Prediction based Control: -

Occupancy prediction and weather forecast based HVAC control.

Real time Control: -

Lighting control based on PIR and Light sensor

HVAC control based on the Temp and PIR.

Cloud Repository

Execution: -

Light Control Driver

Heaters and Coolers Relay drivers

Siren Alarm Driver

Context: -

Light Intensity Calculation

Presence Detection

Temperature Calculation

Occupancy counter logic from Sensors

Actuators: -

Lighting

Heaters

Coolers

Alarm

Sensors: -

PIR

Light Sensor

Temperature Sensor

Occupancy Sensor

Gateway