

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is light green. They are positioned diagonally, with the blue one partially covering the green one.

# The Smart Door

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# Application

- Voice commands
- Commands are account related
- Accounts secured by
  - Bluetooth device
  - Password
  - Activation state
- Database





# Hardware & Software

## Hardware:

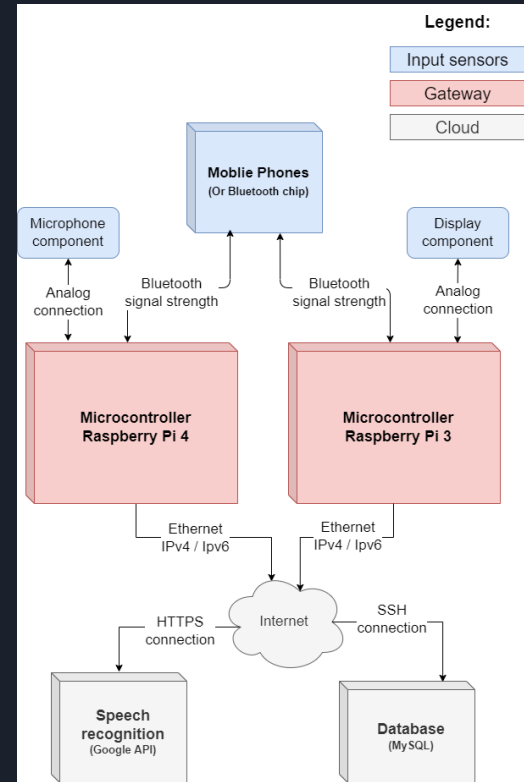
- Raspberry Pi
- Microphone
- Display
- Bluetooth device

## Software:

- Python
- PyCharm / Visual Studio Code
- Docker
- GitHub
- CustomTkinter

# Architecture

- Two microcontrollers
- 3 different sensors
- Microcontrollers are our gateway
- Google API





# How does this fit in IoT?

- Using sensors
- Having a Gateway
- Connectivity
  - WiFi
  - Bluetooth
  - Ethernet (for demonstration purposes)
- Processing data in cloud



DEMO



# Lessons learned and Future ideas

- Bluetooth device details
- Graphical User Interfaces with Python
- Working with the Raspberry Pi's
  
- Event system
  - Define date, time and duration
  - Is connected to user account (and the Bluetooth device)
  - Shared with friends

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# Thanks for listening

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