Scenarios ----------

Our classroom system has first a **NIGHT_TIME** and **DAY_TIME** mode configuration. It means that between two defined hours, for example 22:00 → 6:30, the behaviour of the sensors and actuators available are different from the day period.

We chose to base these hours on the admin choice with two inputs, so that these hours can be customizable for each room inside a department or building.

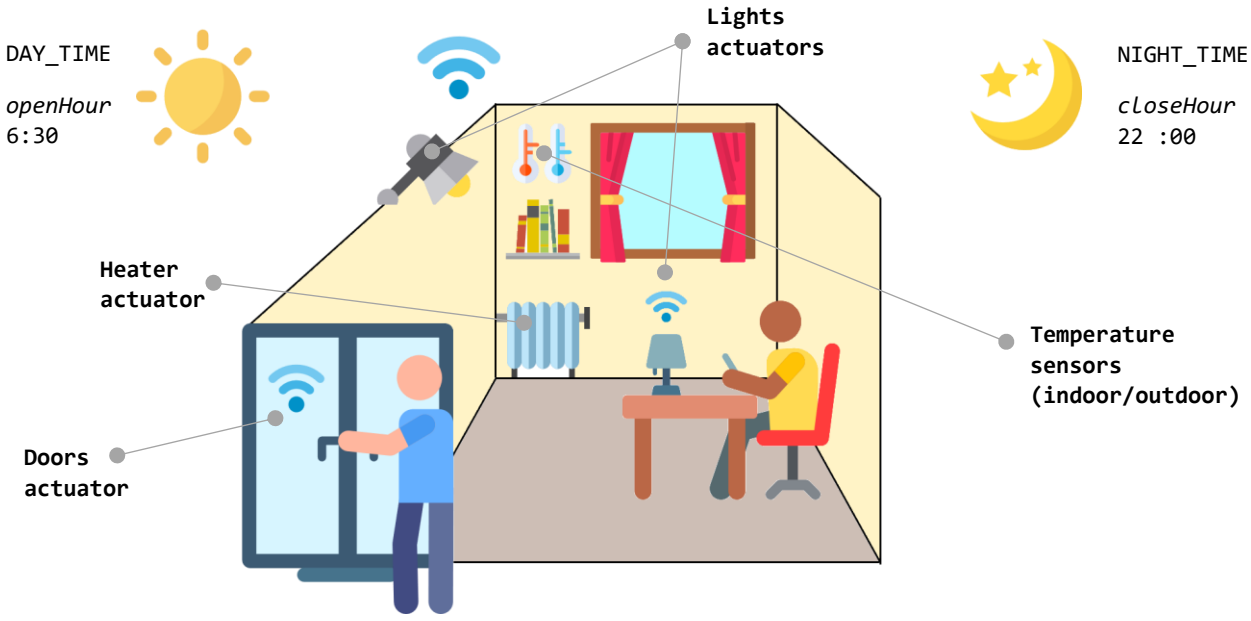
We came up with various scenarios detailed below:

1. 15 minutes before ***closeHour*** time, lights start to turn off, in order to inform people that it's time to leave the room and the building. On time, heaters are turned off and doors are locked. During this period, if any presence is detected, the alarm is triggered, and a signal is sent to the lounge. At ***openHour*** time, doors open.

2. On **DAY_TIME** period, if the inside temperature returned by the sensor is under a threshold chosen by the admin, and that the presence sensor returns true (meaning that there is someone in the room, and so make power energy savings), heaters are turned on. Otherwise, heaters are in off state.

3. On **DAY_TIME** period, if the illuminance sensor returns a value below another threshold defined by the admin, and that the presence sensor is detecting, lights are switched on. Otherwise, lights are in off state.

The picture below illustrates the different elements of our scenarios, for the Library Room:



READING ROOM EXAMPLE