

Smart Home System

► Group 1

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System Flow

- ☐ SHS_01 read flame sensor
- ☐ SHS_02 check password
- ☐ SHS_03 read temp (DHT22)
- ☐ SHS_04 read LDR sensor (SUN)
- ☐ SHS_05 check user input for lights (switch)
- ☐ SHS_06 check soil moisture
- ☐ SHS_07 display readings on LCD

System Flow

- ❑ SHS_08 if flame sensor reads there is fire turn on flame alarm and turn on pump(water)
- ❑ SHS_09 if the password is wrong for 3 times turn on alarm(Buzzer) and send message to Server
 - else if password is correct open door
- ❑ SHS_10 if temp sensor reads the target value or above ,,the value that the user set,, turn on fans
 - else turn fans off
- ❑ SHS_11 if LDR sensor reads that the sun is exist , turn off outer lights
 - else turn on outer lights
- ❑ SHS_12 if the user input (switch component) for lights is on , turn on lights
 - else turn off
- ❑ SHS_13 if soil sensor reads that the soil is dry , turn on the pump(water)
 - else turn off
- ❑ SHS_14 Send Sensors Readings and Status of devices

Components

Sensors:

- DHT22 (temperature)
- Soil Moisture Sensor
- Flame Sensor
- LDR

Components

Devices:

- LCD
- MOTORS
- KeyPad
- EEPROM
- LEDS



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Flowchart

Smart Home FlowChart

