

Nama : Agung Sulaksono Ramdhani  
NIM : 1103194071

# Tutorial 1: Your First Simulation in Webots

*Figure 1 creating new project*

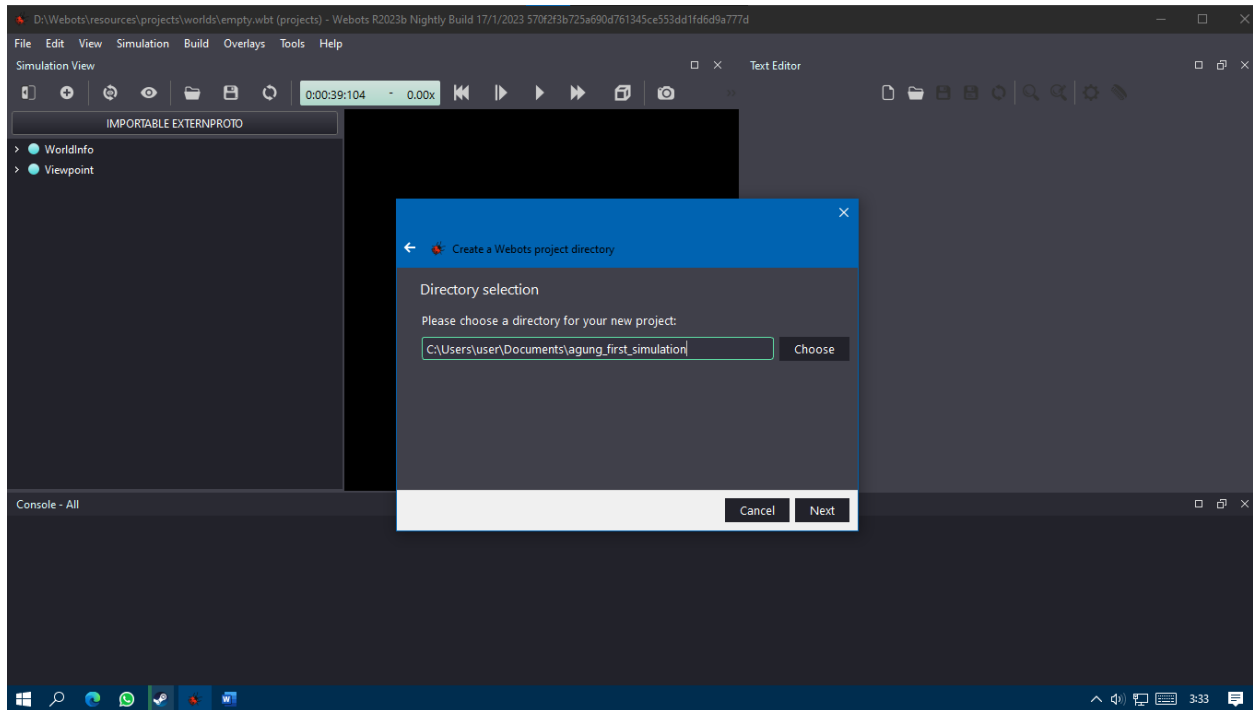


Figure 2 A new Project Created

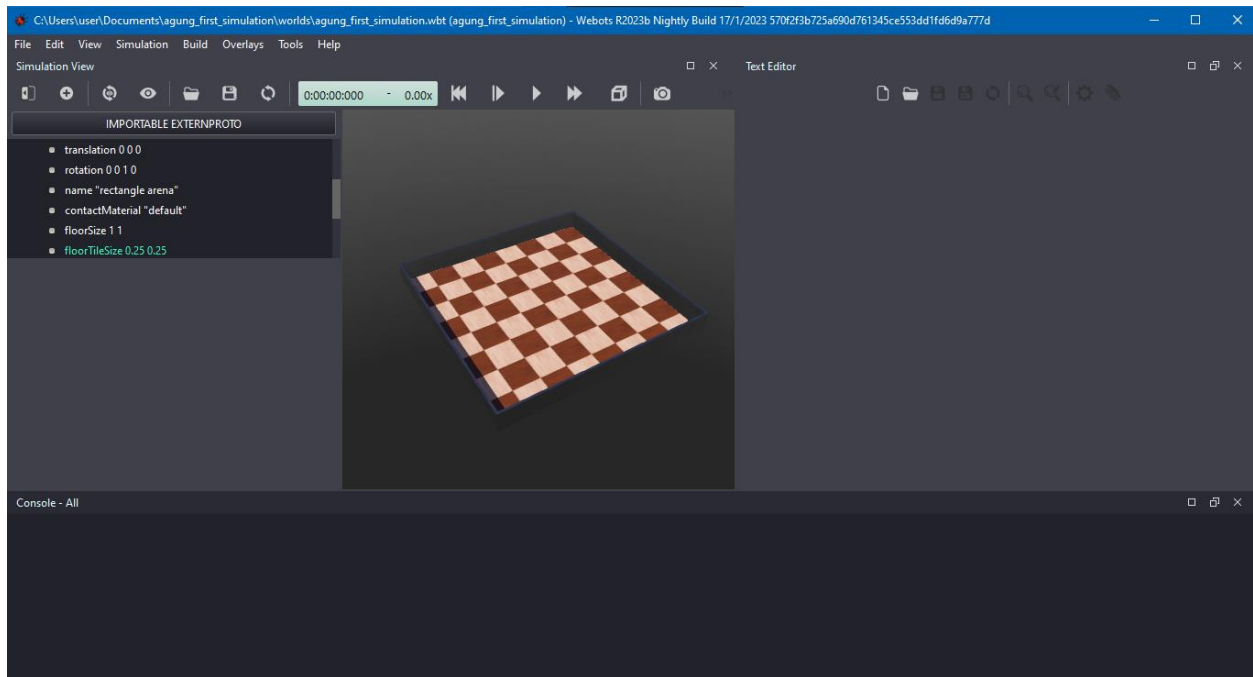


Figure 3 Make 4 wooden boxes at every corner

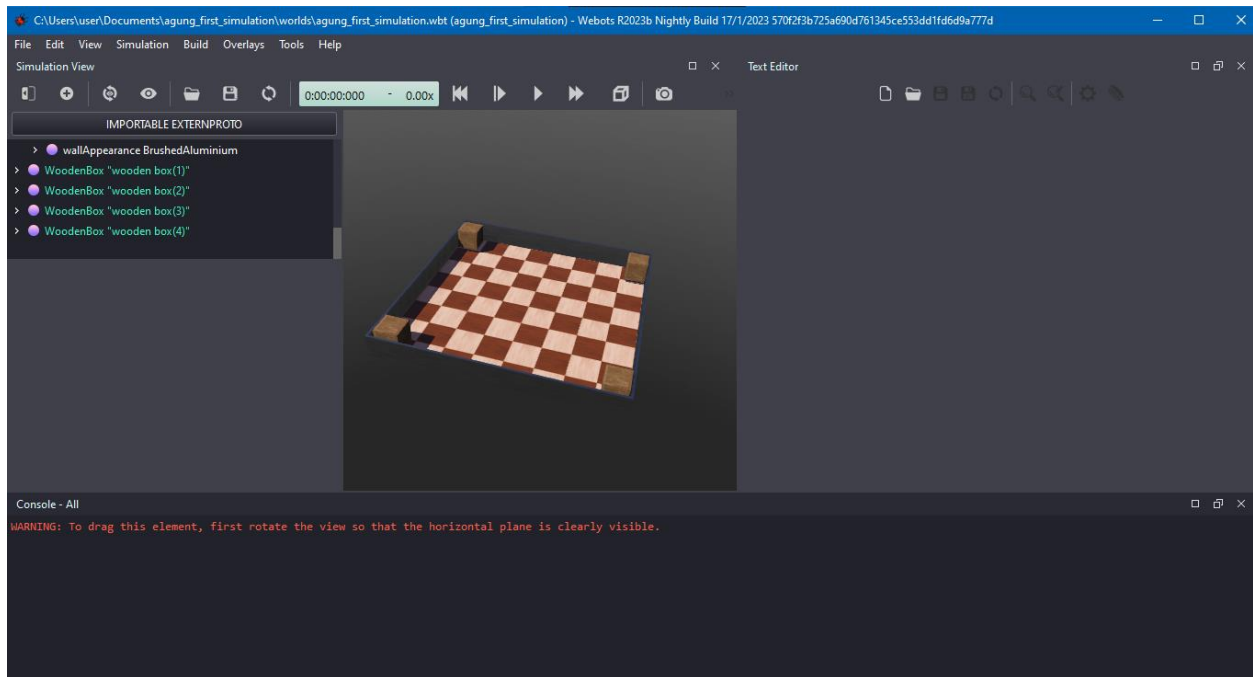


Figure 4 Insert e-puck Robot to world

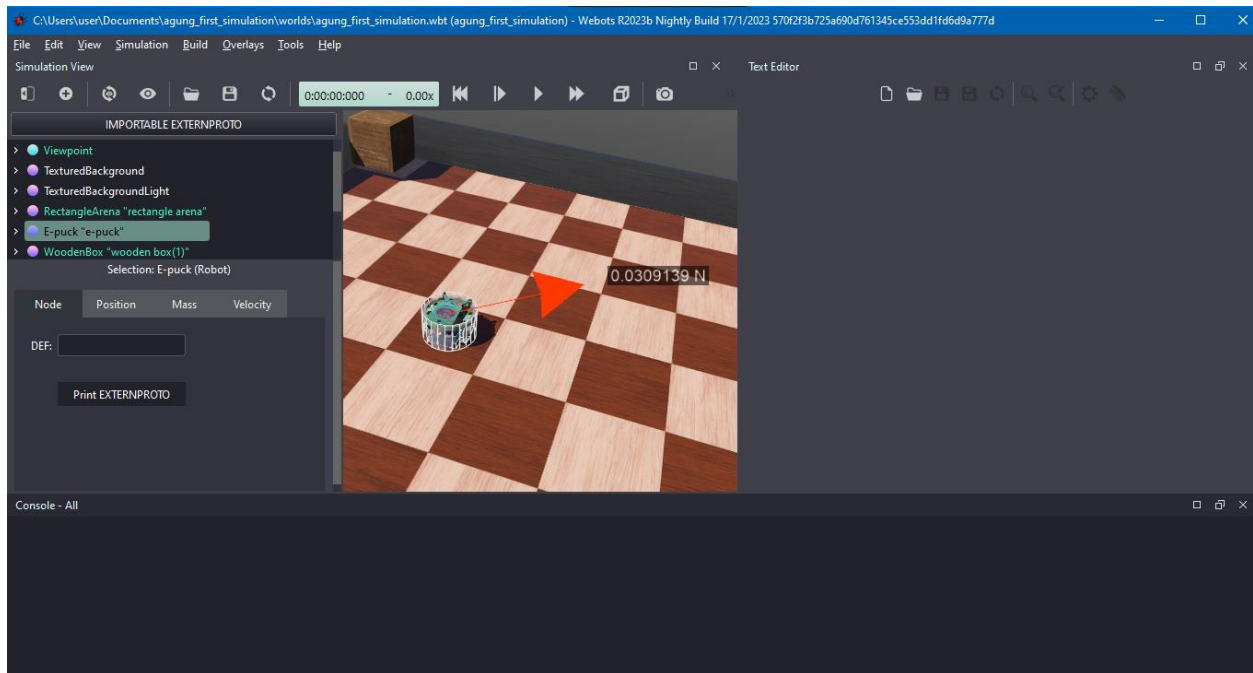


Figure 5 Making a new controller to e-puck

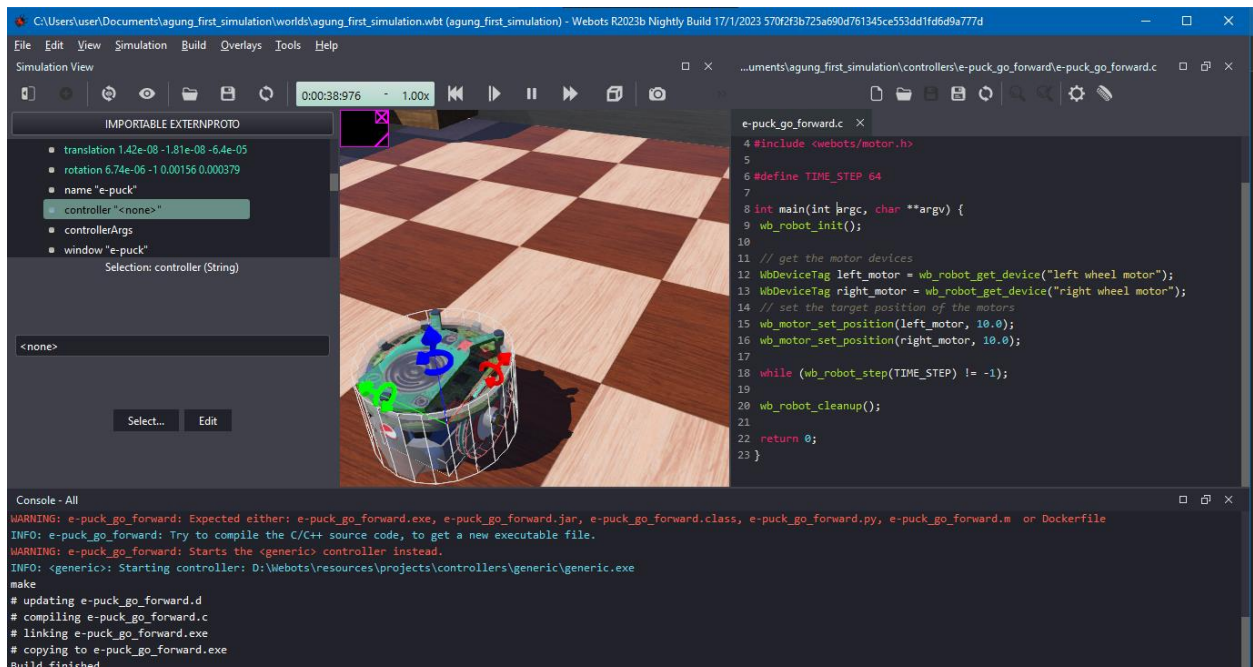
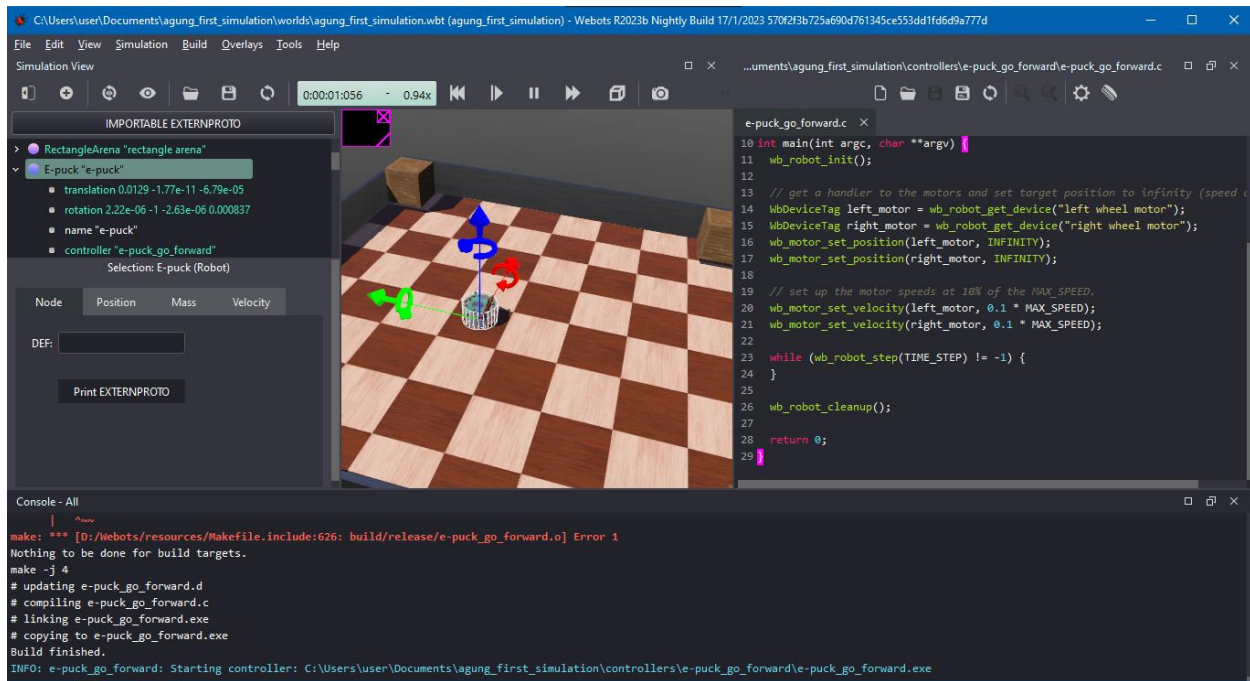


Figure 6 a new controller named *e-puck\_go\_forward*



## Tutorial 2: Modification of the Environment

Figure 7 save and load a existing world named obstacles

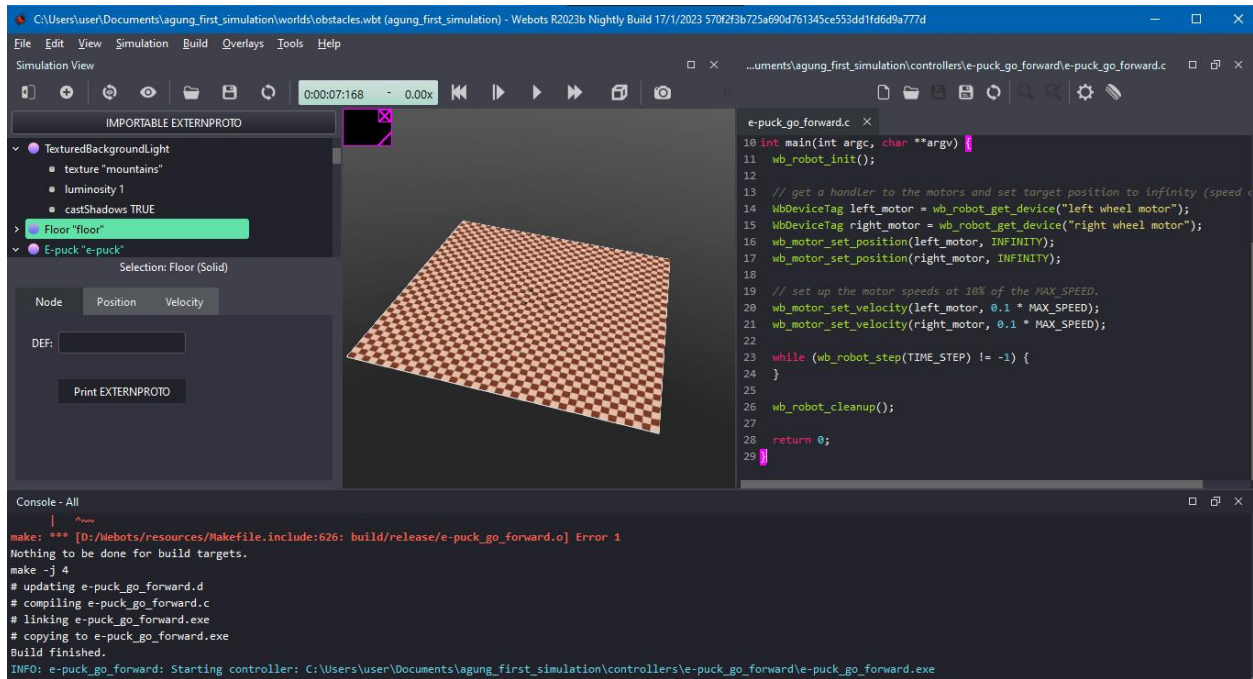


Figure 8 Modifying the floor

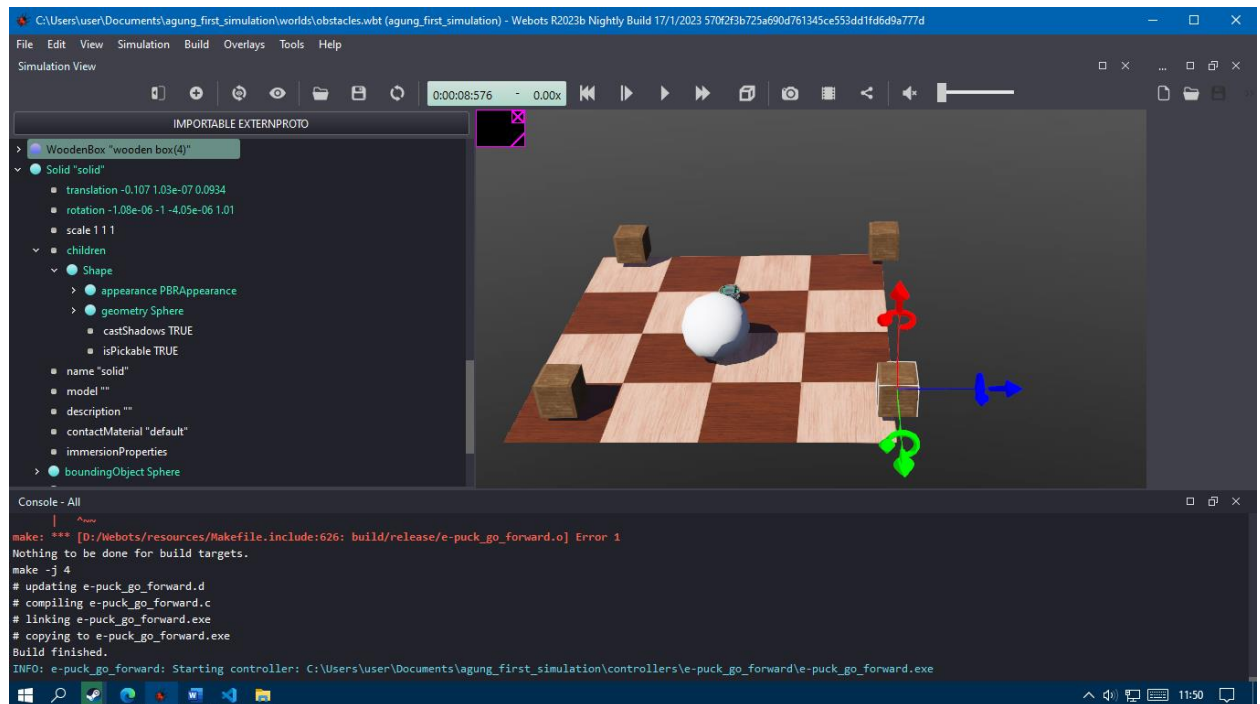
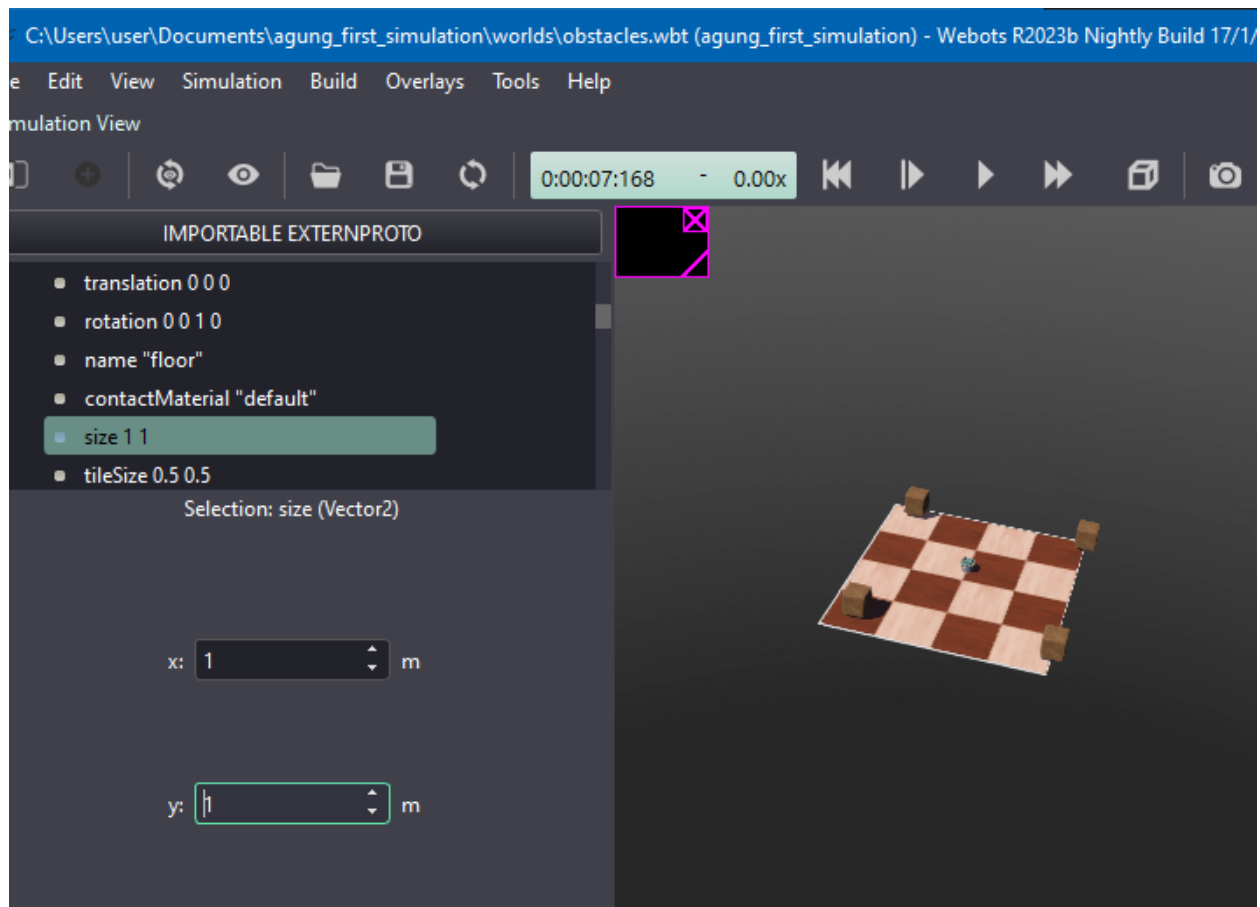




Figure 9 Creating a ball node

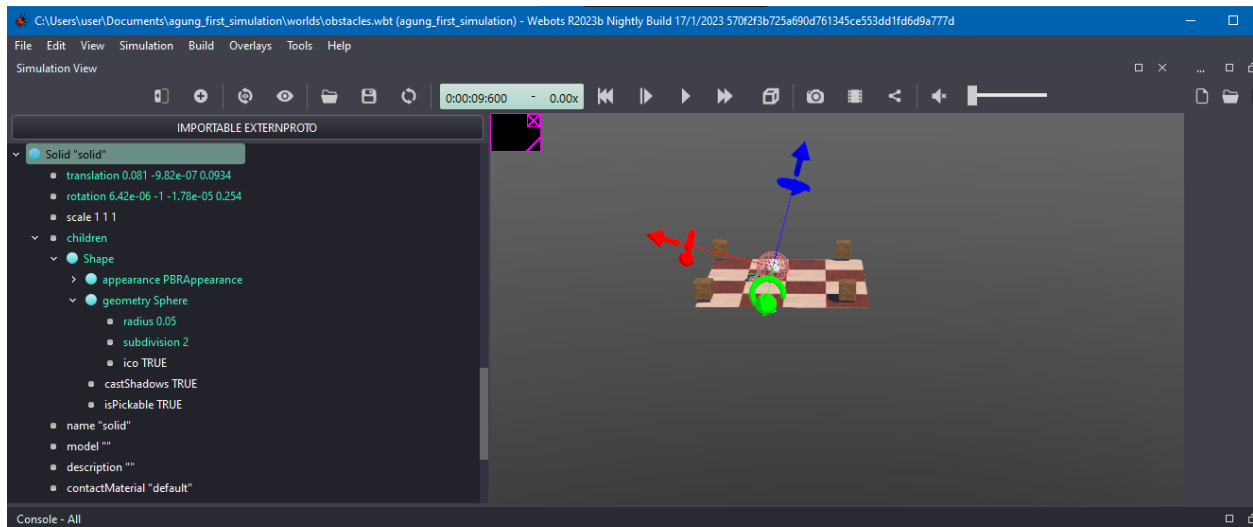
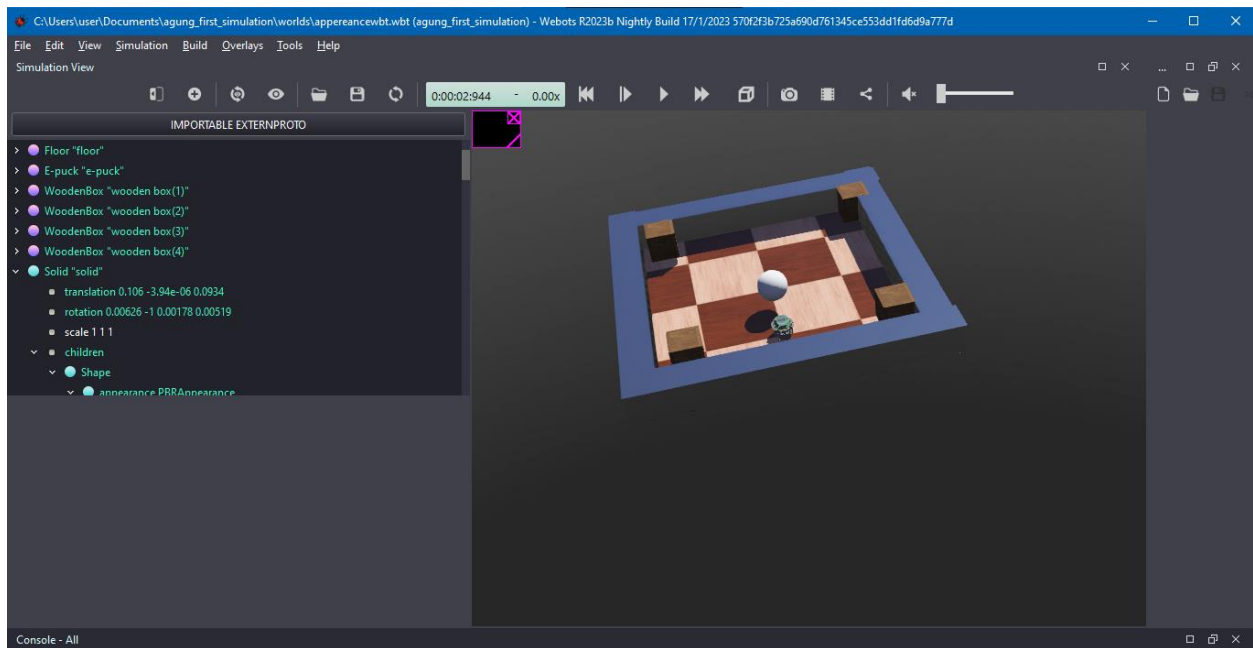


Figure 10 creating a wall



## Tutorial 3: Appearance

Figure 11 change colour of walls

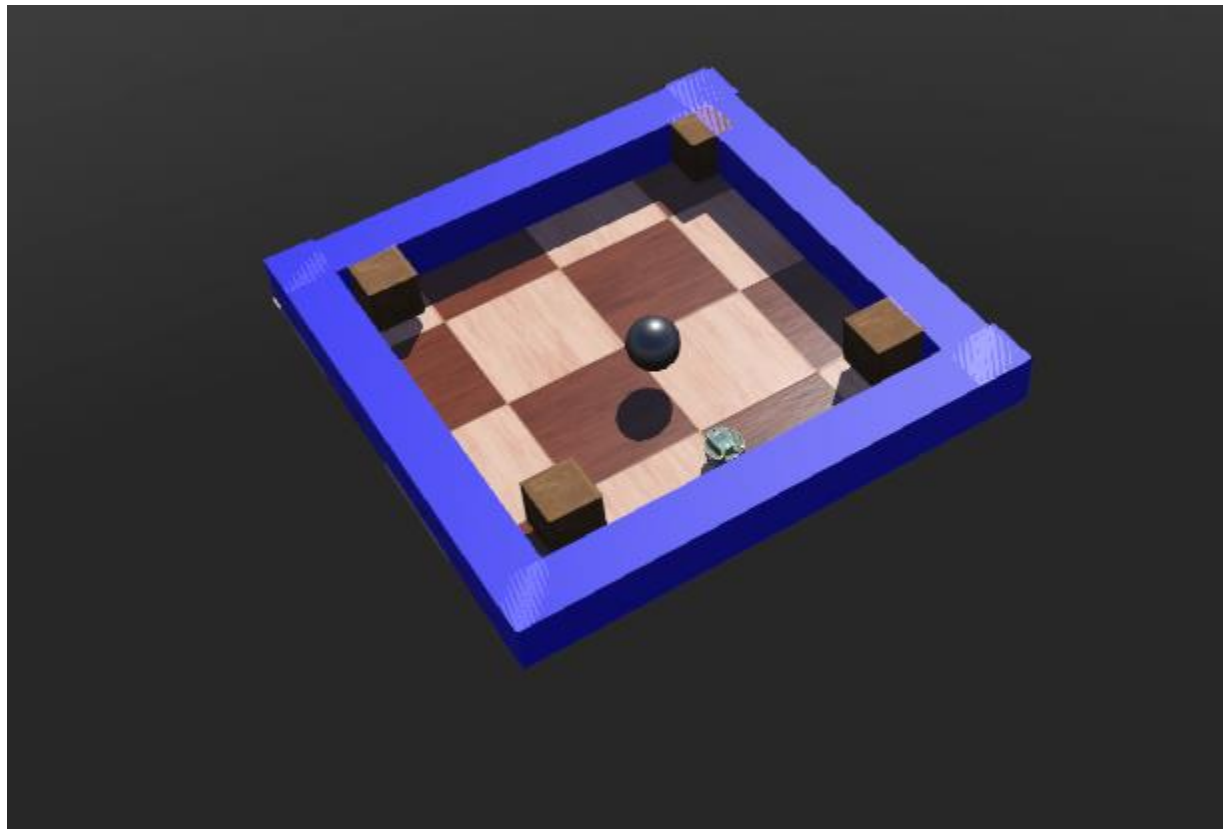
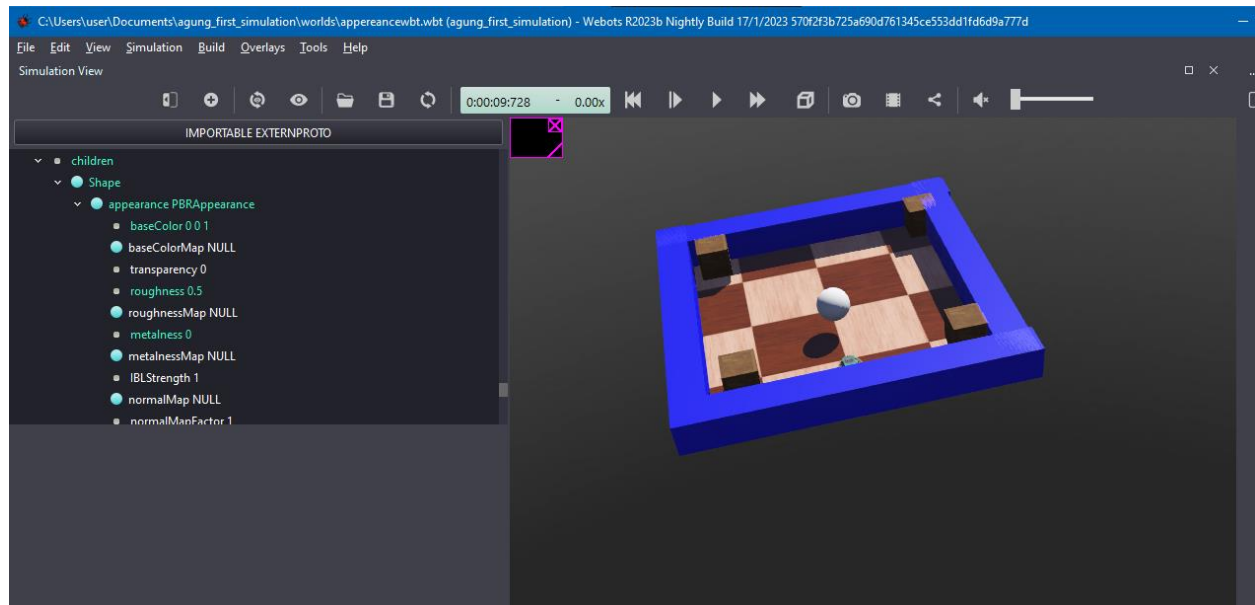




Figure 12 Change colour of ball node using downloaded red brick texture

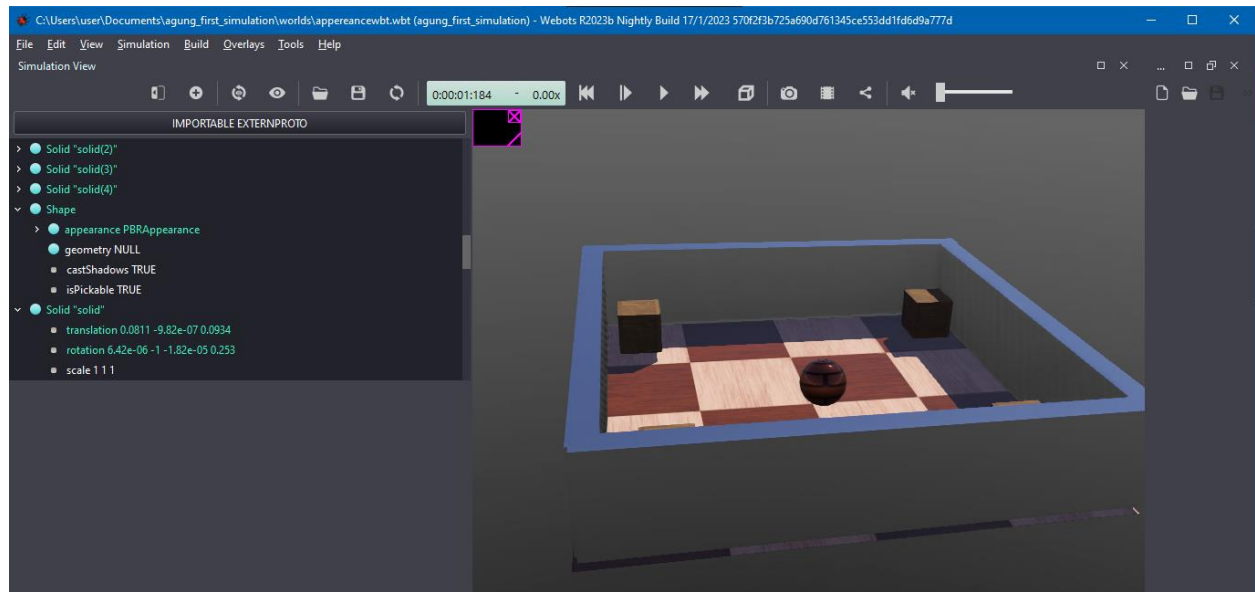
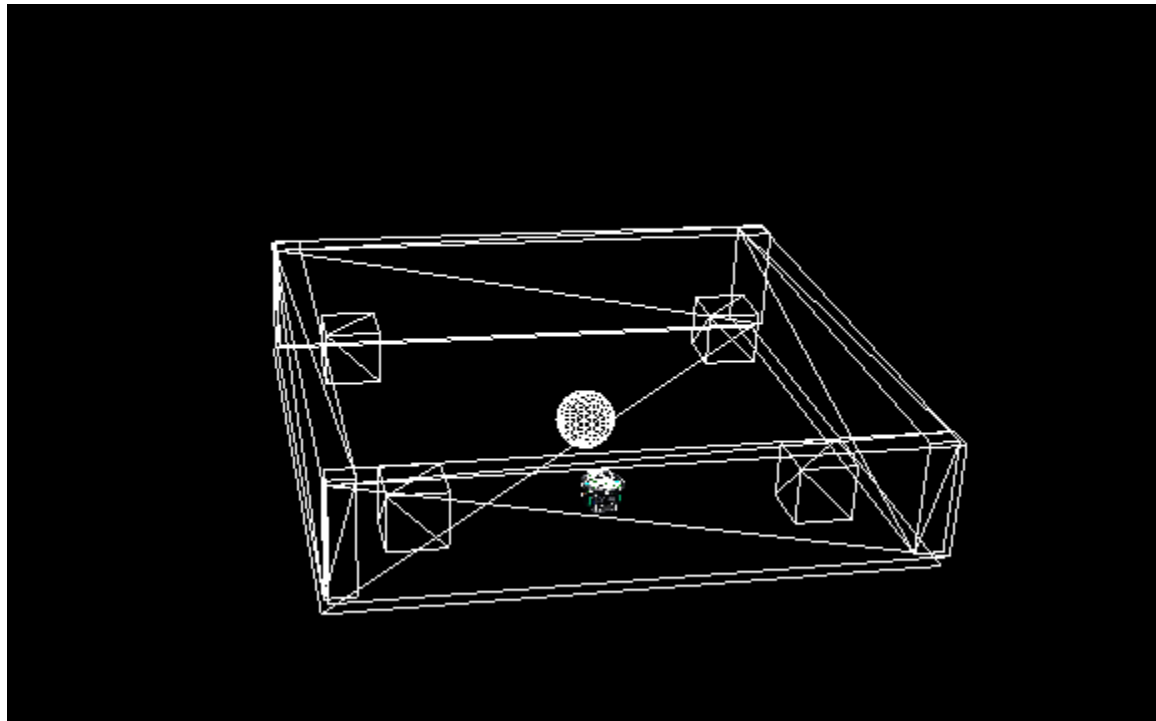


Figure 13 View of wireframe render



# Tutorial 4: More about Controllers

Figure 14 Program a controller

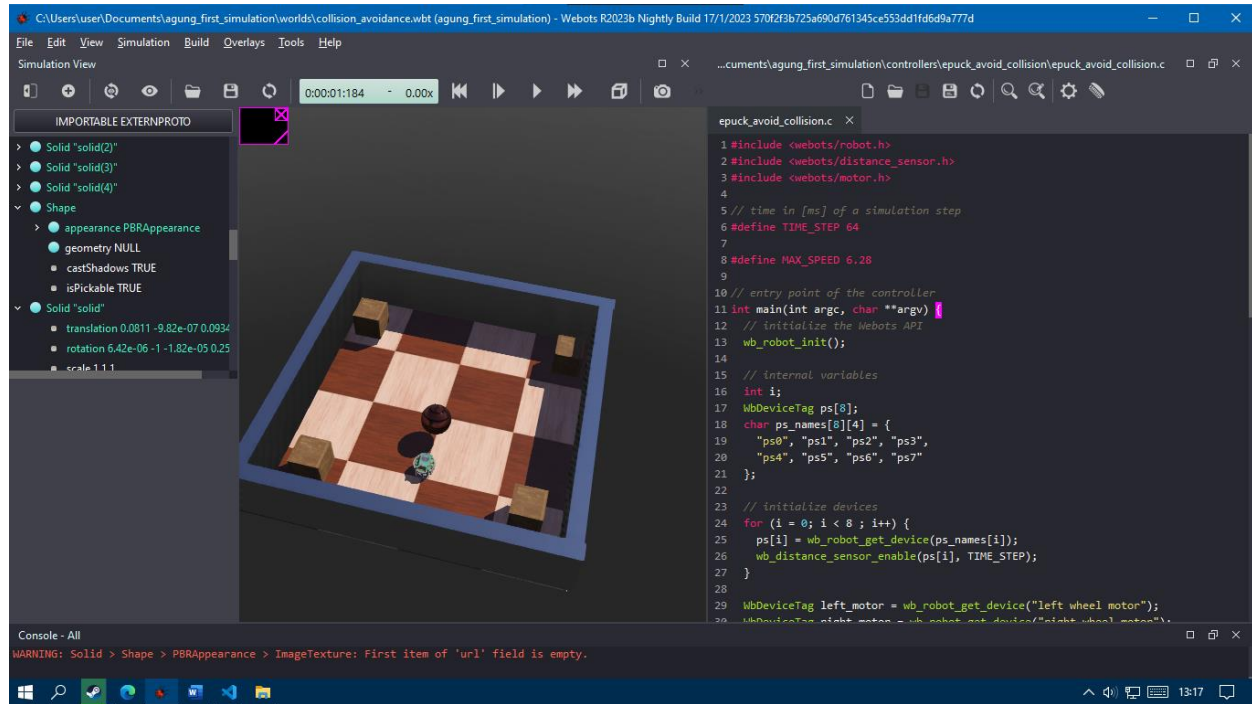
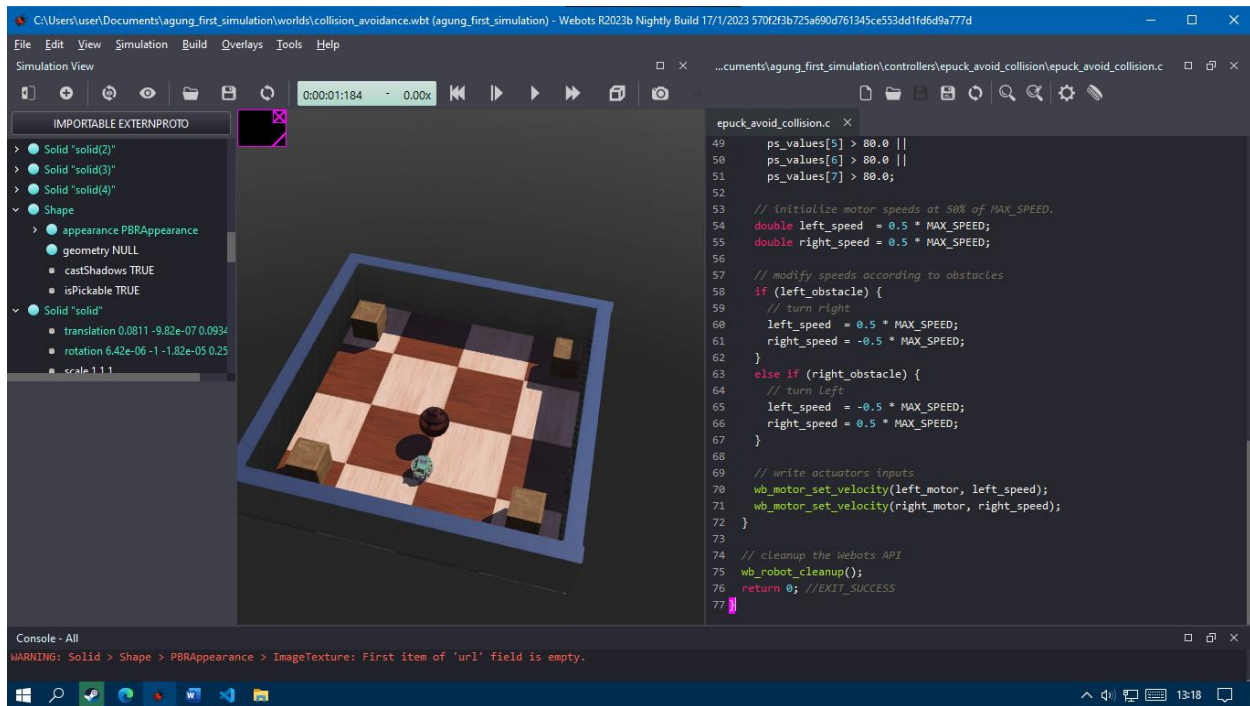
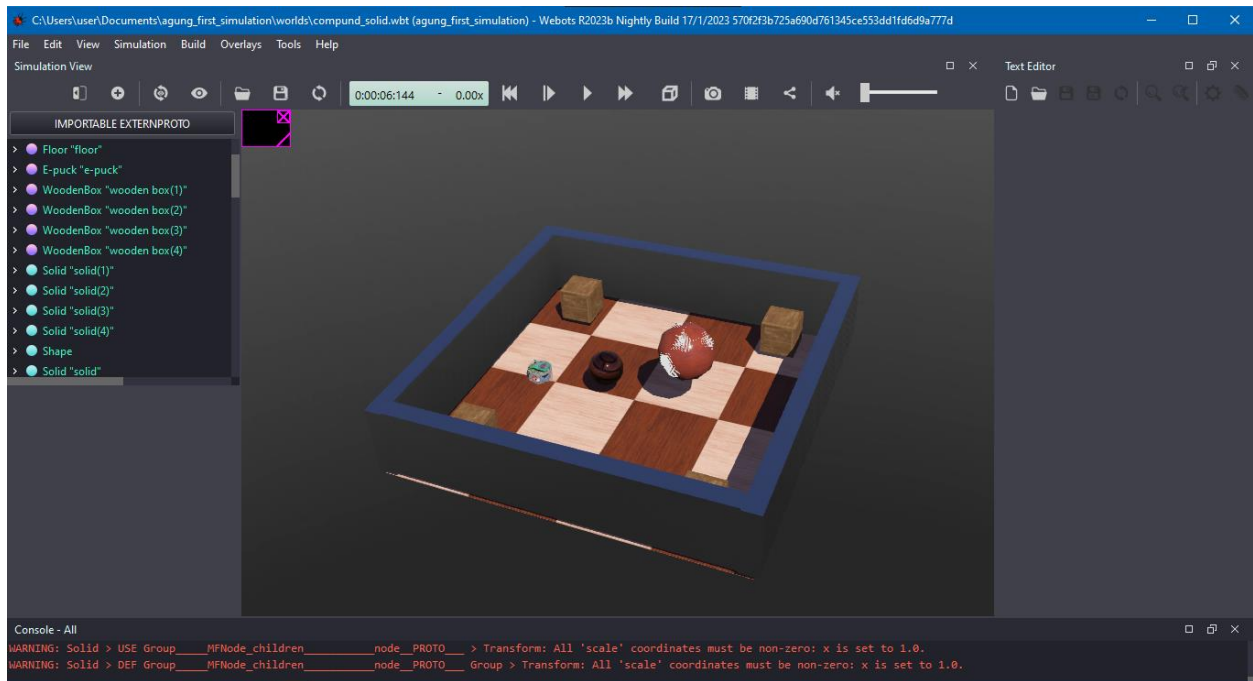


Figure 15 creating e-puck new controller



## Tutorial 5: Compound Solid and Physics Attributes

Figure 16 making a dumbbell node



## Tutorial 6: 4-Wheeled Robot

Figure 17 Creating a 4 wheeled robot from scratch

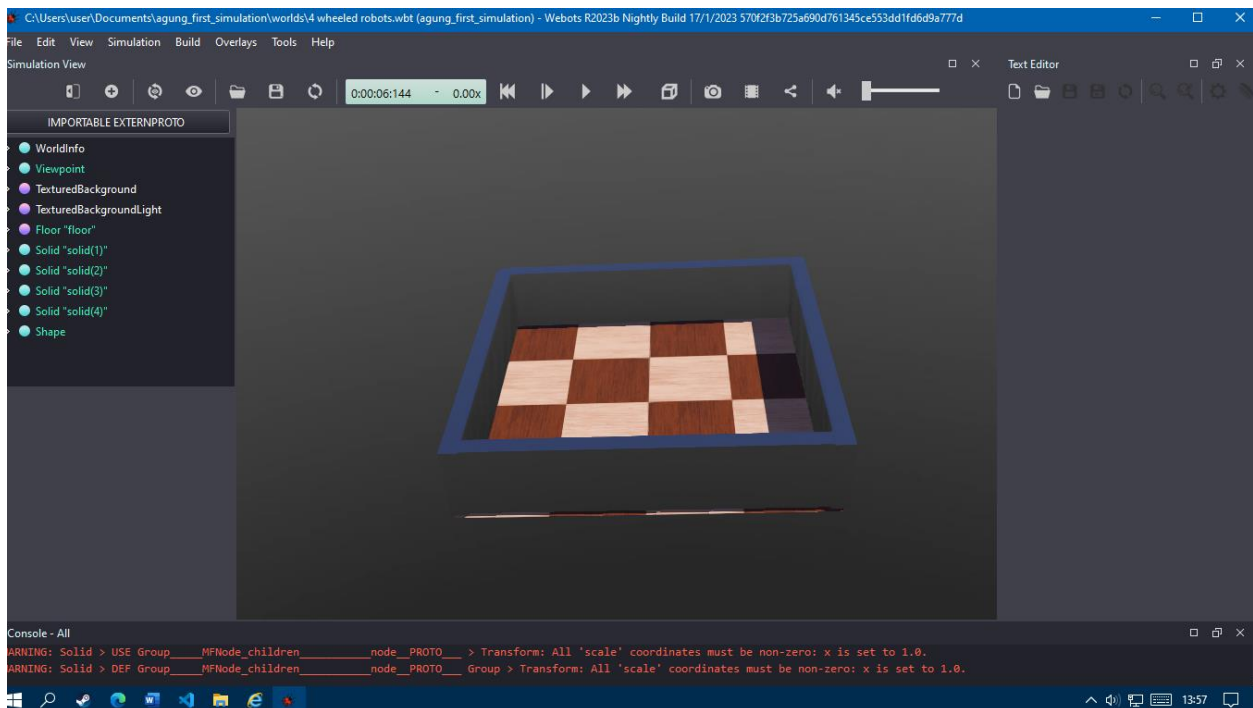


Figure 18 4 wheeled robot

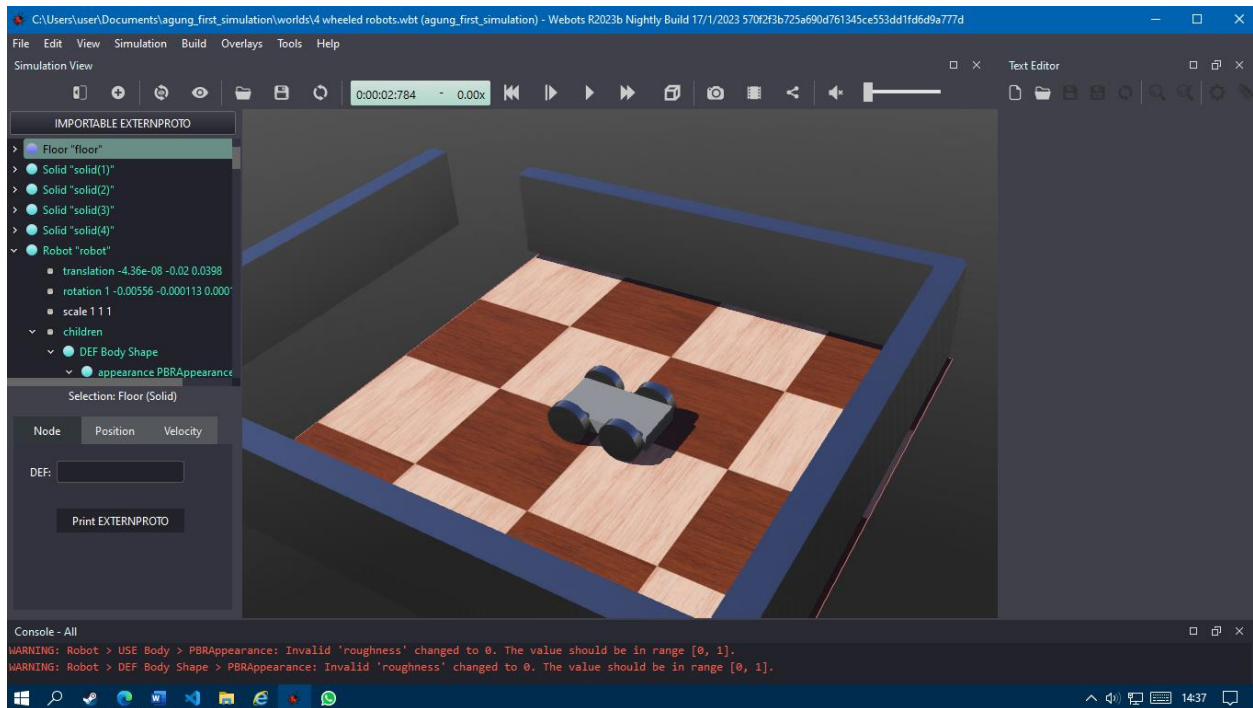
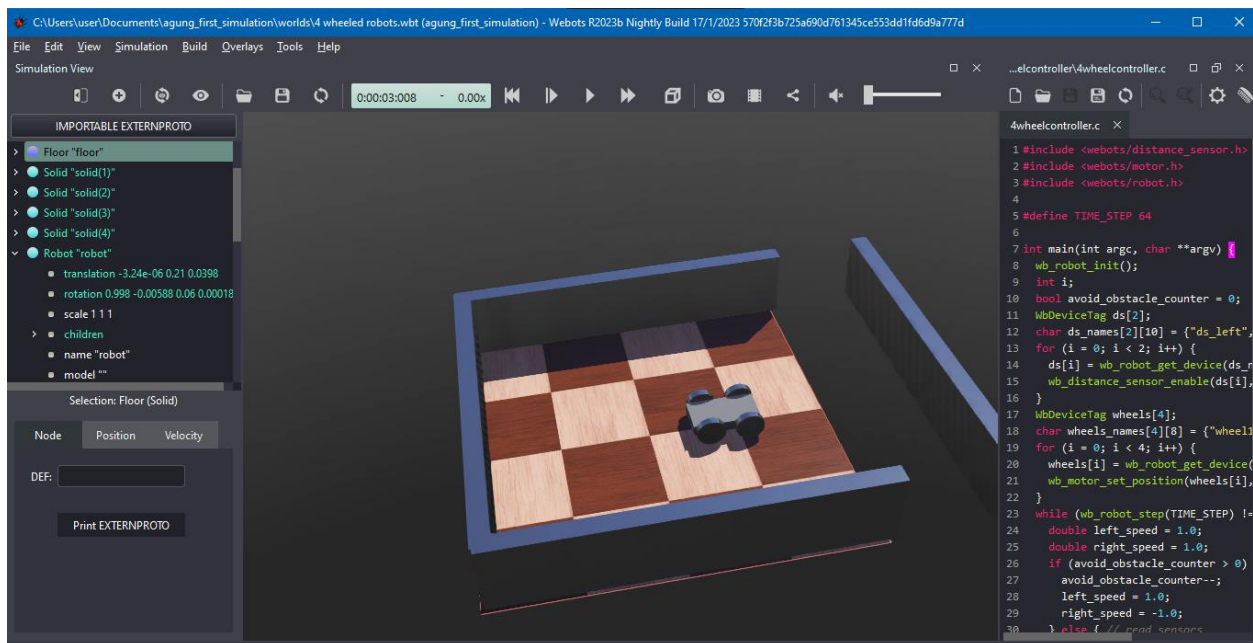
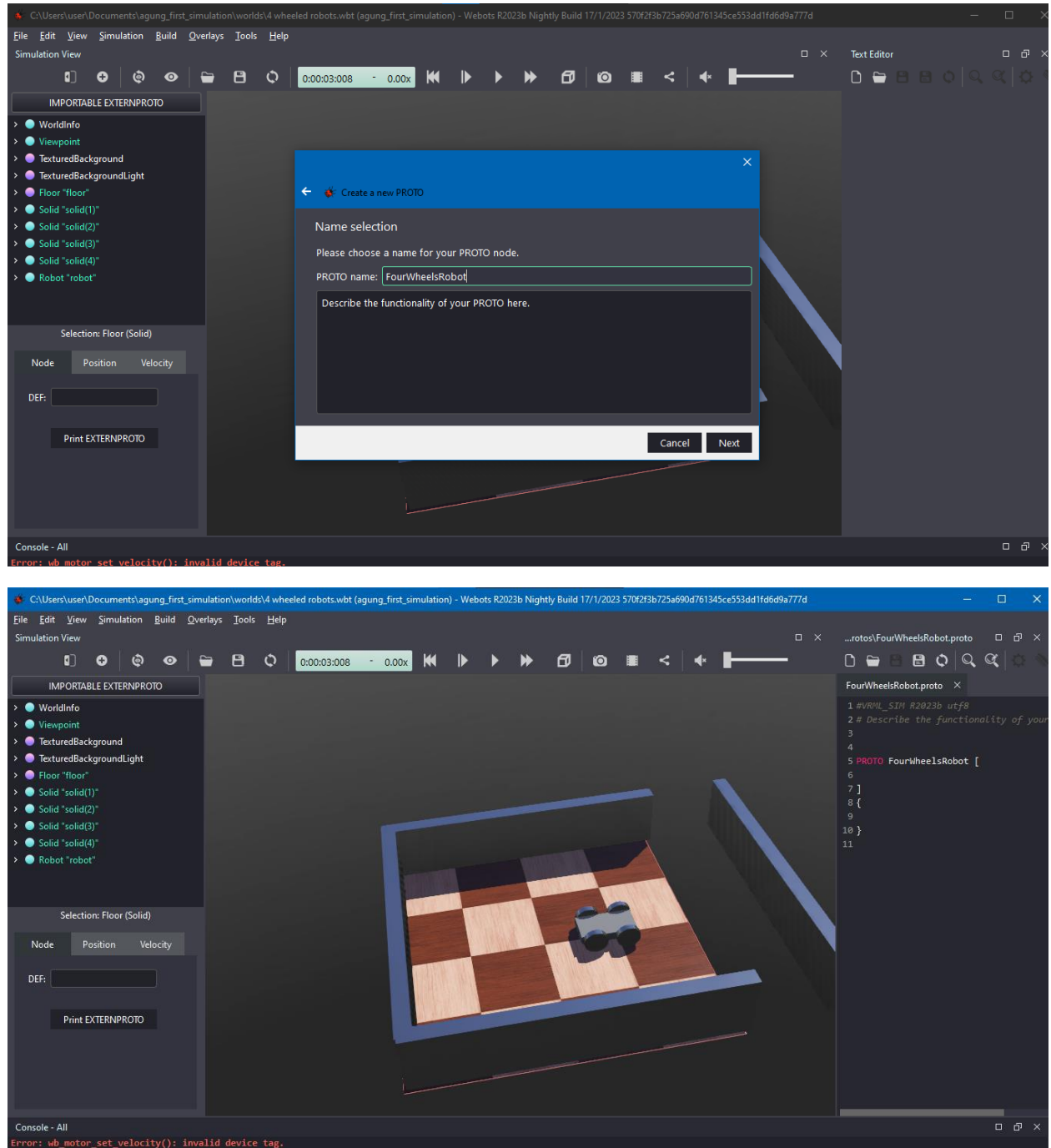


Figure 19 insert a controller to robot



# Tutorial 7: Your First PROTO

Figure 20 Creating a proto using existing robot





# Tutorial 8: the Supervisor

Figure 21 creating base and changed the size to 10x10

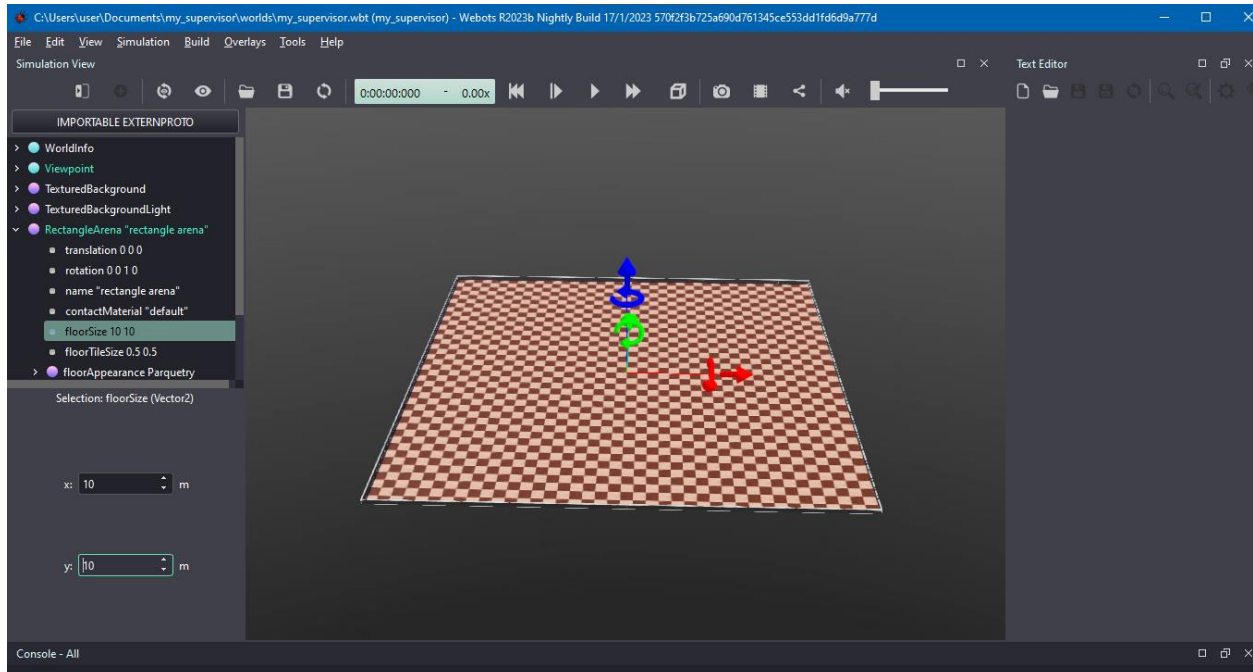


Figure 22 add a bb8 robot to world

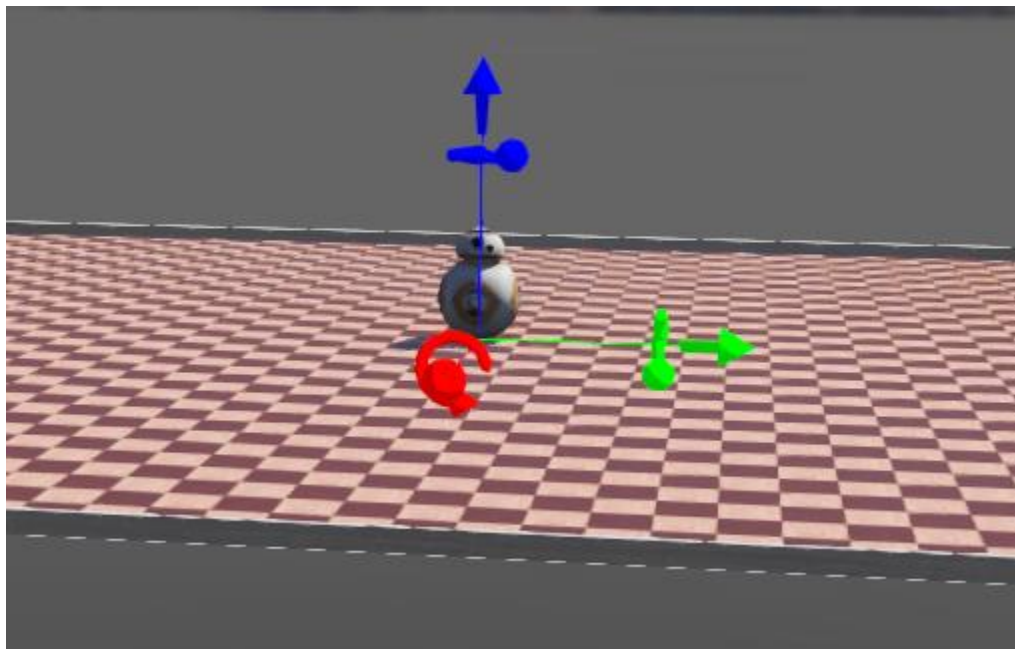


Figure 23 creating a supervisor robot

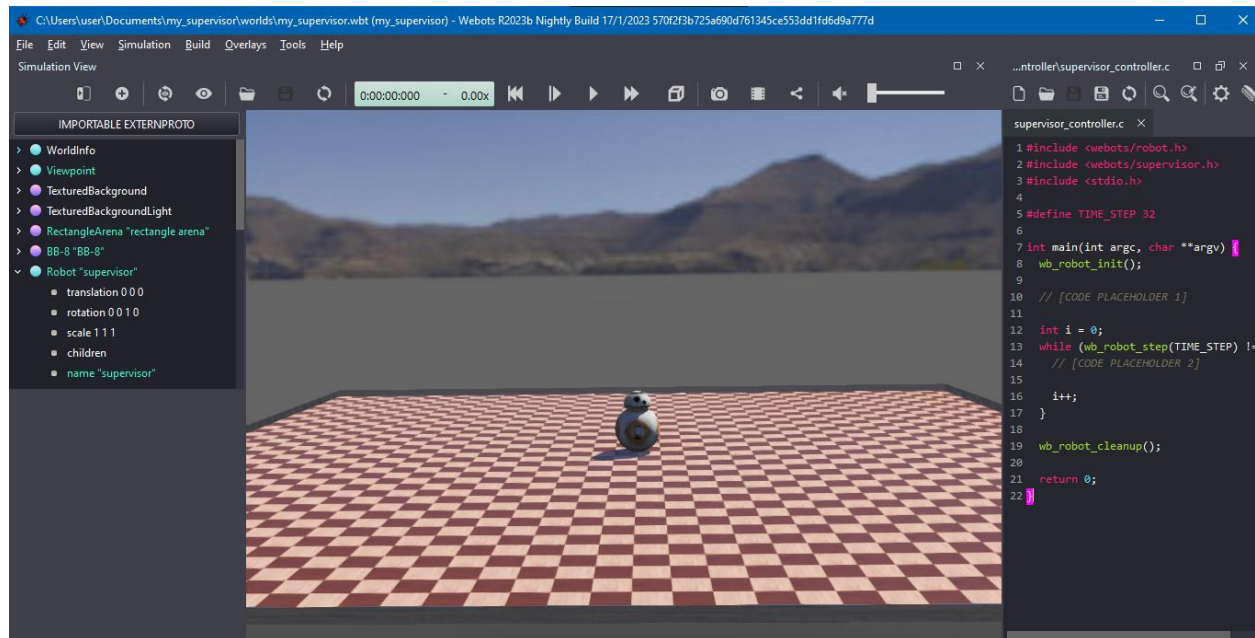
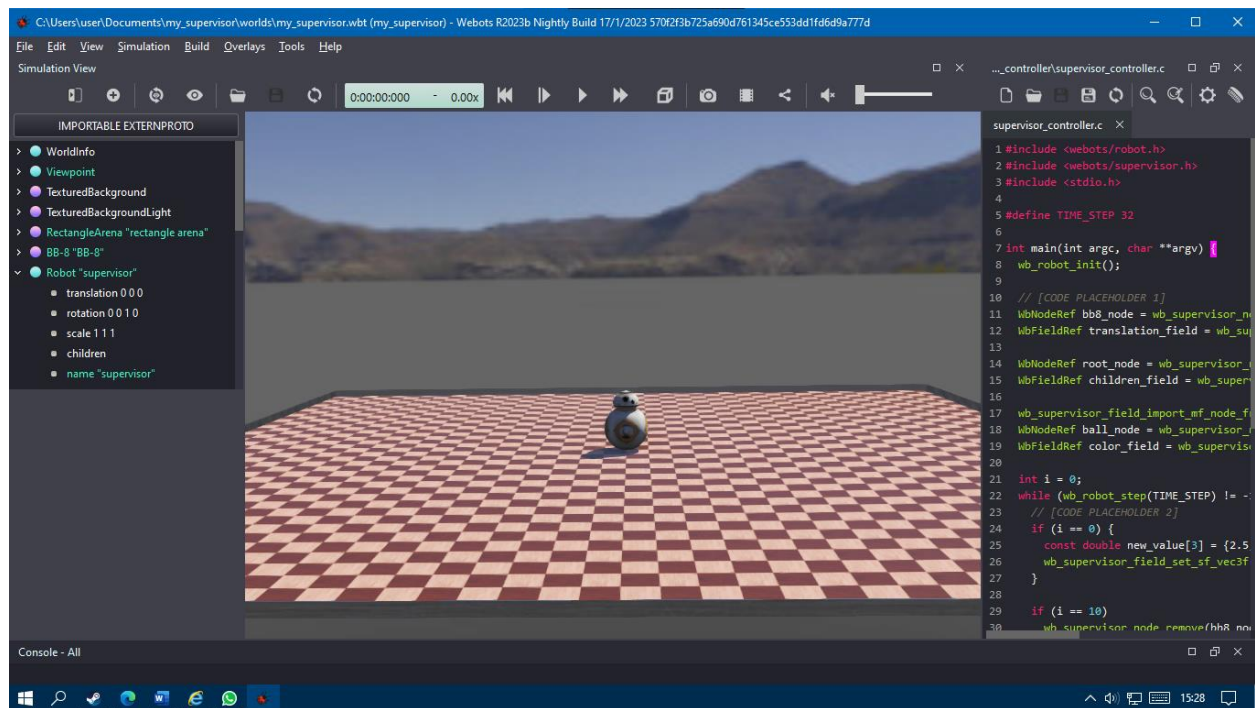


Figure 24 using created robot as supervisor to bb8 robot



# Tutorial 9: Using ROS

It can be seen that in the tutorial ROS is installed using linux and there is no way to install it on windows.