What are we trying to do?
What are we trying to do?

SAPHIRE
What are we trying to do?

We’re trying to build a communication and control interface for smart house devices,
What are we trying to do?

that is intuitive, useful, polymorphic, and applicable in different devices.
The Model

SAPHIRE is Semantic because it understands different user needs and situations,
The Model

semi-Autonomous, because it reacts to explicit user input (e.g. voice command) as well as its context,
The Model

A Processing Household repertoire, because it targets household devices for the SAPHIRE system.
First target:
First target:

A microwave
Questions

What constitutes a NEXT-GEN Microwave?

How can we make it smarter?
The System

Power Level: 1200W

Instructions?
1. Cook 2 min
2. Remove film
3. Cook 3 more min
The System
The System
The System

Controller

Healthy Choice

New! Whole Grain TVP Protein
The Process

How to choose which operation aligns the best with the user’s intention?
The Process

How to choose which operation aligns the best with the user’s intention?

Solution: Voice Commands
Apply this model to various other scenarios with different devices.
Apply this model to various other scenarios with different devices.
Apply this model to various other scenarios with different devices.
The Deliverables
The Deliverables

Member responsible: Martin

A cyber simulation model of a smart microwave
The Deliverables

Member responsible: Chen

A Google Glass application that
(1) reads QR codes,
(2) talks to the household device hub,
(3) dispatches notifications to users,
(4) etc.
The Deliverables

Members responsible: Hyeonsu and Pargat

AN INTERFACE

An interface for other smart device models
Thank you!