



Comfort Home

Use Cases

T-CB2 – Group 7

Group Members

Omar Shekho - 3588734

Danail Georgiev – 3781496

Ilian Stoev - 361859

Viktor Rumenov - 3608530

2019/2020

Use cases

- Use case: Switch ON or OFF

Actor: The customer

Main Success Scenario:

- 1- Customer enters the room, which the ventilation system is in.
- 2- Switches ON or OFF the system via remote control or phone app.

Extensions: (System has no connection with the app or remote control)

The system indicates malfunction in communication.

- Use case: Ventilation cools off the room

Actor: The system

Main success scenario:

- 1- The temperature sensor detects high temperature
- 2- The system gets the reading from the sensor
- 3- The ventilation is started to cool the room

- Use case: Ventilation reduces humidity in the room

Actor: The system

Main success scenario:

- 1- The humidity sensor detects the moisture in the atmosphere and sends it to the system
- 2- The system gets the reading from the sensor and checks if it is above the threshold
- 3- The ventilation is started to get fresh air in the room

- Use case: Ventilation decreases VOC concentrations

Actor: The system

Main success scenario:

- 1- The VOC sensor measures concentrations associated with bad air quality.
- 2- The system gets the reading from the sensor
- 3- The ventilation is started to get rid of the contamination

- Use case: Ventilation reduces CO2 levels in the room

Actor: The system

Main success scenario:

- 1- The CO2 sensor detects the levels of CO2 in the atmosphere and sends the reading to the system
- 2- The system gets the reading from the sensor and checks if it is above the threshold
- 3- The ventilation is started to get fresh air in the room

- Use case: Sensor malfunction

Actor: The system

Main success scenario:

- 1- The system indicates that a sensor is out of boundary or malfunctioning
- 2- The system indicates visually which sensor is out of boundary to the user.

- Use case: Ventilation malfunction

Actor: The system

Main success scenario:

- 1- The system receives information about malfunctioning ventilation
- 2- The system indicates visually malfunction to the user

- Use case: Fix technical problem

Actor: Technical support.

Main success scenario:

- 1- Actor receives notification about malfunction
- 2- Actor analyses log data
- 3- Fixes the problem