Experiment Task Sheet

In this experiment, you will have two tasks; you will have three tasks if you can use at least one programming language. You should use the graphical automation editor on http://sfo.iamwz.online/editor.html to design the automation. You can take the tutorial as a reference when doing the following tasks.

Task 1:

Turn the light on when the motion sensor detects any activity.
Event:
Sensor Event
Sensor:
motion sensor (service: someone passed)
Actuators:
Living_Room_Light (service: switch)

Task 2:

Design automation run at 7 am every weekday:

1. Open the curtains
2. wait for 3 seconds
3. check the brightness of the brightness sensor. If the value is lower than 100, set the brightness of the bedside lamp to 50%; otherwise, ask the smart speaker to play a random song.

Hint: you need to use if block and compare block in the logic section to achieve the goal.

Event:
Time Event
Sensors:
Brightness sensor (get brightness)
Actuators:
Curtain(open/close)
Lights (set brightness)
Smart Speaker (Play a random song)

Task 3:

Design a function named blinking, which receive two parameters, the first one called lights,

which is a list of lights, the second one called times. This function contains a loop; in the loop, turn on the lights that are off and turn off the lights that are on, then wait for 1 second.
Design a scene named warning, create a list of lights given, use the function defined before to let them blink 100 times.
Hint: you can find useful blocks in the logic, loop, and list section

Actuators:
Light1/Light2/Light3 (switch, check state)

Extra:
For participants who have python programming experience: The same goal writes in Python (with pre-defined devices and services), you can just remove the content in the code editor and copy definitions below, click the start button and then write your python code there, after you finished, click the finish button

```
class Light:
    state = True

    def is_on(self):
        return self.state

    def switch_on(self, on):
        self.state = on

def scene_warning():
    pass
```