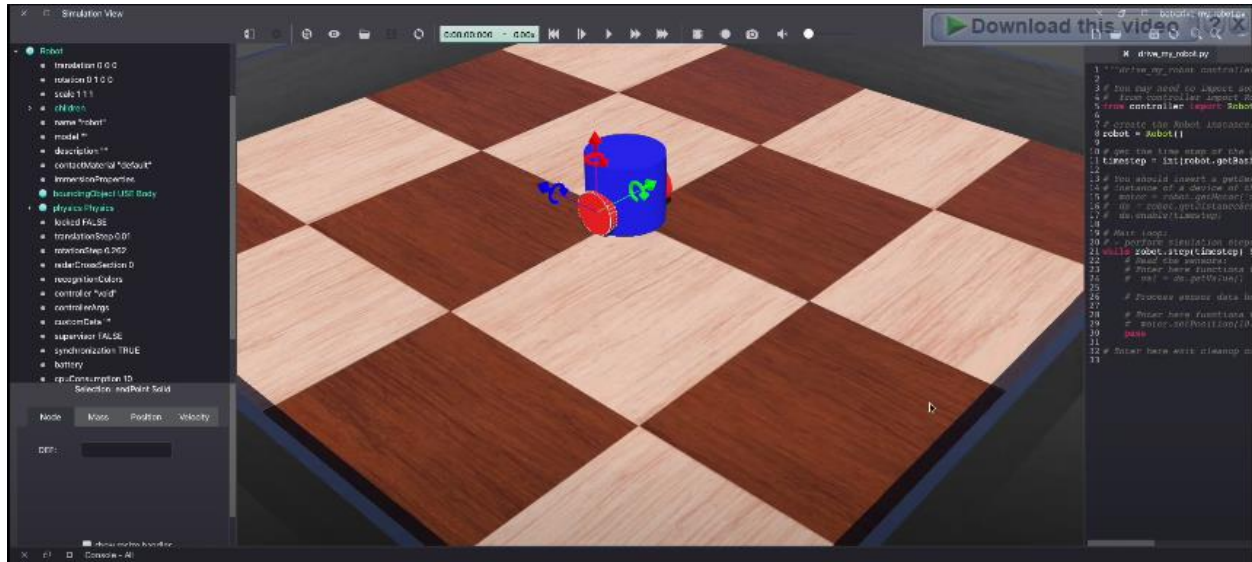


NAMA : REYNANDA ADITYA

NIM :1103202154

TugasLecture 10 Robotics



Membuat controller di Weboots

```
1 """drive_my_robot controller."""
2
3 # You may need to import some classes of the controller module. Ex:
4 # from controller import Robot, Motor, DistanceSensor
5 from controller import Robot
6
7
8 if __name__ == "__main__":
9
10
11     # create the Robot instance.
12     robot = Robot()
13
14     # get the time step of the current world.
15     timestep = int(robot.getBasicTimeStep())
16
17     # You should insert a getDevice-like function in order to get the
18     # instance of a device of the robot. Something like:
19     # motor = robot.getMotor('motorname')
20     # ds = robot.getDistanceSensor('dsname')
21     # ds.enable(timestep)
22
23     # Main loop:
24     # - perform simulation steps until Webots is stopping the controller
25     while robot.step(timestep) != -1:
26         # Read the sensors:
27         # Enter here functions to read sensor data, like:
28         # val = ds.getValue()
29
```

Weboots Controller di python

```

# from controller import Robot, Motor, DistanceSensor
from controller import Robot

if __name__ == "__main__":

    # create the Robot instance.
    robot = Robot()

    # get the time step of the current world.
    timestep = 64

    # You should insert a getDevice-like function in order to get the
    # instance of a device of the robot. Something like:
    # motor = robot.getMotor('motorname')
    # ds = robot.getDistanceSensor('dsname')
    # ds.enable(timestep)

    left_motor = robot.getMotor('motor_1')
    right_motor = robot.getMotor('motor_2')

    left_motor.setPosition(float('inf'))
    left_motor.setVelocity(0.0)

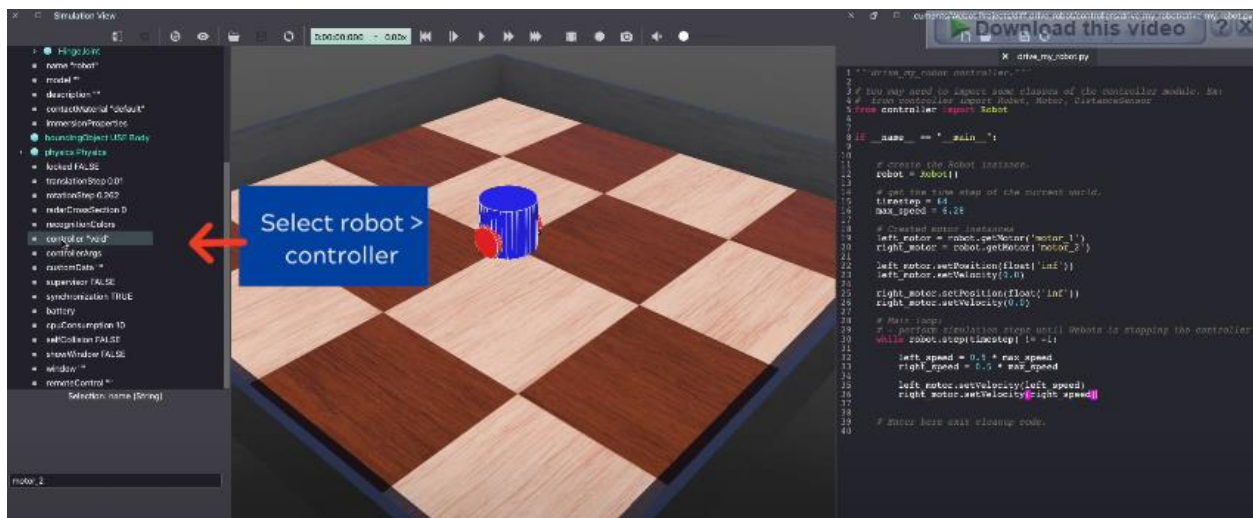
    left_motor.setPosition(float('inf'))
    left_motor.setVelocity(0.0)

    # Main loop:
    # - perform simulation steps until Webots is stopping the controller
    while robot.step(timestep) != -1:
        # Read the sensors:
        # Enter here functions to read sensor data, like:
        # val = ds.getValue()

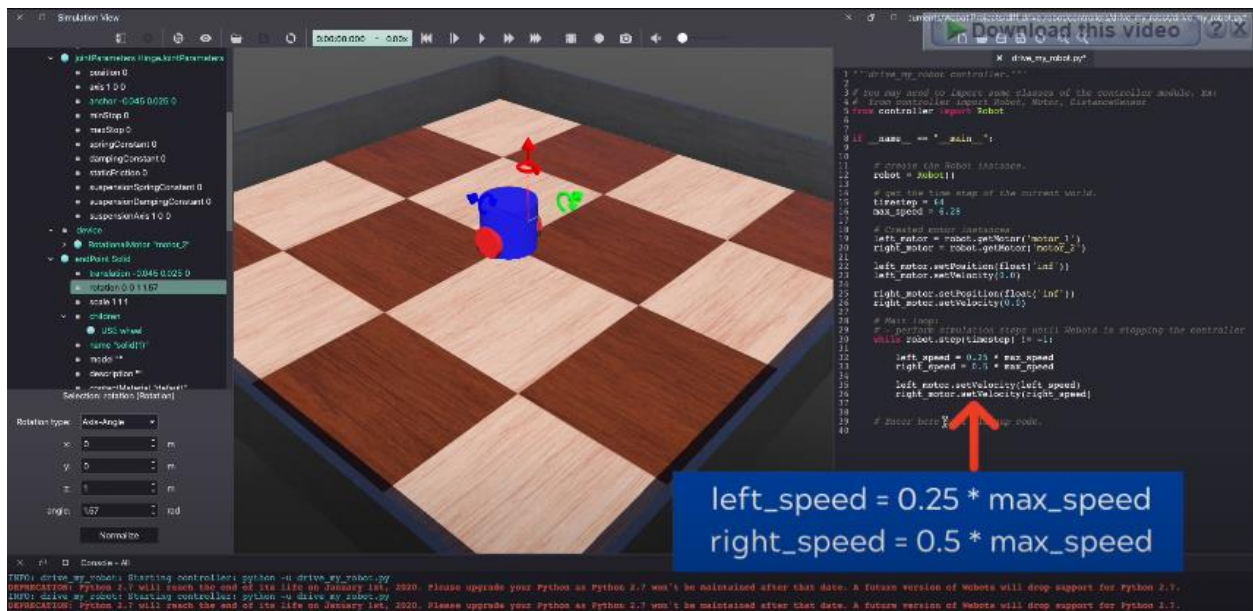
        # Process sensor data here.

```

Membuat control motor di webots



MenjalankanLurus



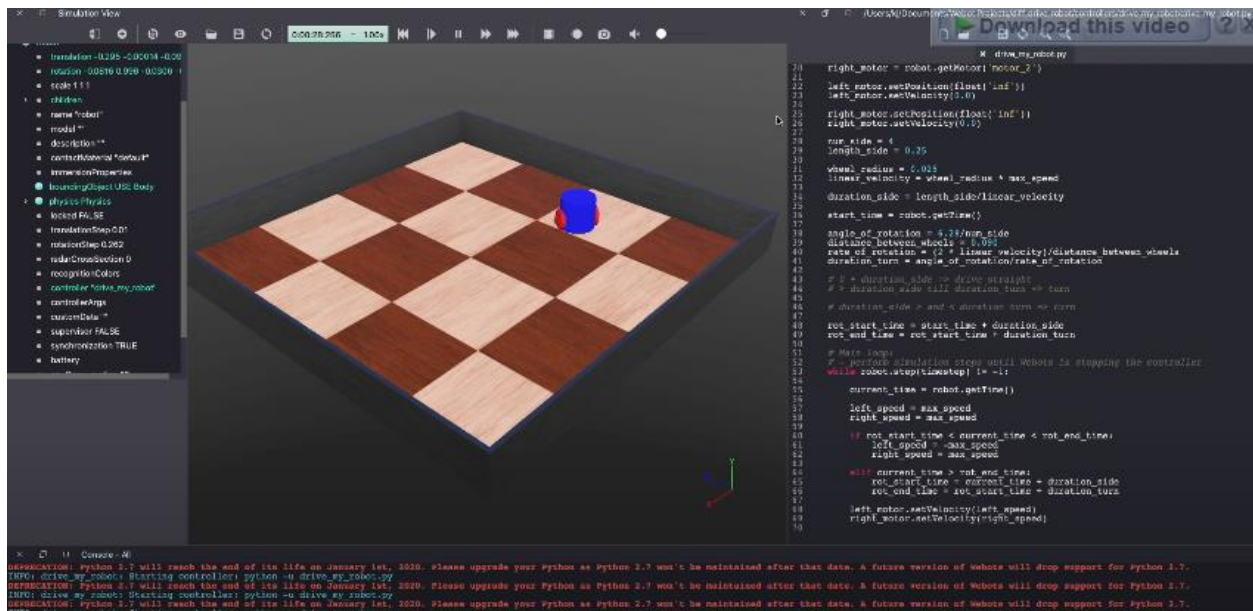
## Menjalakan Robot

```

1 # You may need to import some classes of the controller
2 # from controller import Robot, Motor, DistanceSensor
3 from controller import Robot
4
5 if __name__ == "__main__":
6
7     # create the Robot instance.
8     robot = Robot()
9
10    # get the time step of the current world.
11    timestep = 64
12    max_speed = 6.28
13
14    # Created motor instances
15    left_motor = robot.getMotor('motor_1')
16    right_motor = robot.getMotor('motor_2')
17
18    left_motor.setPosition(float('inf'))
19    left_motor.setVelocity(0.0)
20
21    right_motor.setPosition(float('inf'))
22    right_motor.setVelocity(0.0)
23
24    num_side = 4
25    length_side =
26
27    # Main loop:
28    # - perform simulation steps until Webots is stopping the controller
29    while robot.step(timestep) != -1:
30
31        current_time = robot.getTime()
32
33        left_speed = max_speed
34        right_speed = max_speed
35

```

Robot berjalan pada polygon



Perbandingan antara open loops dan closed loops system