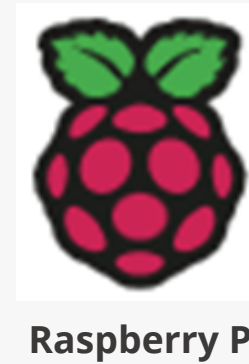
Server



DB



Tools

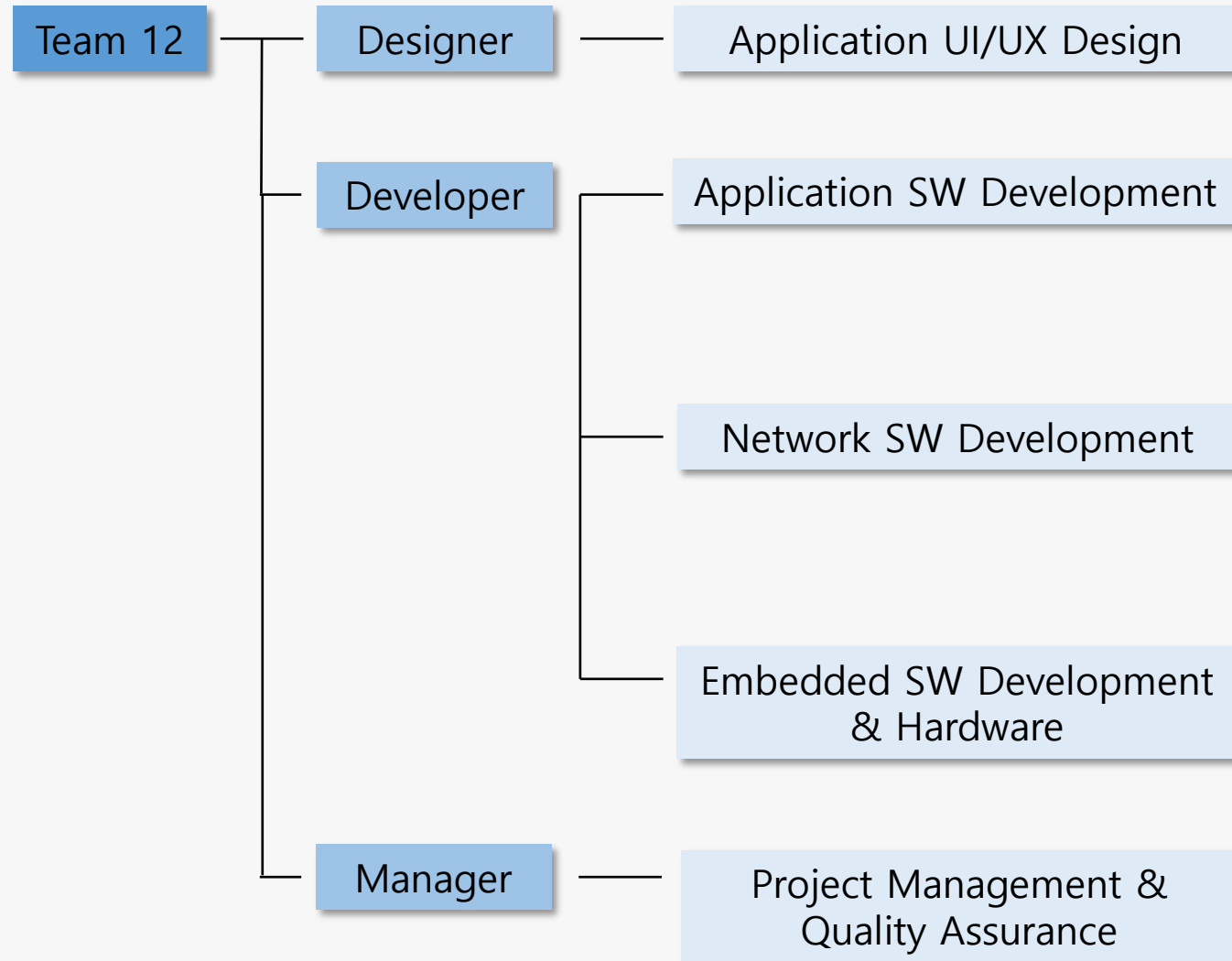


PART 3 Team & Development plan

- 1 Organizational Chart
- 2 Development Process
- 3 Development Schedule

03 Team & Development Plan

Organizational chart



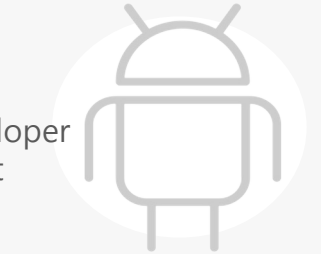
- **금상인**

UI/UX Designer
Design our application
Enhance user experience



- **이대희**

Mobile Application Developer
Overall app development



- **전종문**

Enable communication between
the target HW and our app



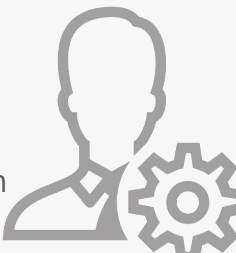
- **Stefan**

Design and build hardware using
Raspberry Pi
Develop SW for the HW



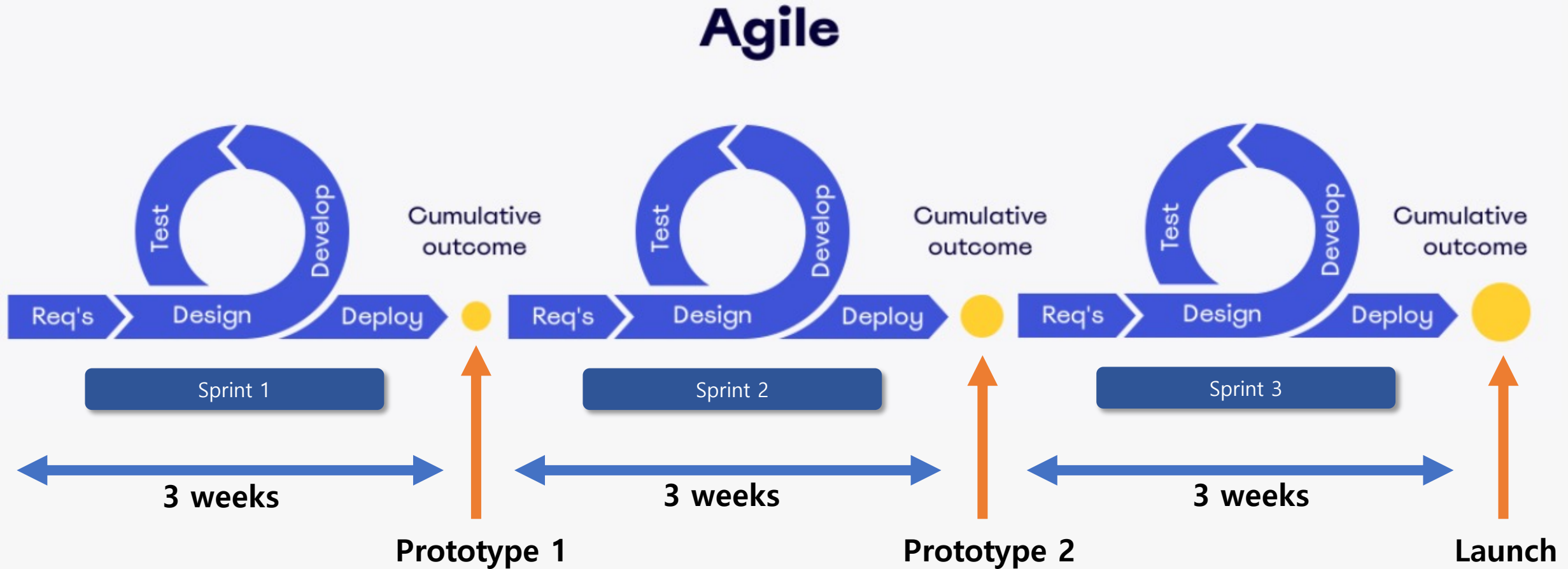
- **조윤근**

Test functionalities & performance of each
component
Integrate components and test the whole system
Make new requirements based on the results



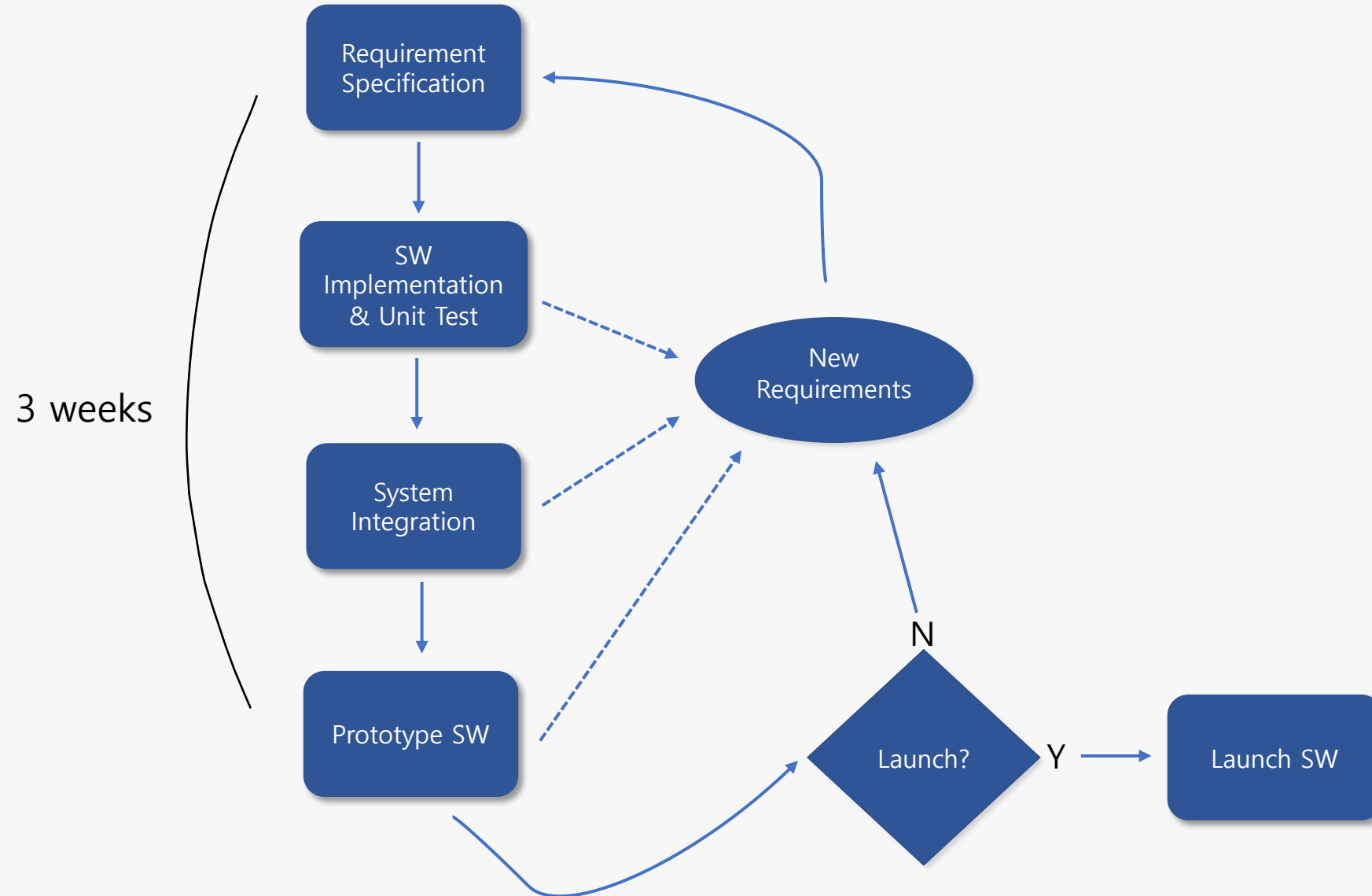
03 Team & Development Plan

Development Process



03 Team & Development Plan

Development Process



PART 4 Uses & Expected Effects

- 1 Uses
- 2 Expected Effects

04 Uses & Expected Effects

Uses



Add Connectivity

- You can add connectivity to your appliances in your house.
- Connected appliances can communicate with your mobile phone.



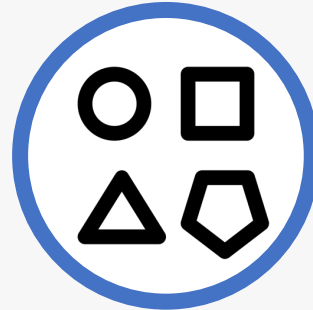
Timer Function

- Set timers for your appliances using the application.
- When the time is up, appliances are automatically turned on or off.



Remote Control

- You can use your mobile app to control your appliances.



Versatility

- Can be applied to many kinds of appliances.

04 Uses & Expected Effects

Expected Effects

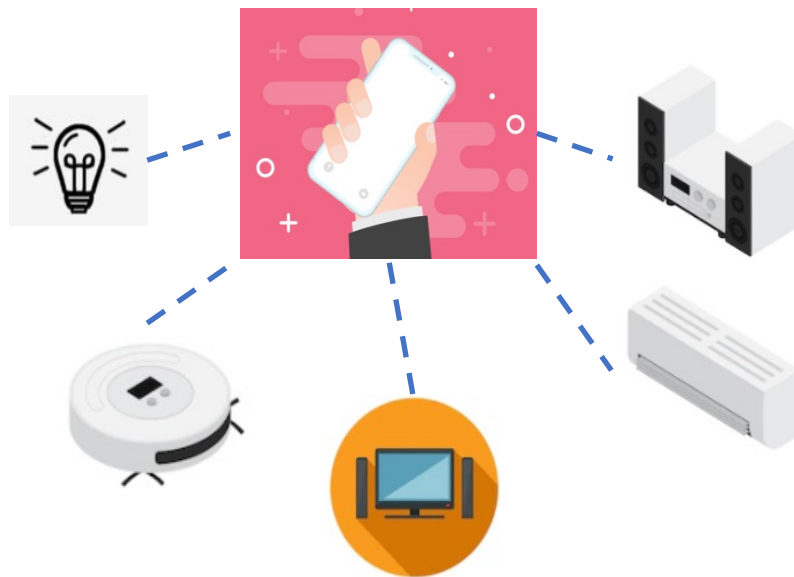


- You can conveniently use your app to turn on or off connected appliances and set timers for them wherever you are.



- Remote controlling system will save your time because you don't need to physically control connected appliances.

Thank you



Team 12