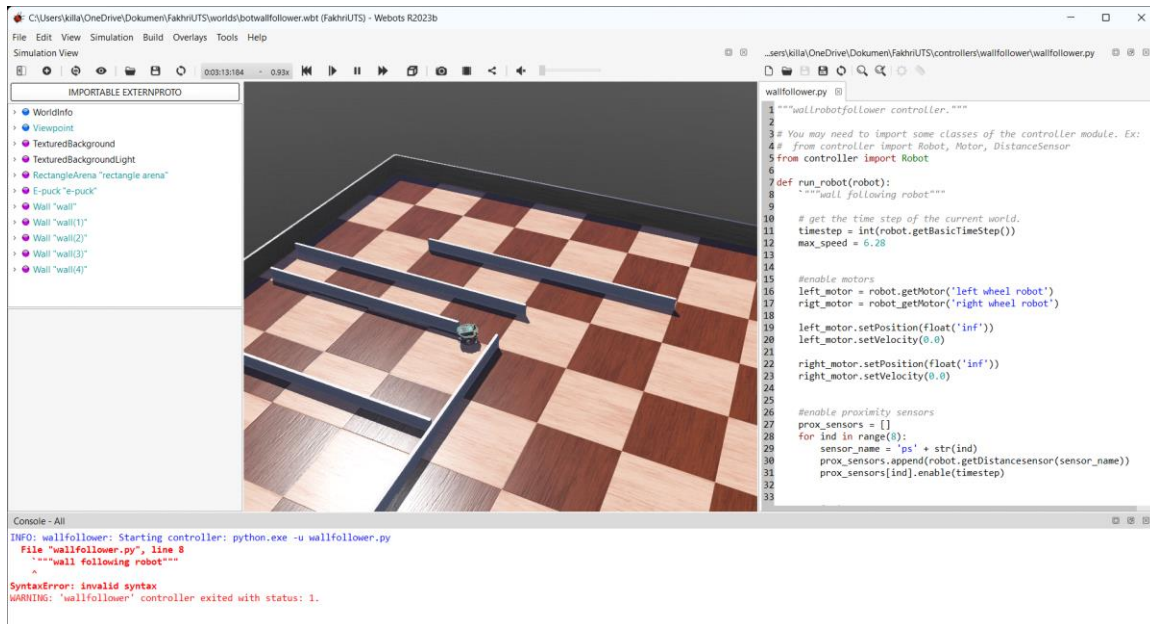


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Saya membuat robot dengan prototype e-puck model yang cocok untuk menjadi wall follower.



source code:

```
"""wallrobotfollower controller."""
```

```
# You may need to import some classes of the controller module. Ex:
```

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

```
from controller import Robot
```

```
def run_robot(robot):
```

```
    \"""wall following robot\""""
```

```
    # get the time step of the current world.
```

```
    timestep = int(robot.getBasicTimeStep())
```

```
    max_speed = 6.28
```

```

#enable motors

left_motor = robot.getMotor('left wheel robot')
right_motor = robot.getMotor('right wheel robot')


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


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


#enable proximity sensors
prox_sensors = []
for ind in range(8):
    sensor_name = 'ps' + str(ind)
    prox_sensors.append(robot.getDistancesensor(sensor_name))
    prox_sensors[ind].enable(timestep)


# Main loop:
# - perform simulation steps until Webots is stopping the controller
while robot.step(timestep) != -1:
    # Read the sensors:
    for ind in range(8):
        print("ind: { }, val: { }".format(ind, prox_sensors[ind].getValue()))

    # Process sensor data here.

```

```
left_wall = prox_sensors[5] .getValue() > 80
front_wall = prox_sensors[7] .getValue() > 80
```

```
left_speed = max_speed
right_speed = max_speed
```

```
if front_wall:
    print("Turn right in place")
    left_speed = max_speed
    right_speed = max_speed

else:
    if left_wall:
        print("Drive Forward")
        left_speed = max_speed
        right_speed = max_speed

    else:
        print("Turn Left")
        left_speed = max_speed/4
        right_speed = max_speed
```

```
# Enter here functions to send actuator commands, like:
```

```
#  motor.setPosition(10.0)
left_motor.setVelocity(max_speed)
right_motor.setVelocity(max_speed)
```

```
# Enter here exit cleanup code.
```

```
if __name__ == "__main__":
```

```
    # create the Robot instance.
```

```
    my_robot = Robot()
```

```
    run_robot(my_robot)
```