

UAS ROBOTIKA DAN SISTEM CERDAS
TUTORIAL WEBOTS

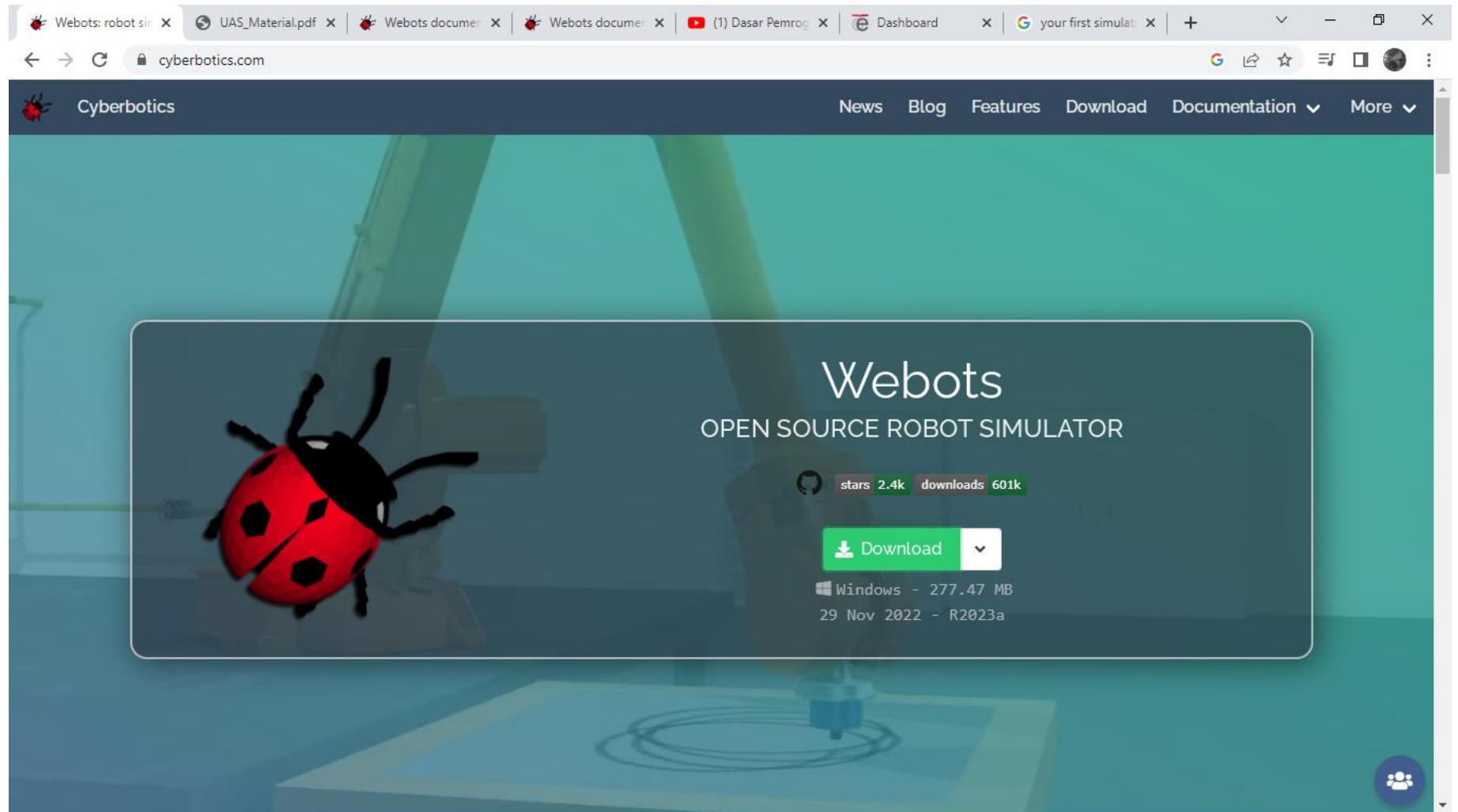
Disusun oleh :

FADLAN YUSUF RASPATI (1103190024)

Kelas : TK-43-03

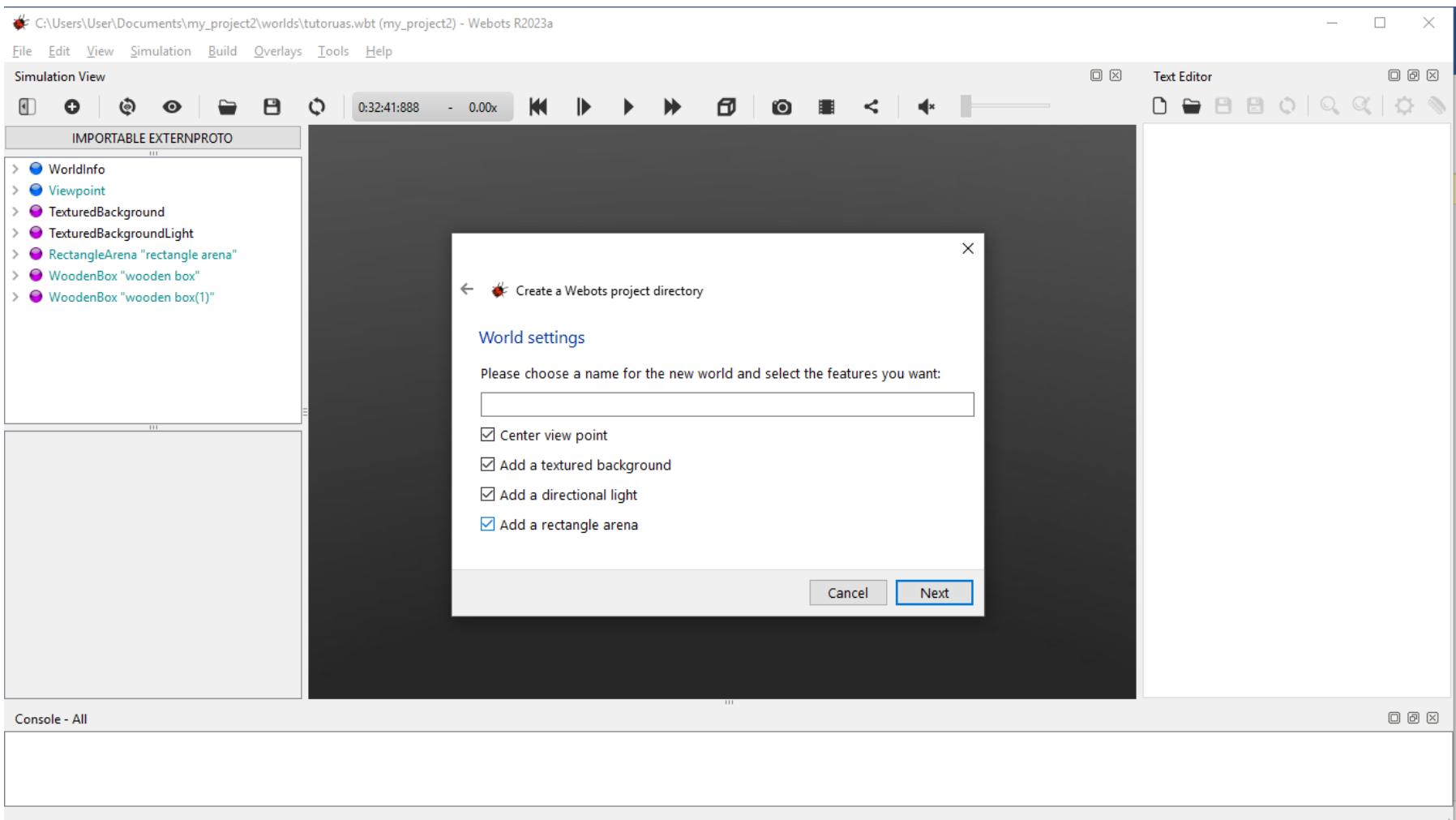
Tutorial 1: Your First Simulation in Webots

A. Start Webots

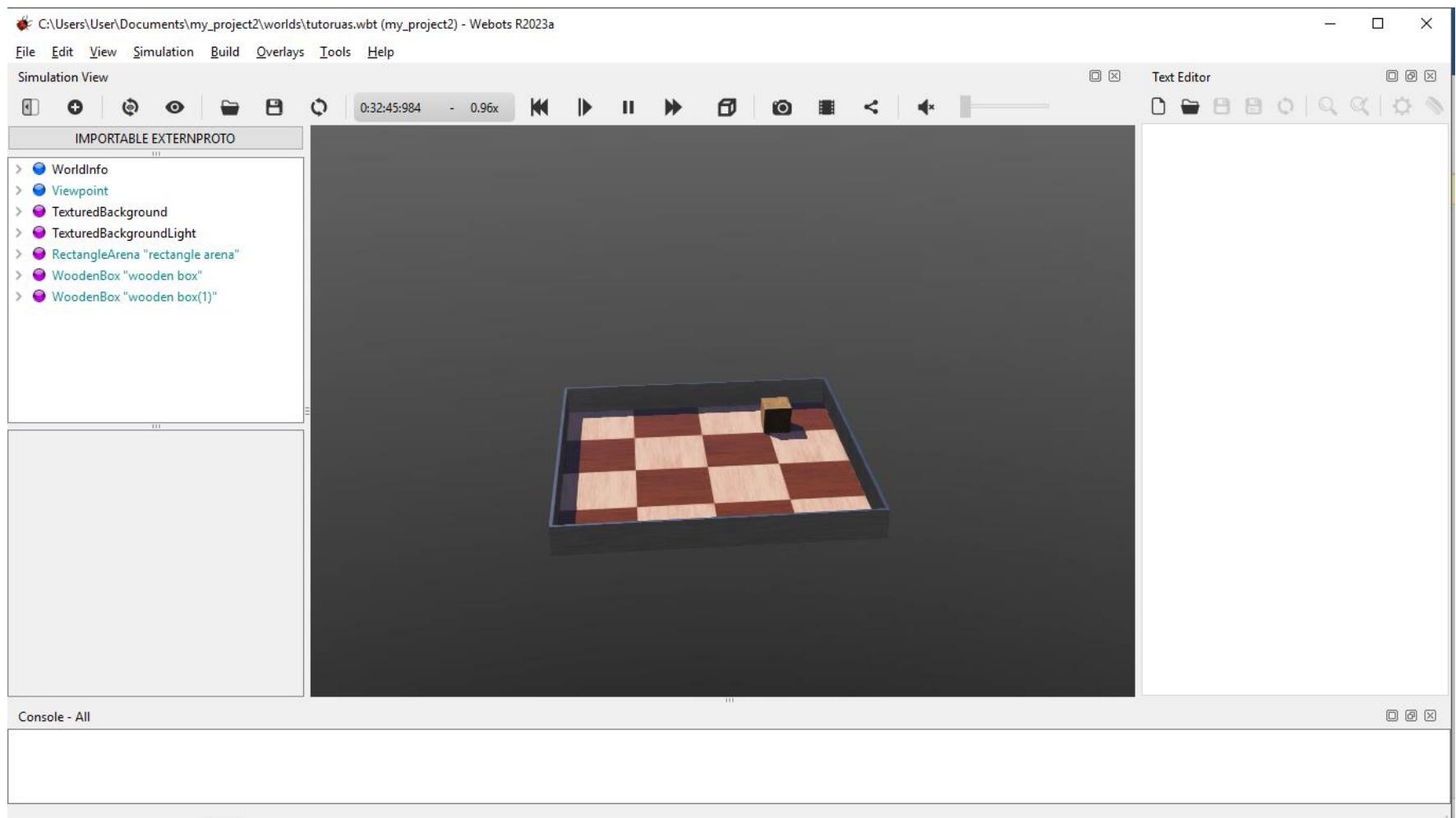


Download Webots

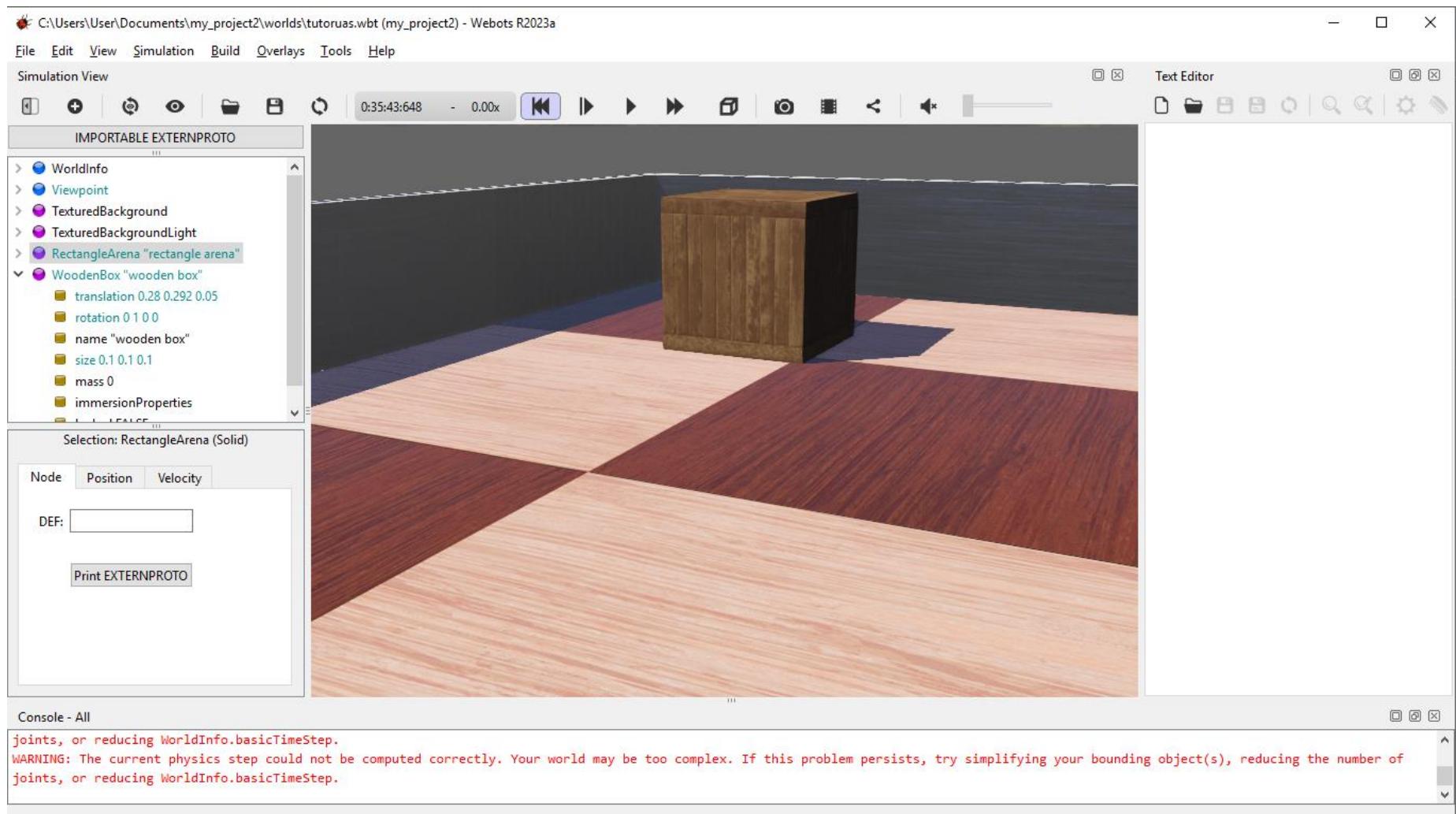
B. Create A New World



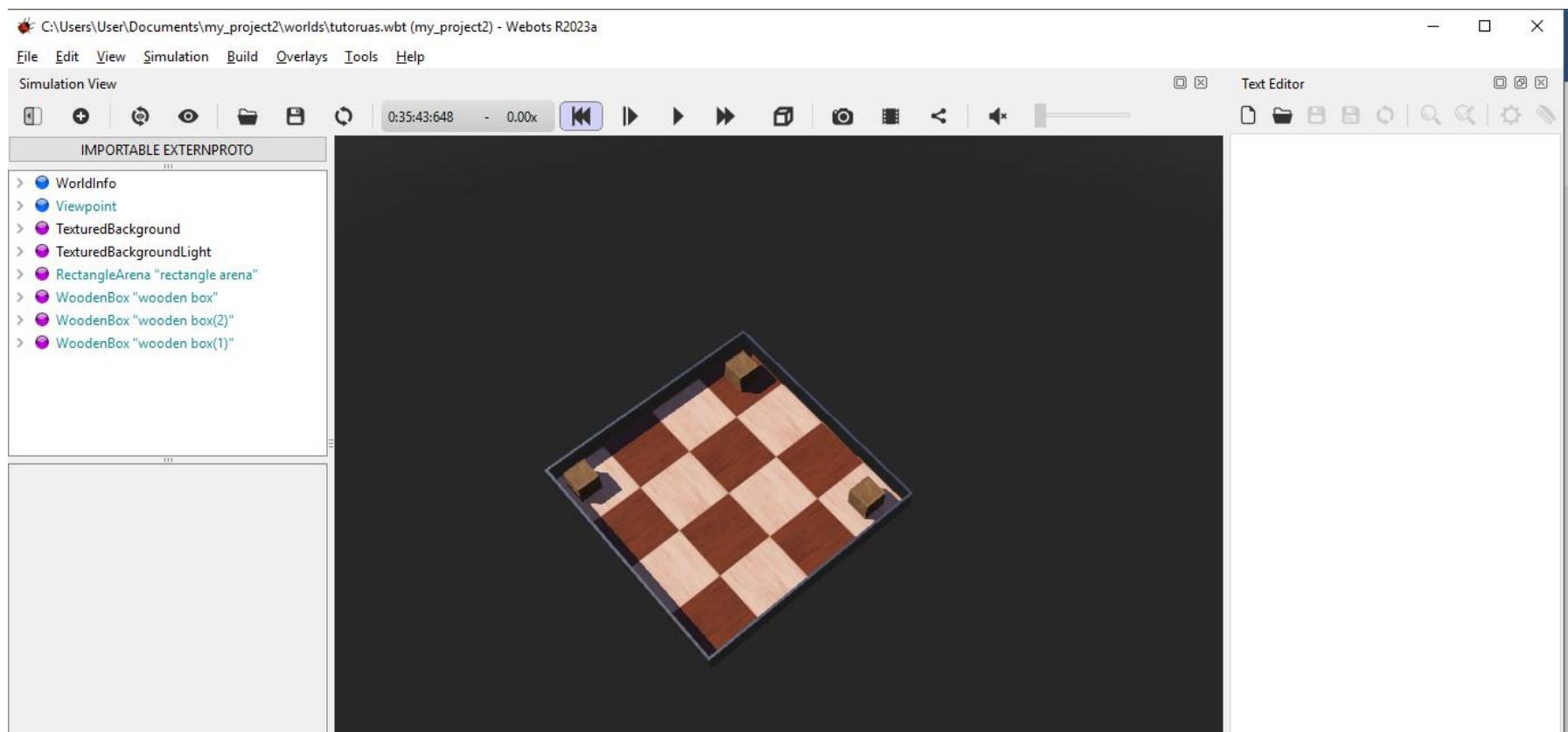
New World with Reactangle Arena



Add Wooden Box object



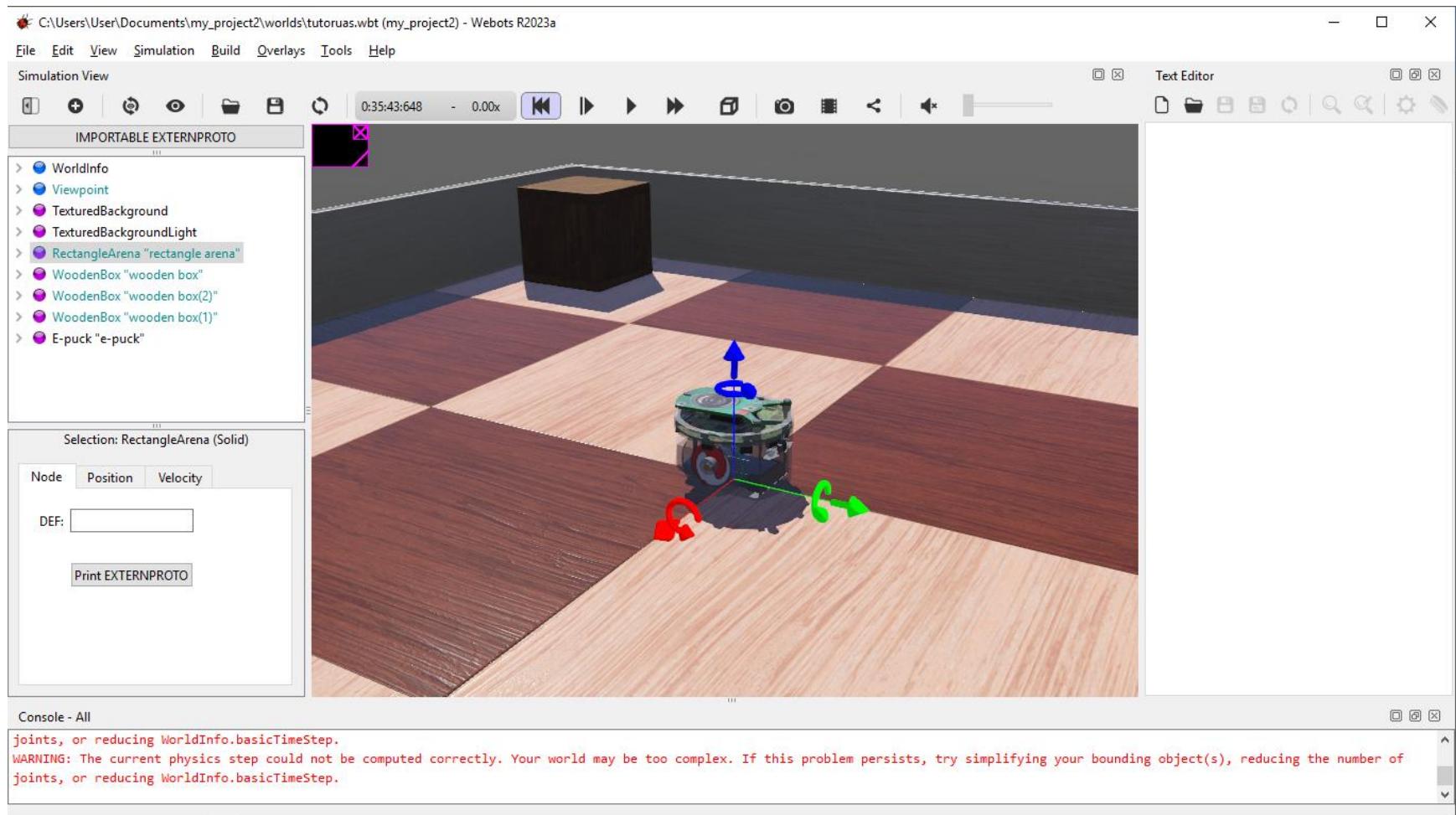
Copying WoodenBox objects

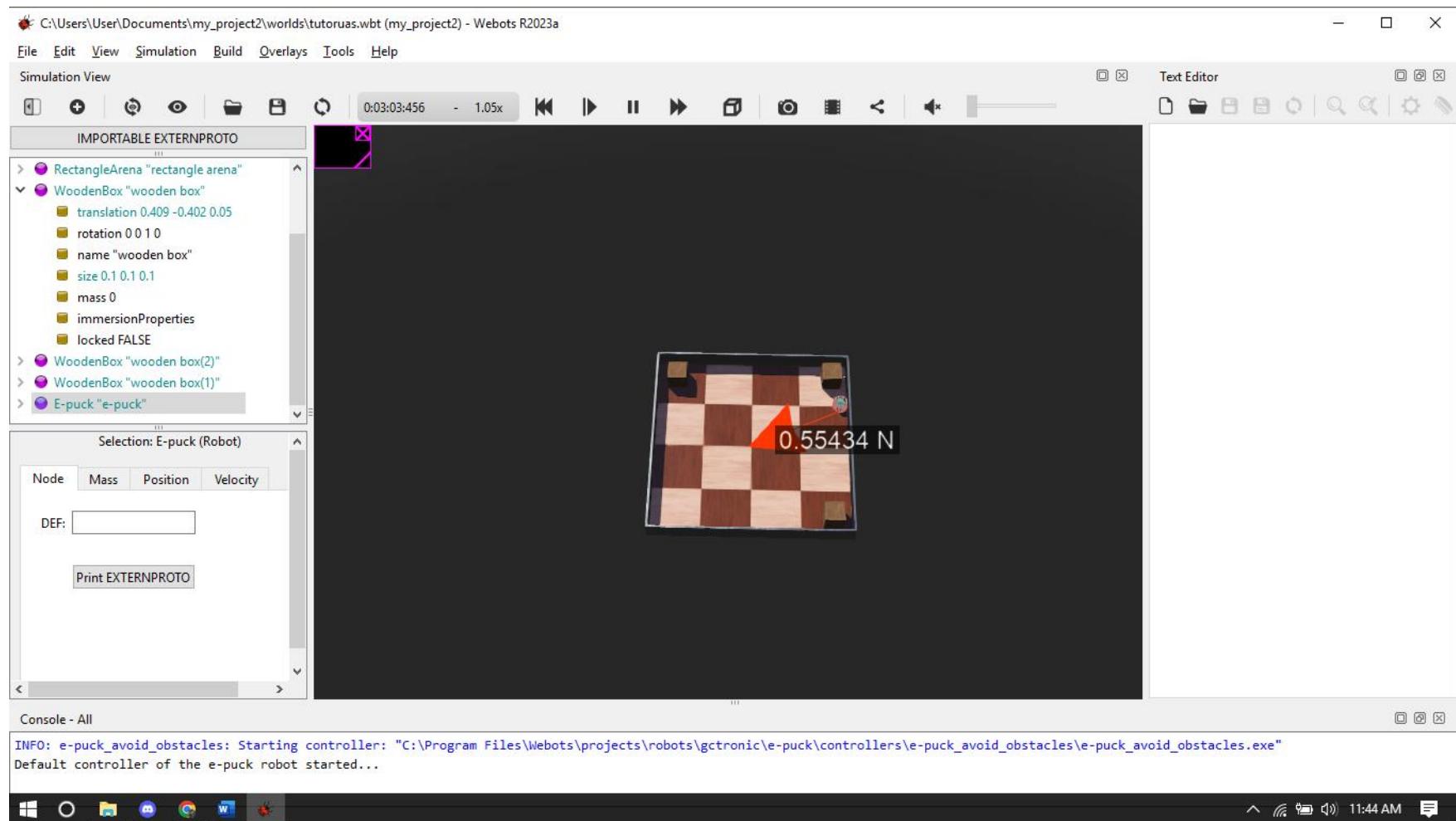


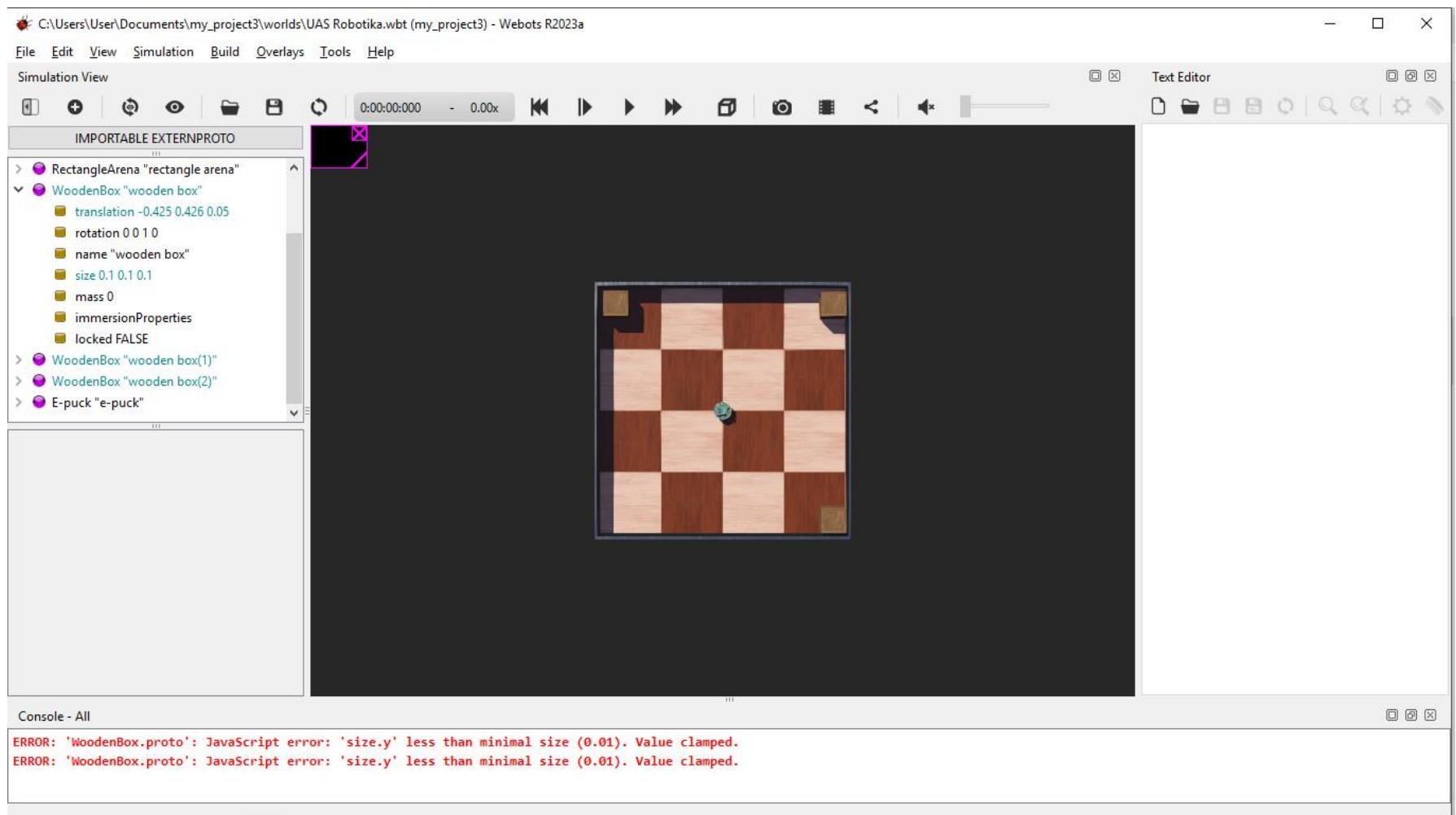
Console - All

```
joints, or reducing WorldInfo.basicTimeStep.  
WARNING: The current physics step could not be computed correctly. Your world may be too complex. If this problem persists, try simplifying your bounding object(s), reducing the number of joints, or reducing WorldInfo.basicTimeStep.
```

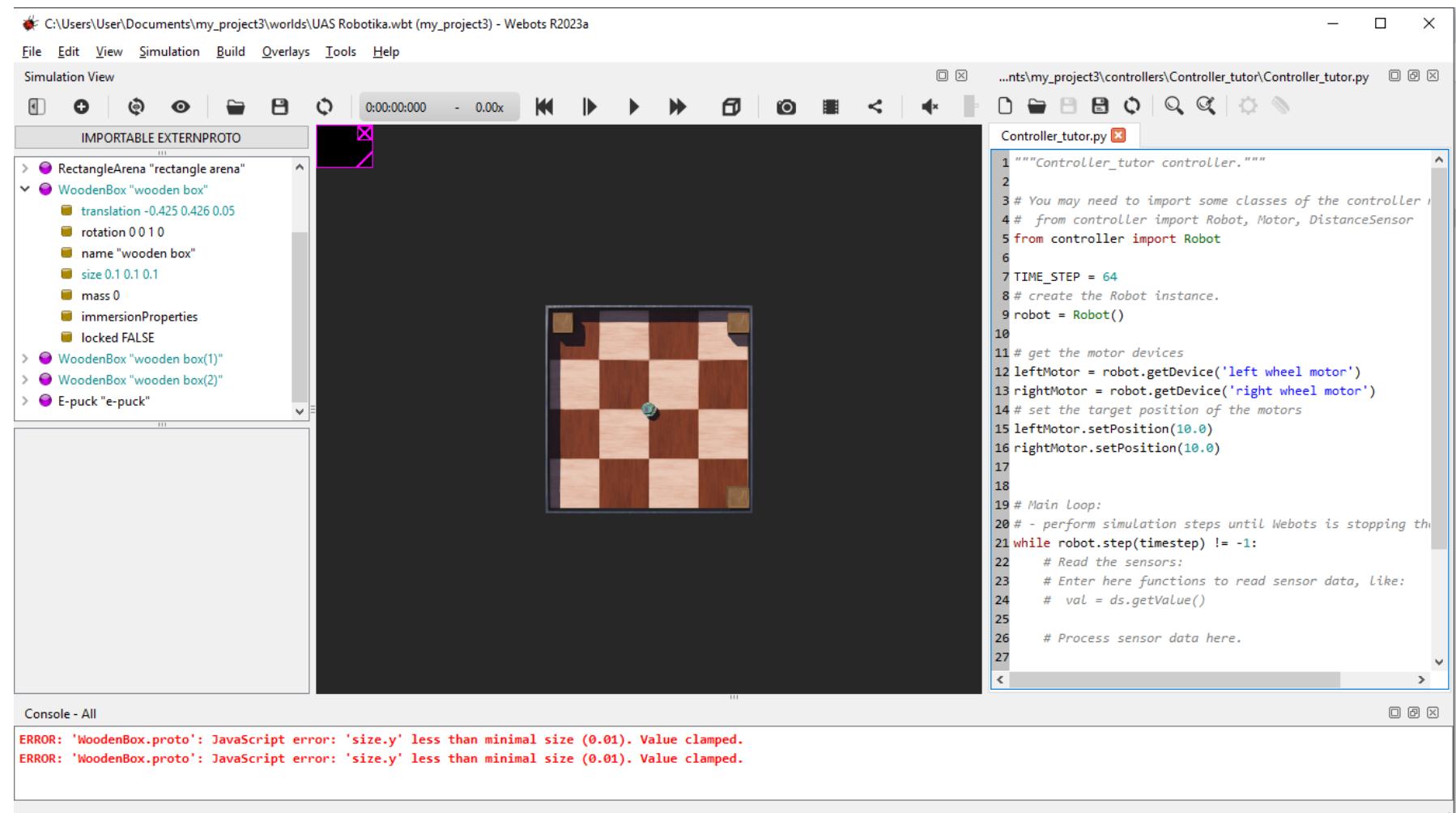
C. Add an E-Puck Robot



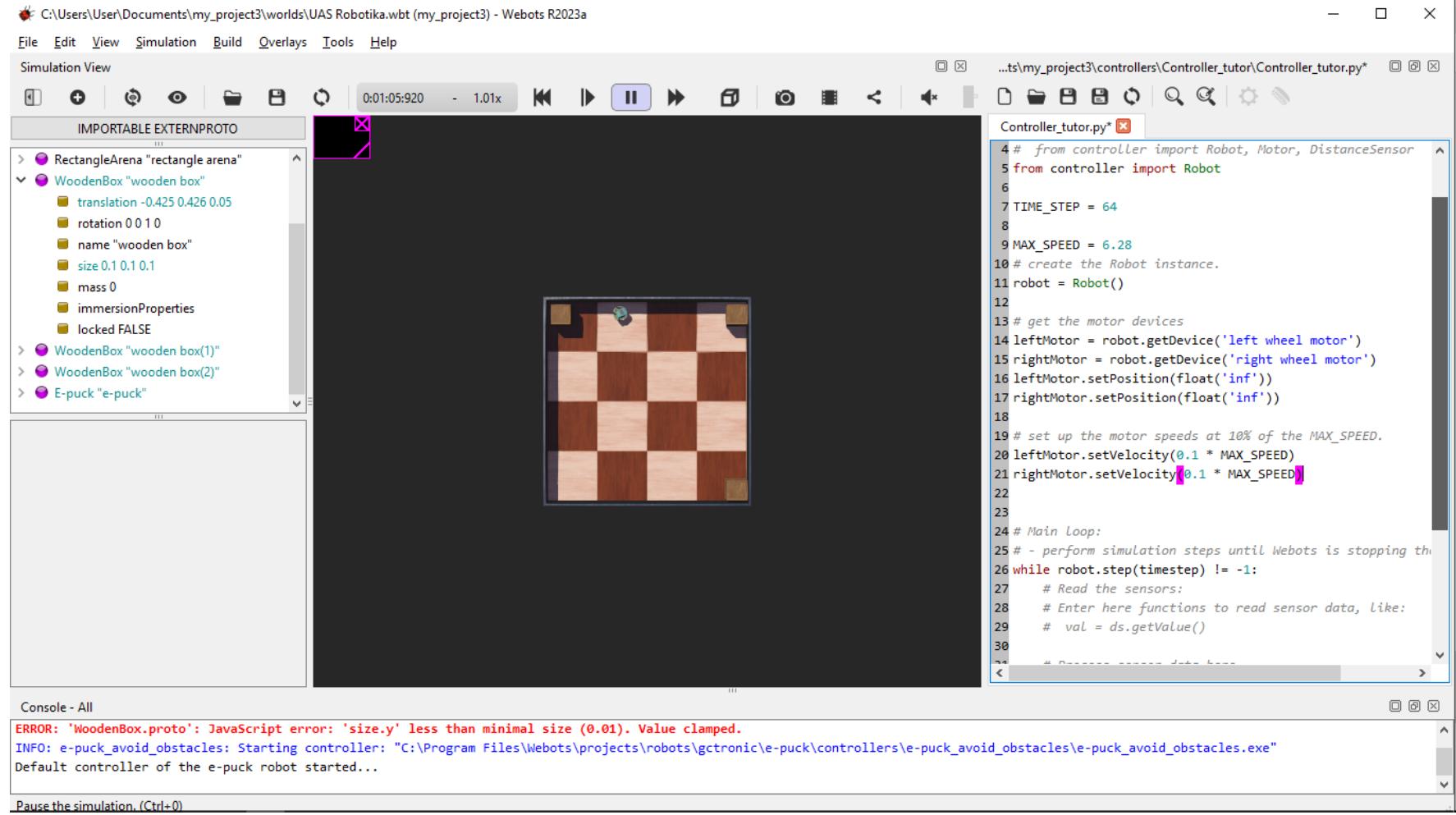




D. Create A New Controller



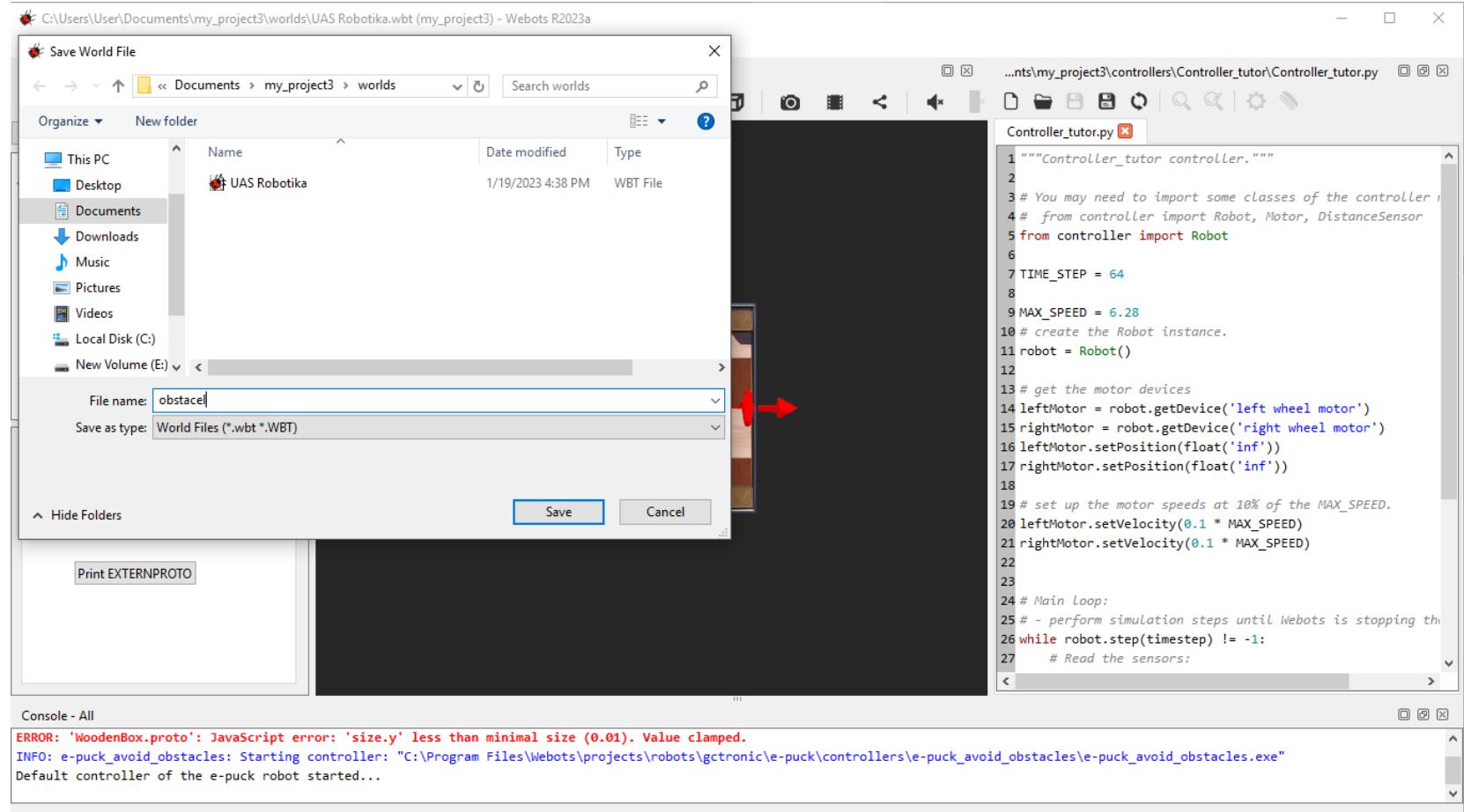
E. Extend the Controller to Speed Control



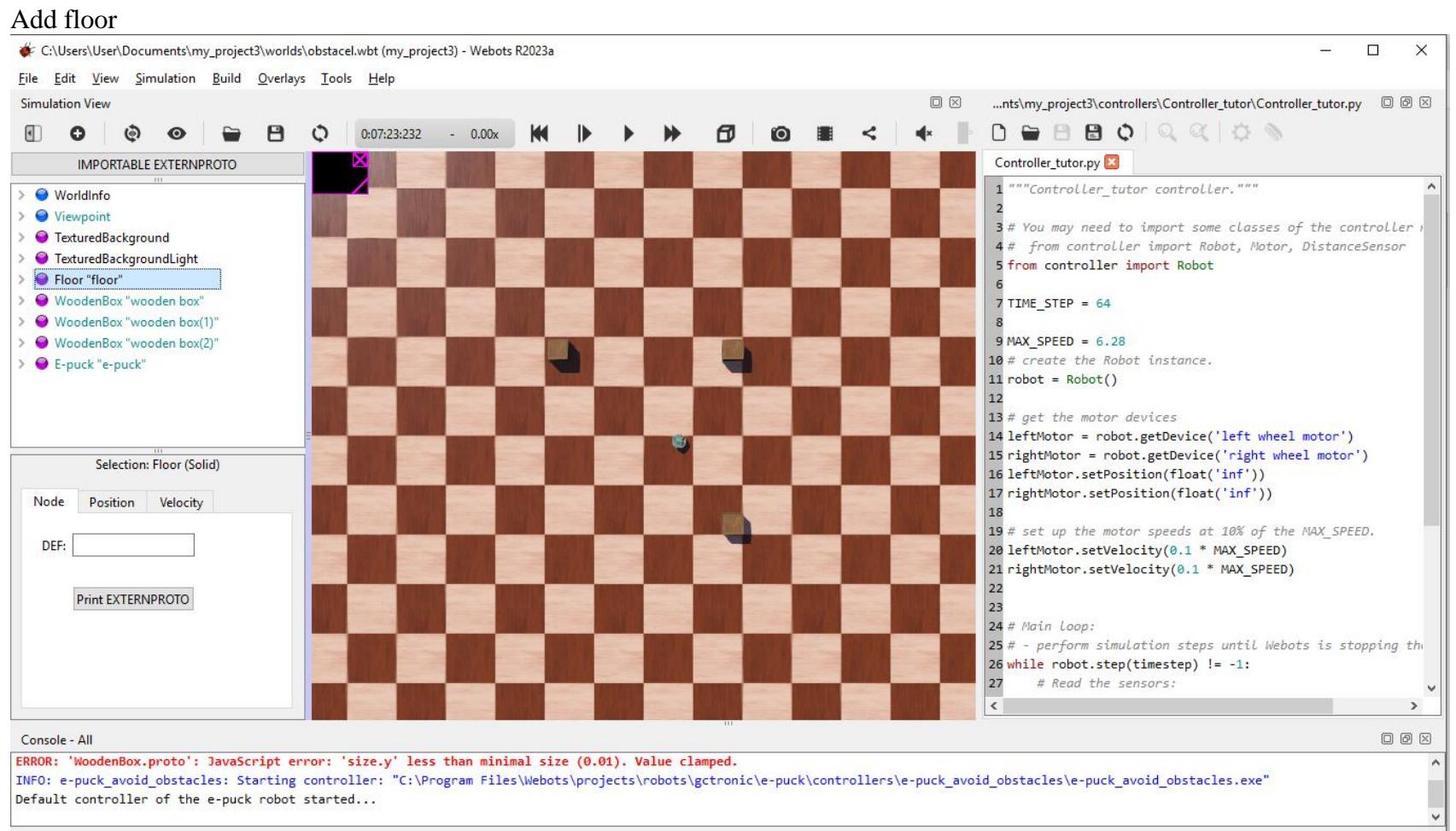
Tutorial 2: Modification of the Environment

A. A New Simulation

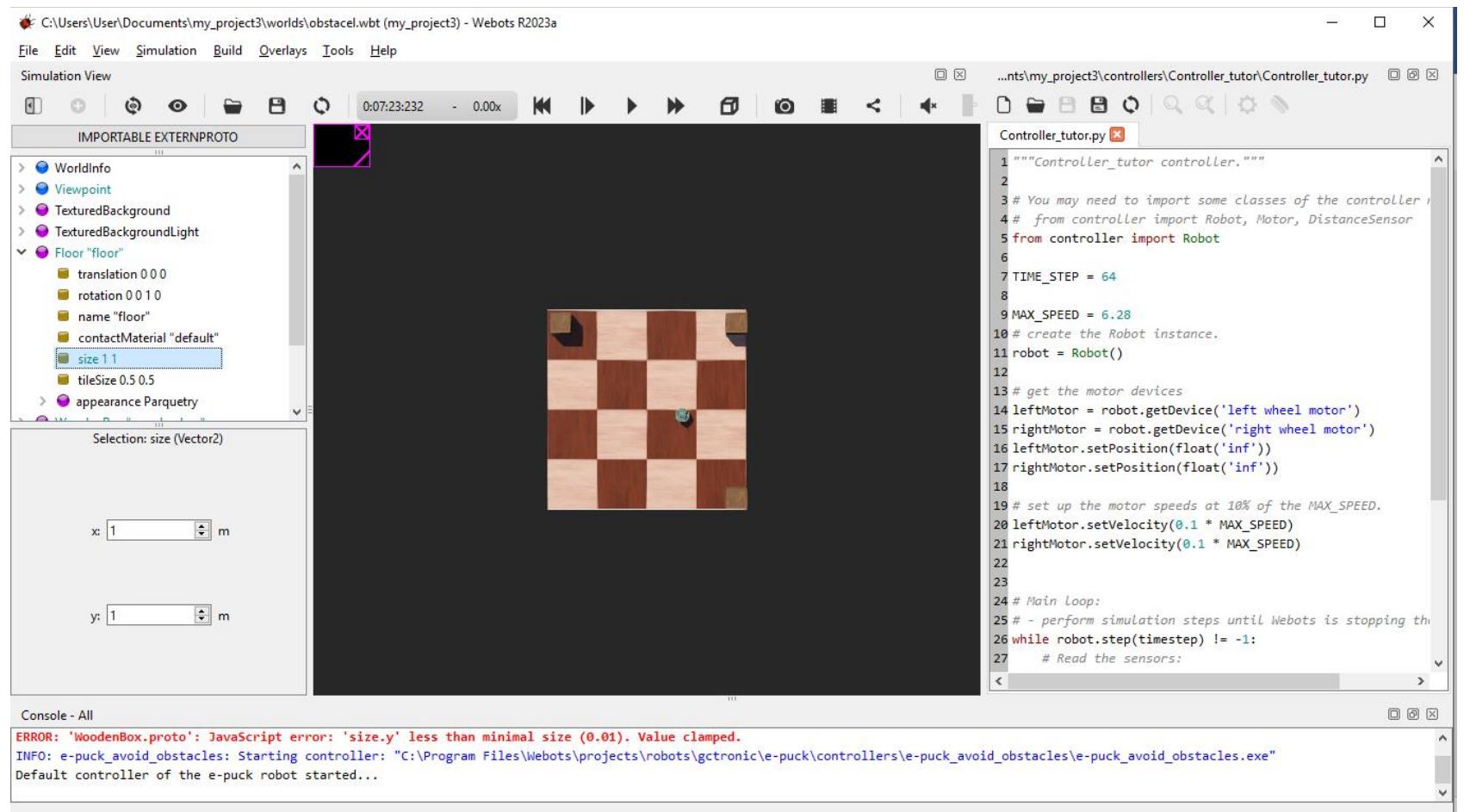
Save World



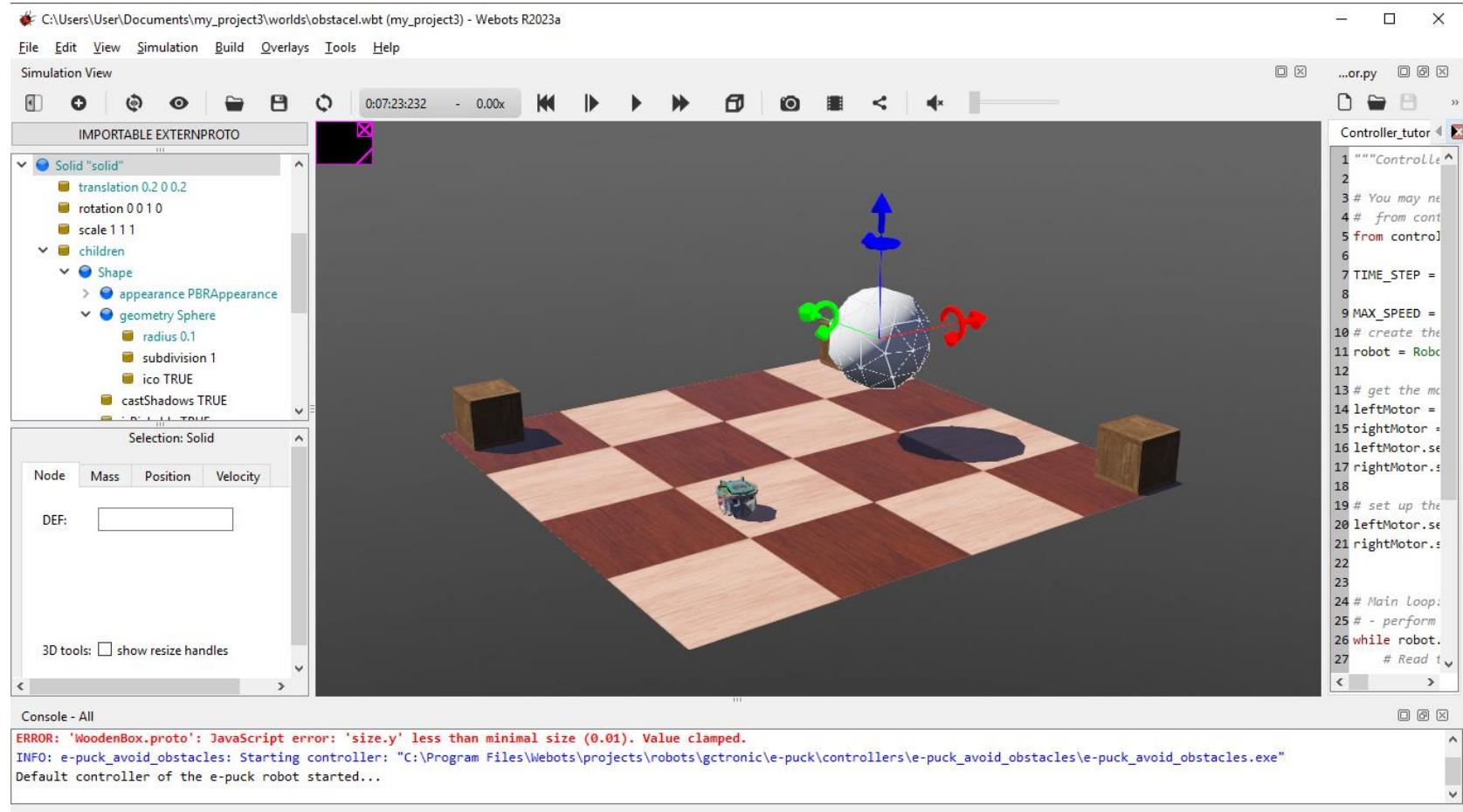
B. Modifying the Floor



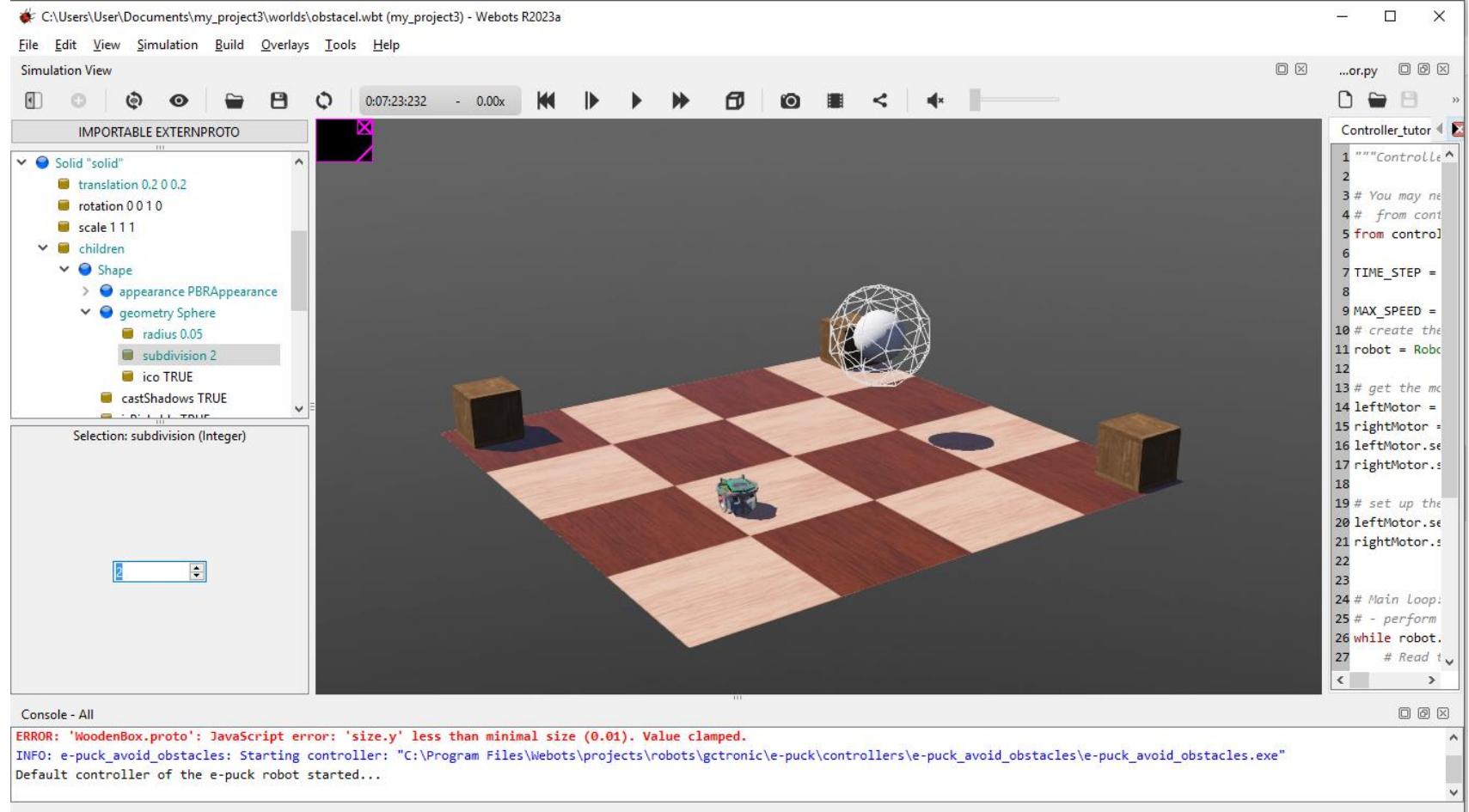
Resize floor size to 1m x 1m



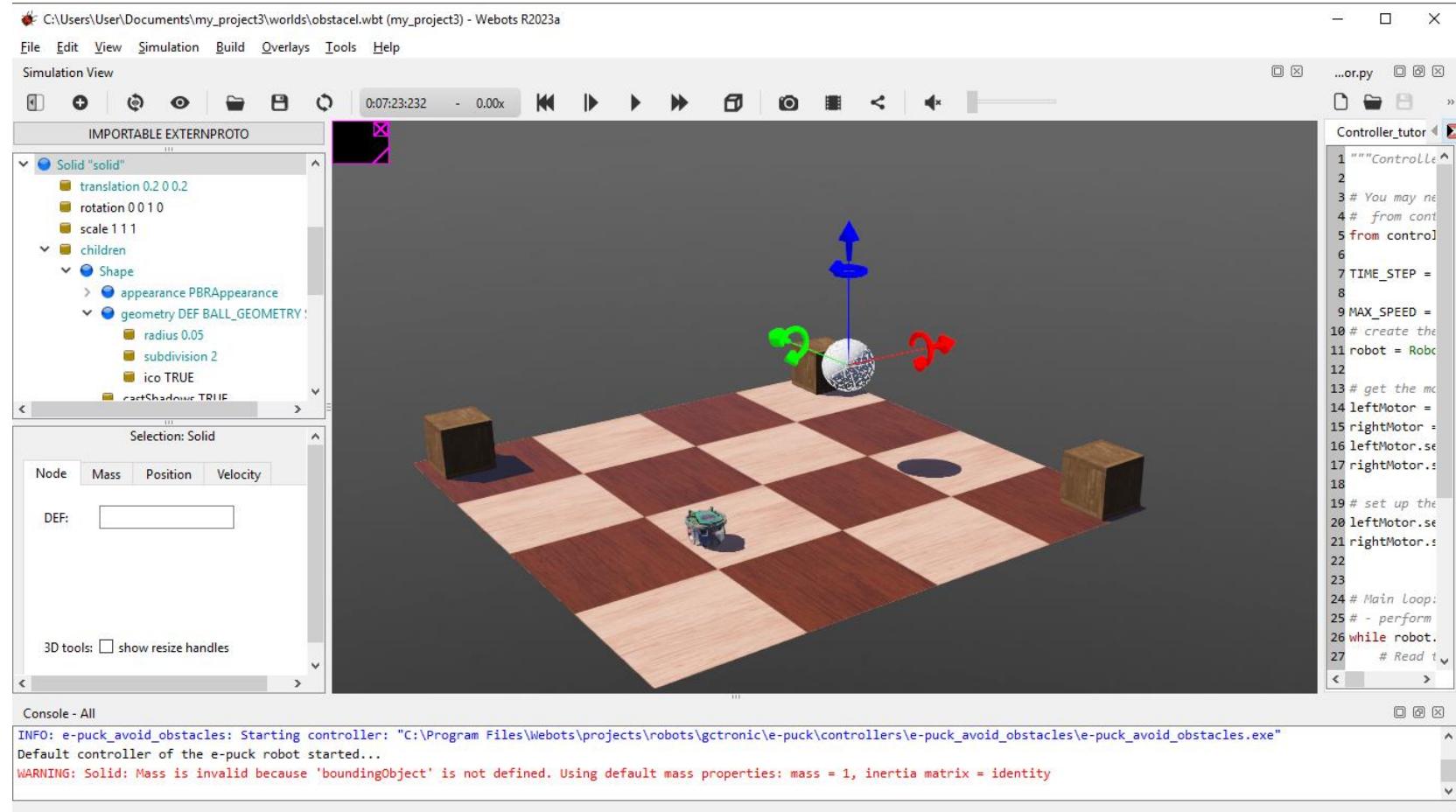
C. Create a Ball

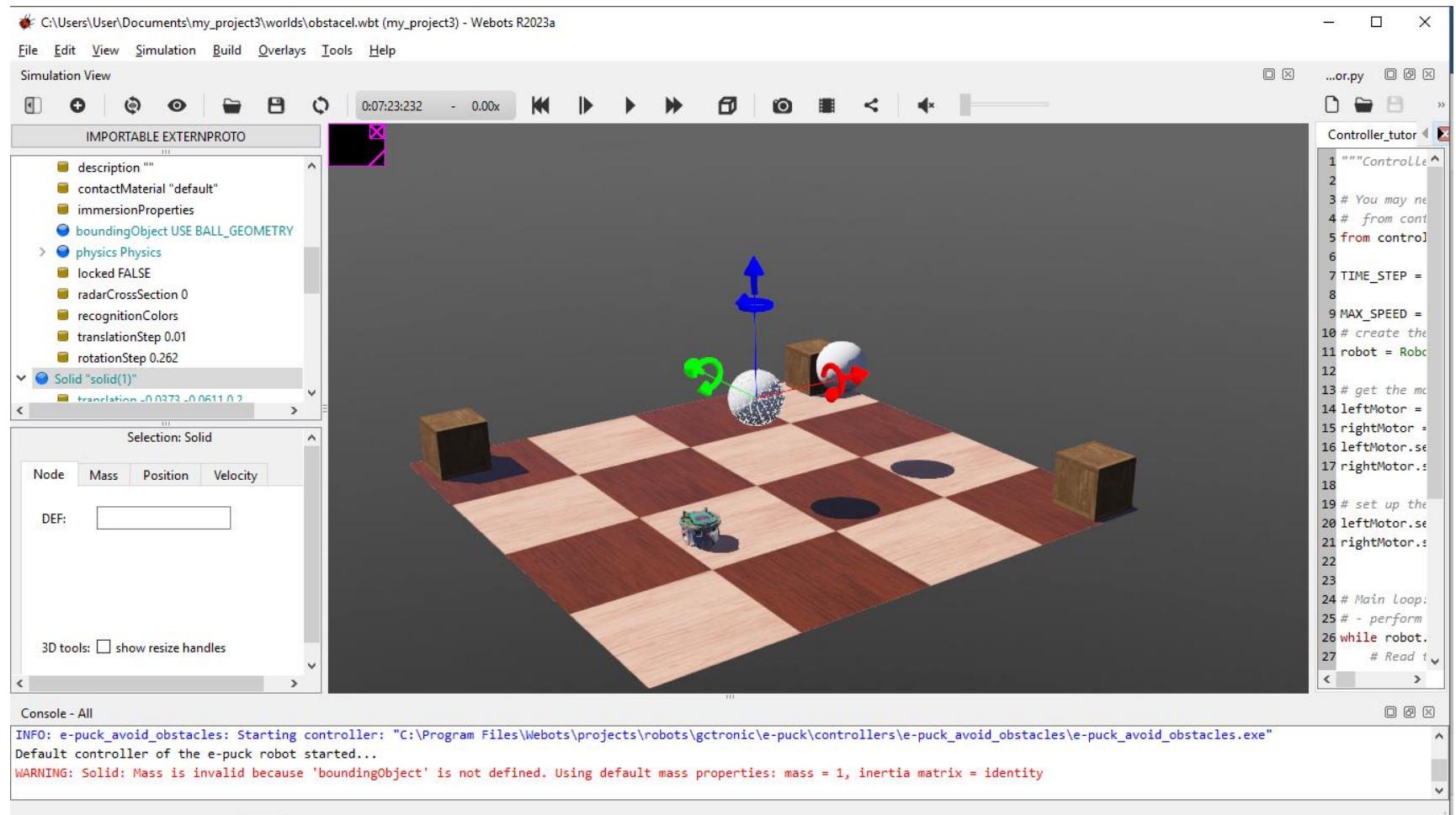


D. Geometries

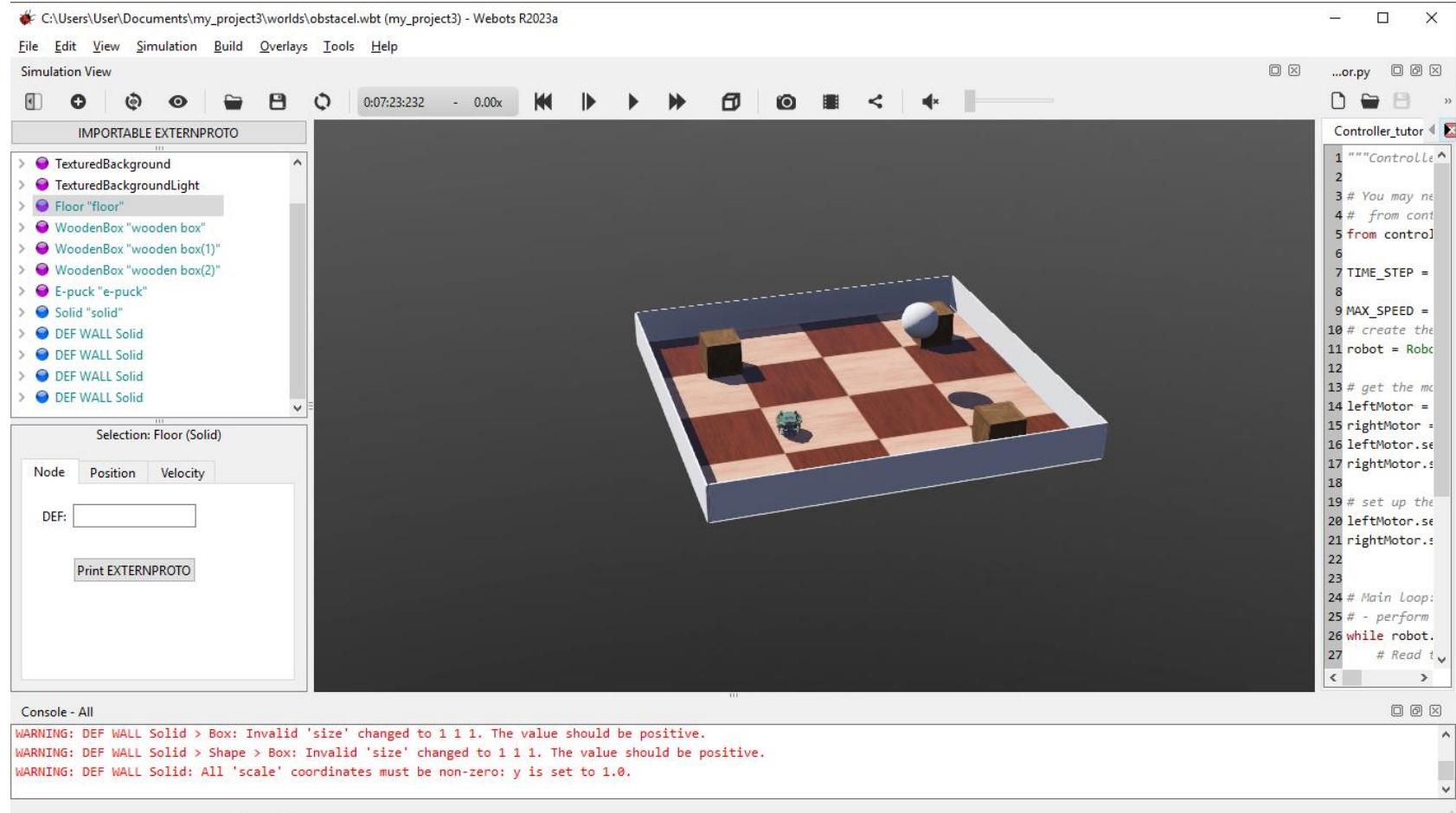


E. DEF-USE Mechanism



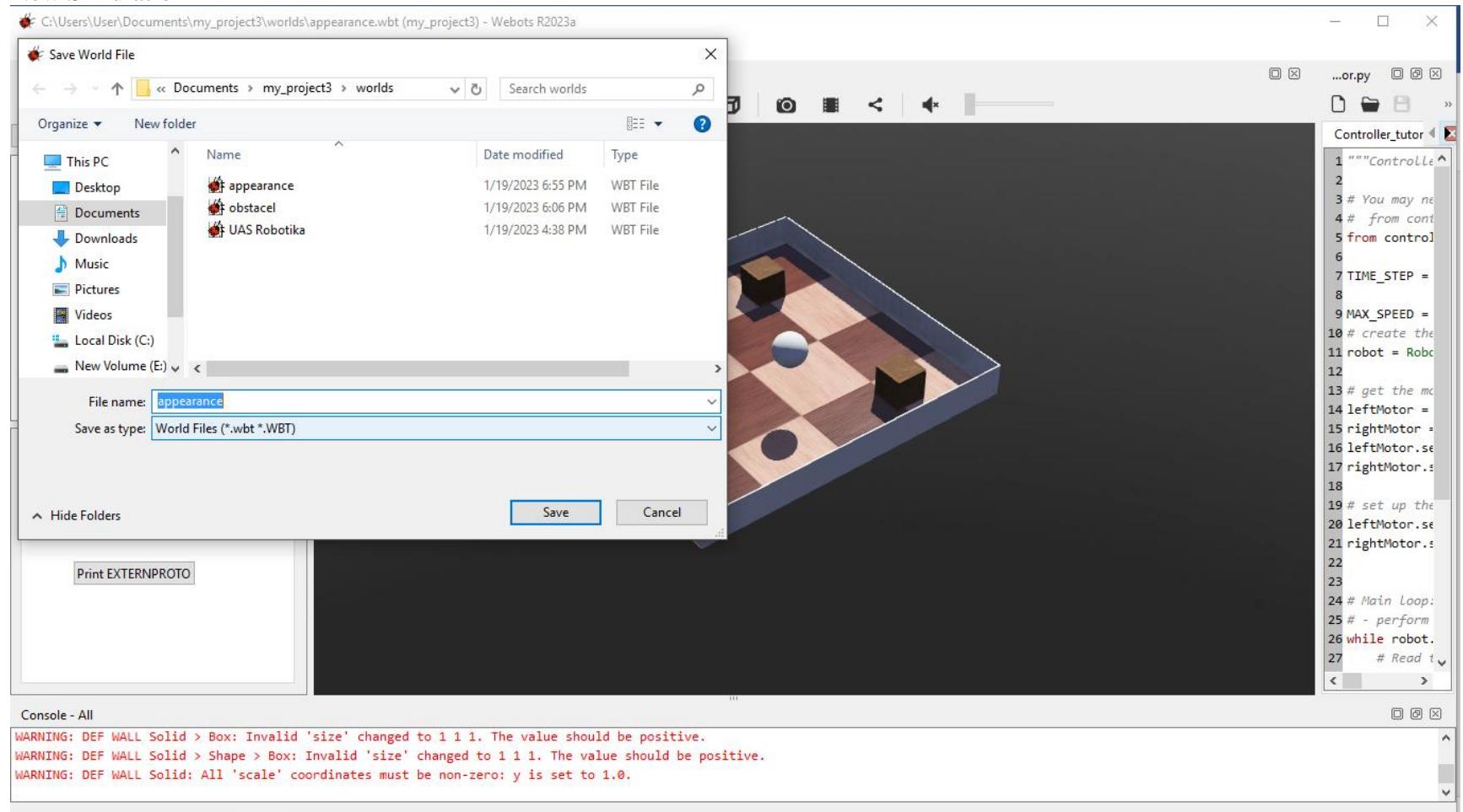


F. Add Walls

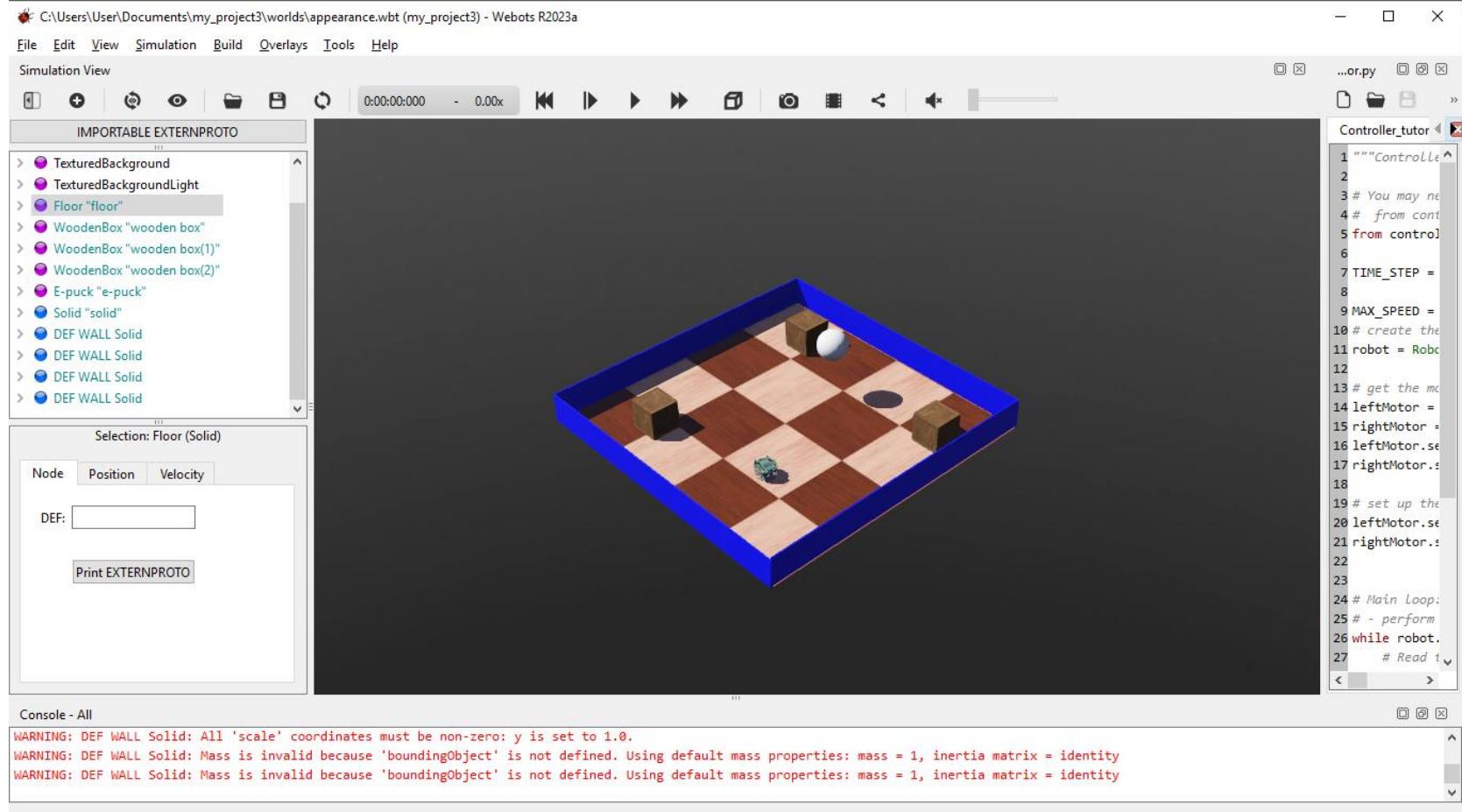


Tutorial 3: Appearance

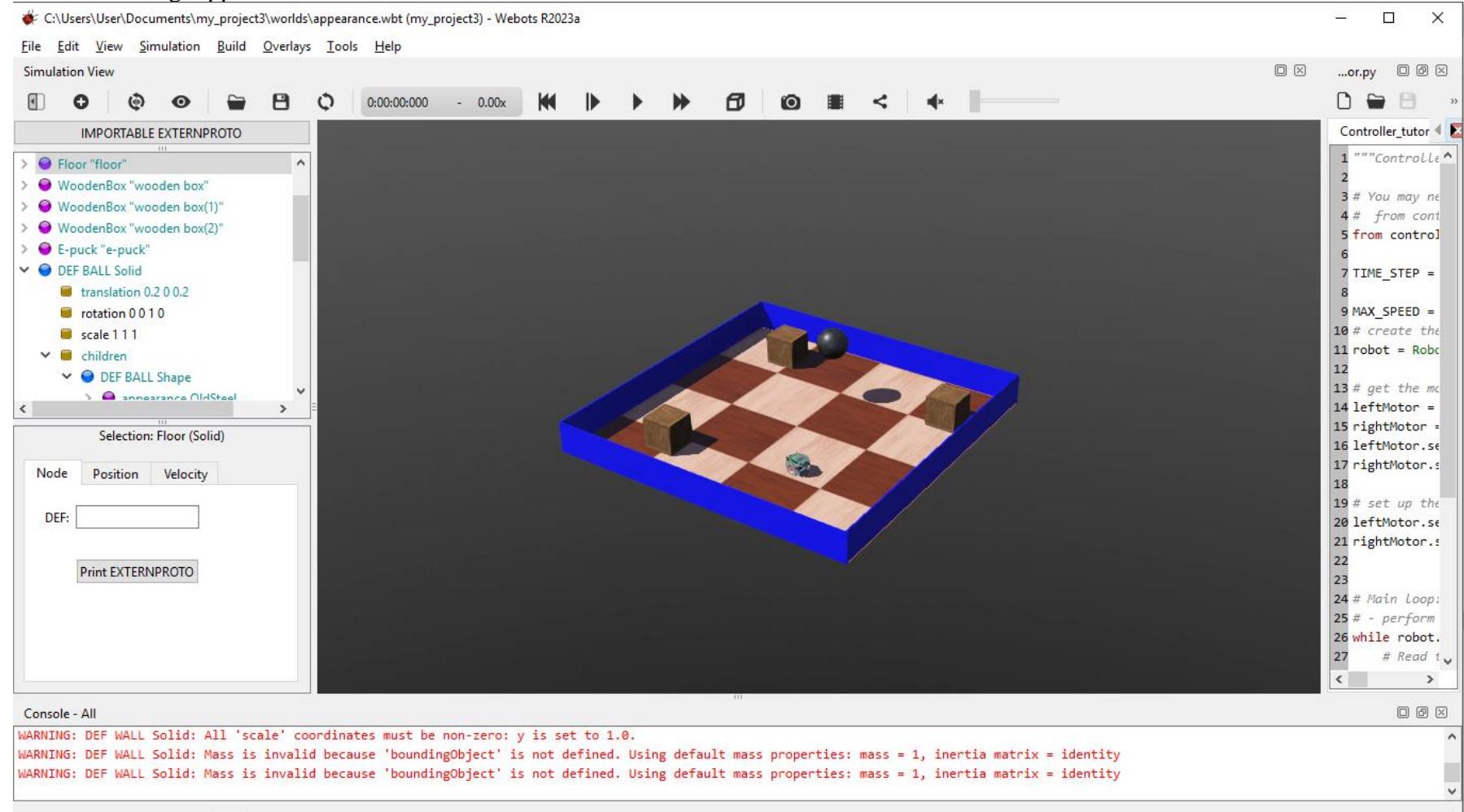
A. New Simulation



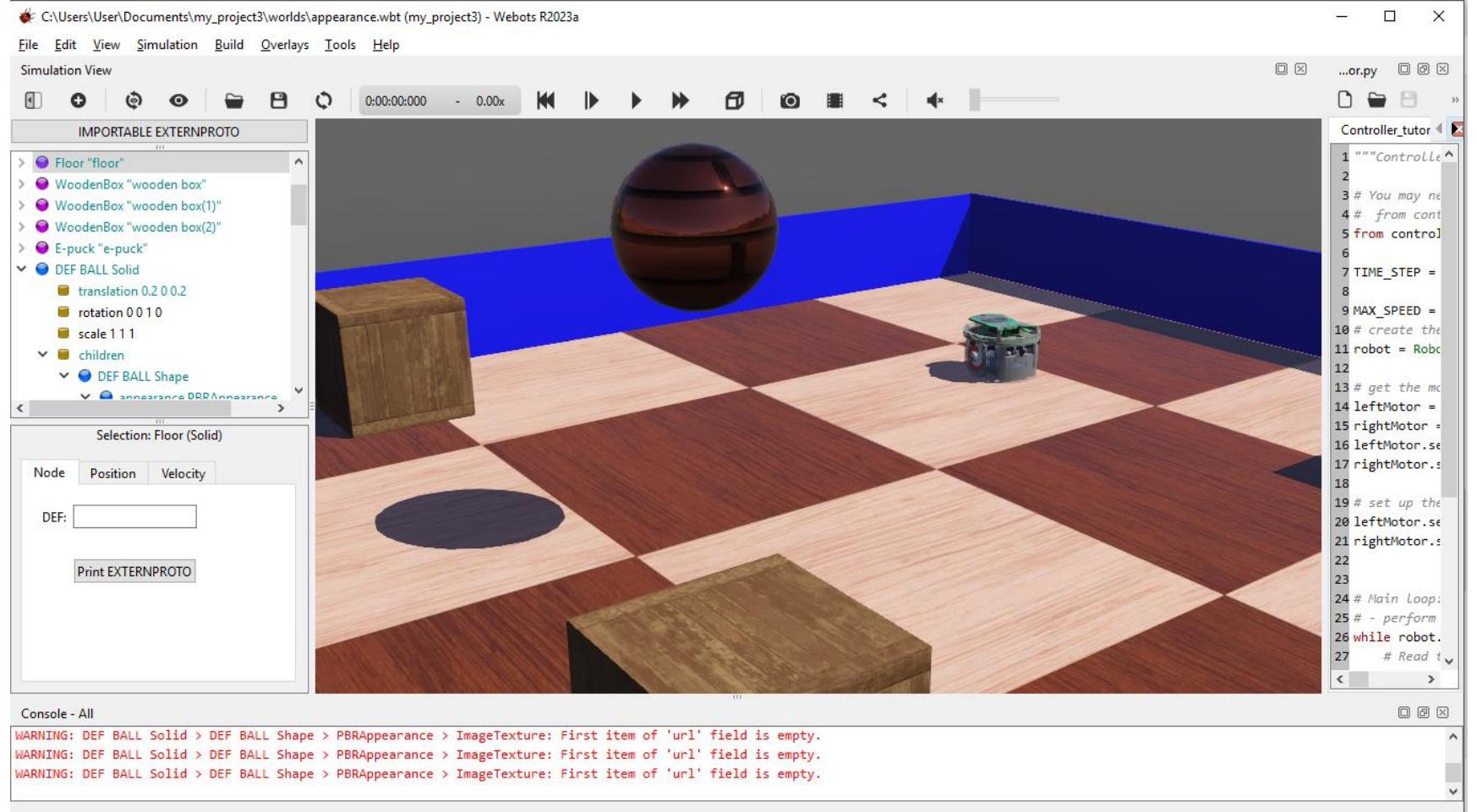
B. Modify the Appearance of the Walls



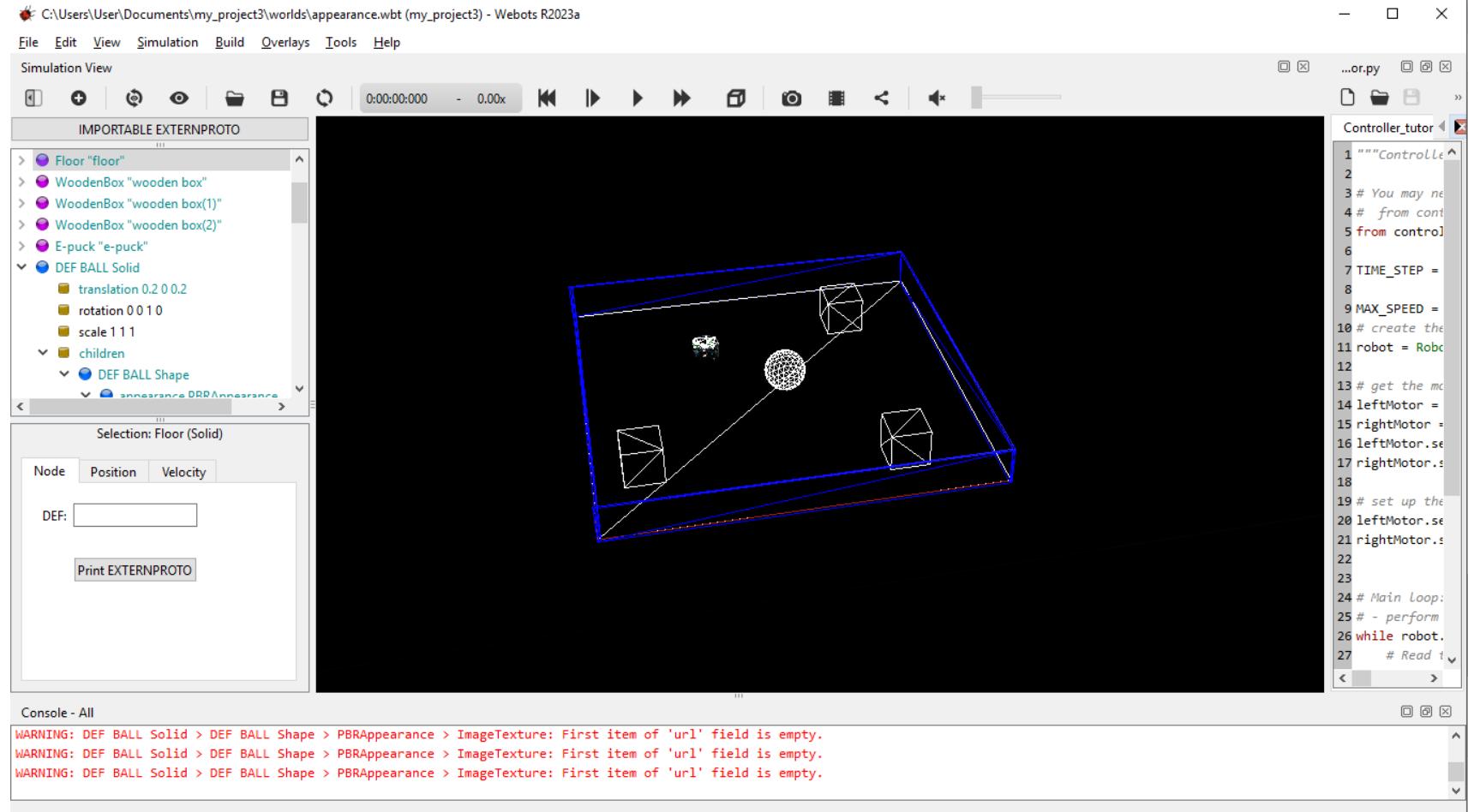
C. Add an Existing Appearance to the Ball



D. Add a Texture from Disk

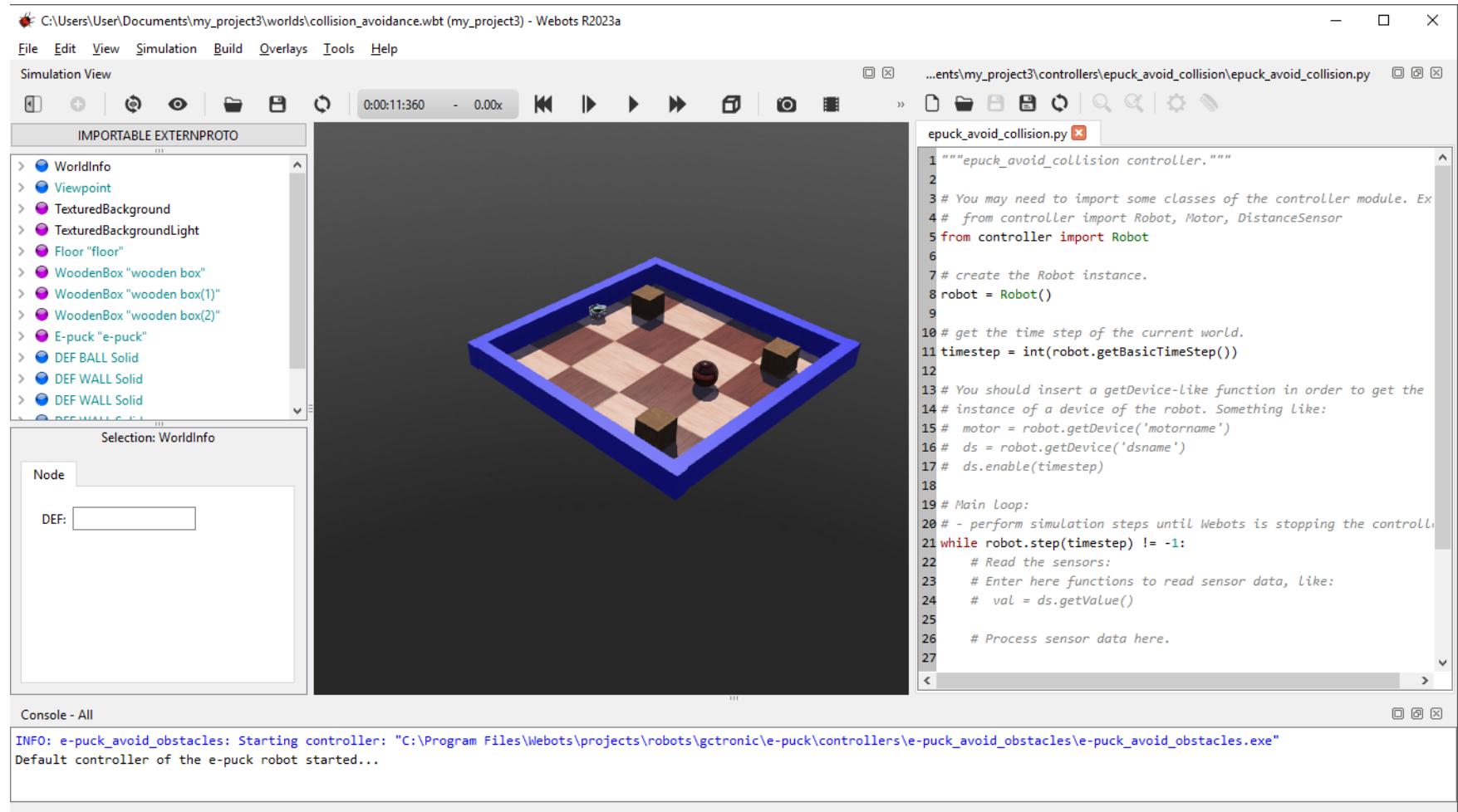


E. Rendering Option

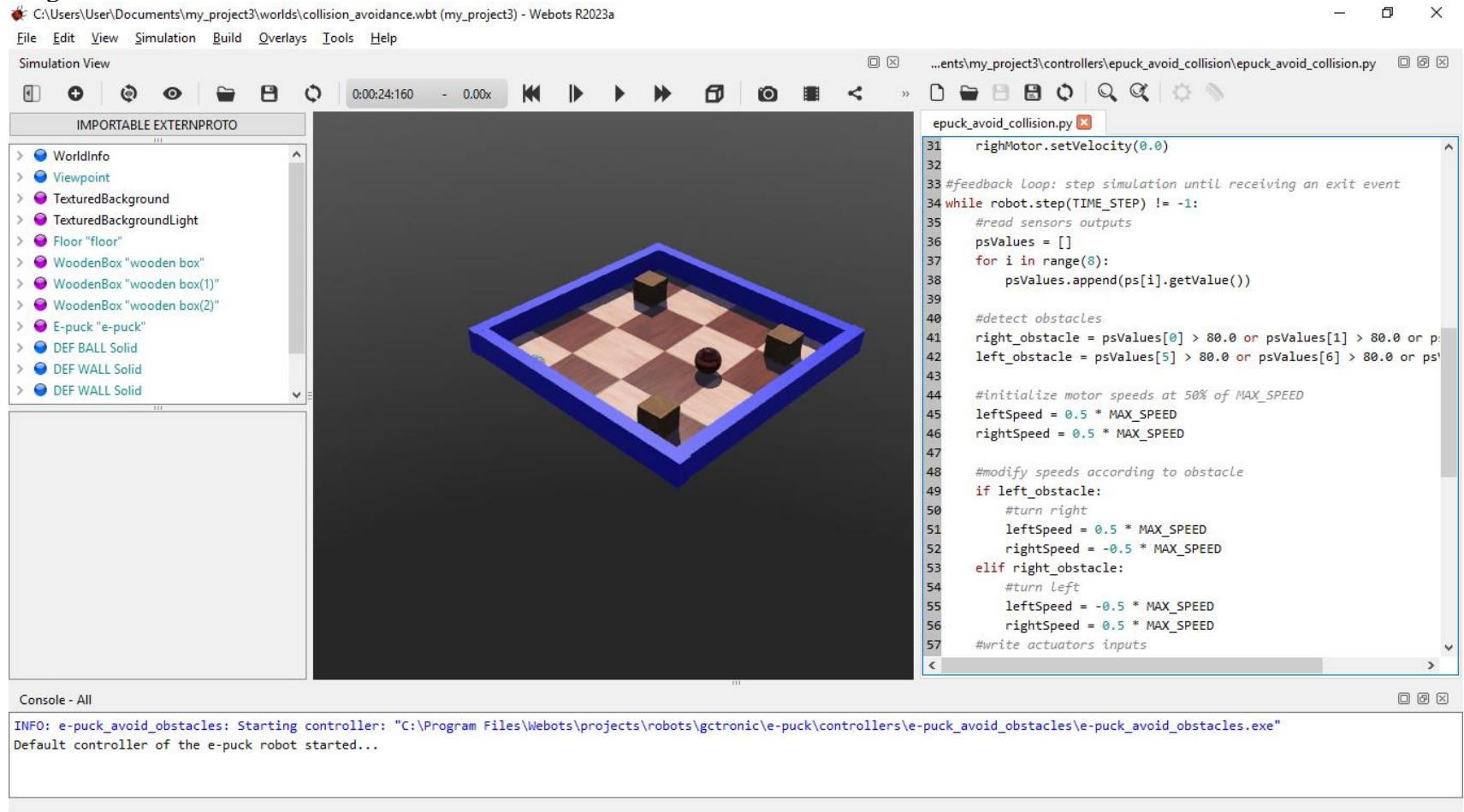


Tutorial 4: More about Controllers

A. New World and New Controller

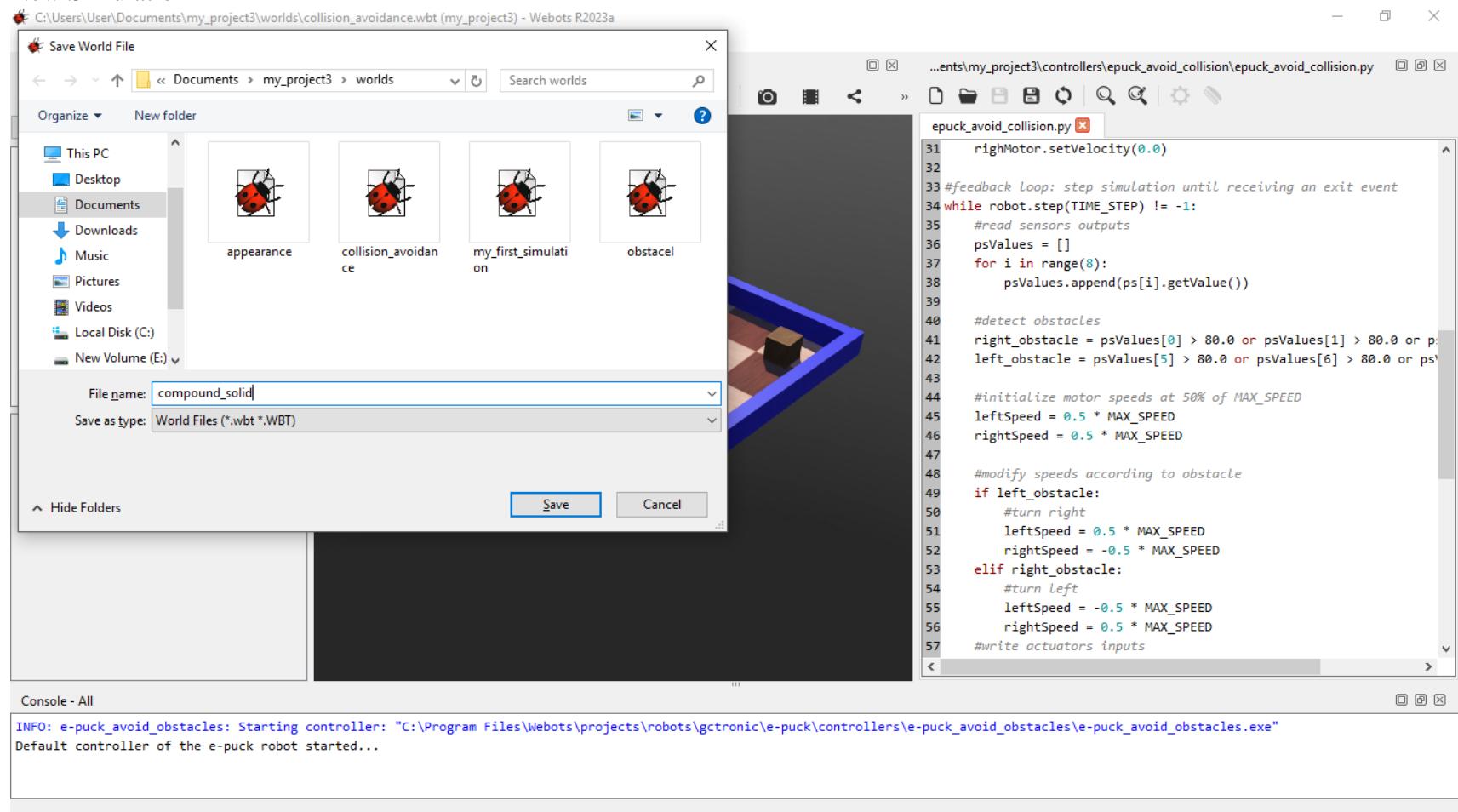


B. Program a Controller

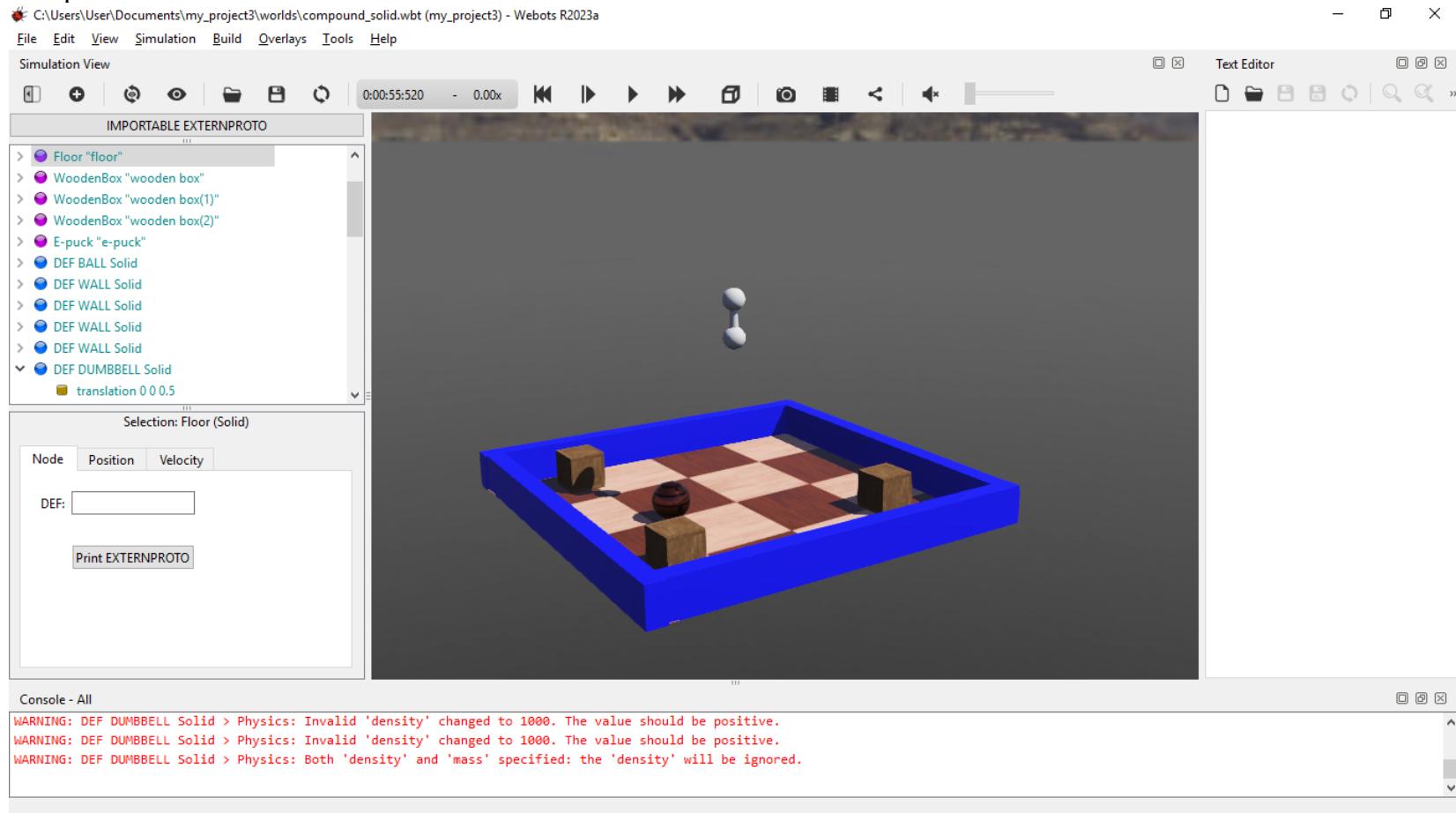


Tutorial 5: Compound Solid and Physics Attributes

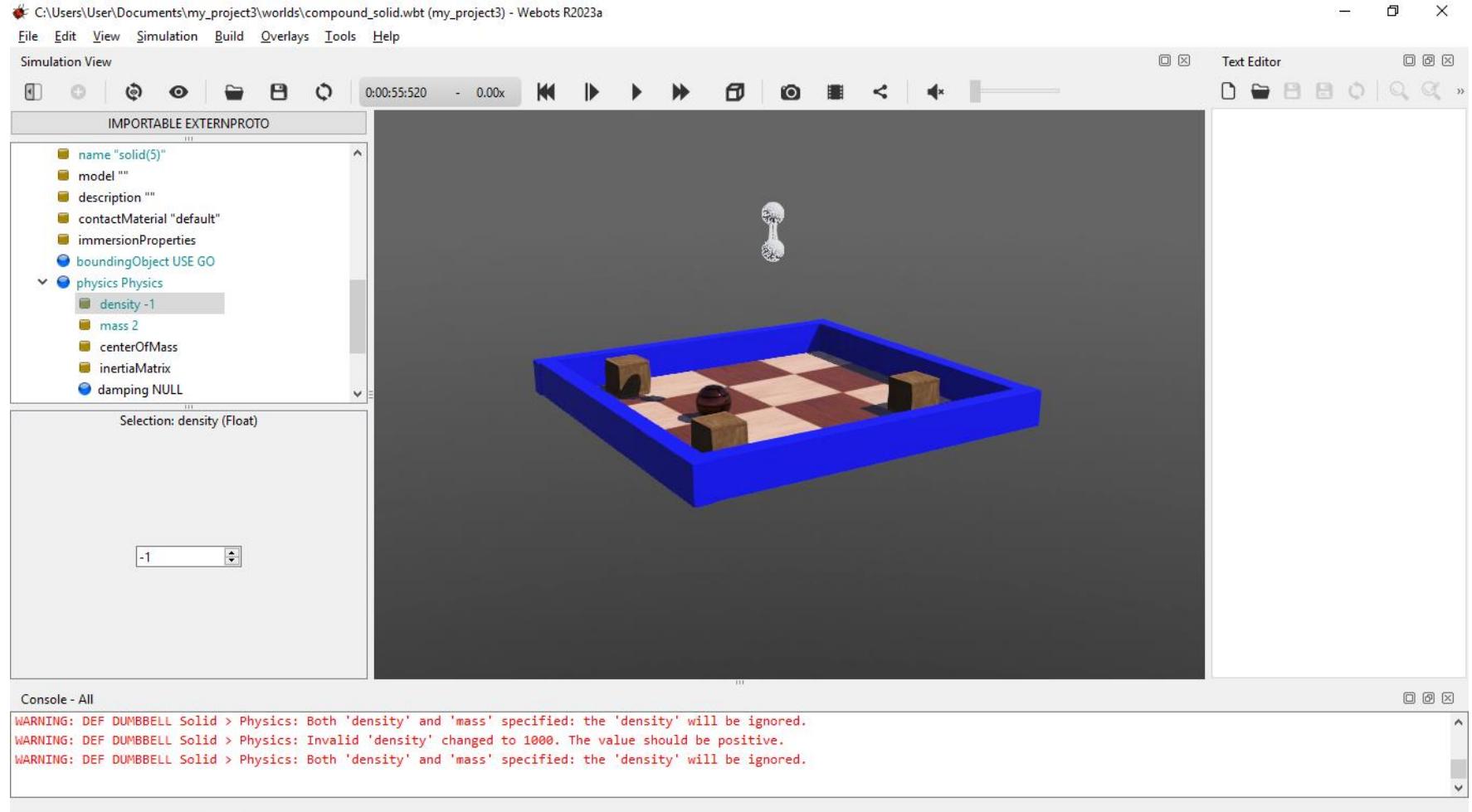
A. New Simulation

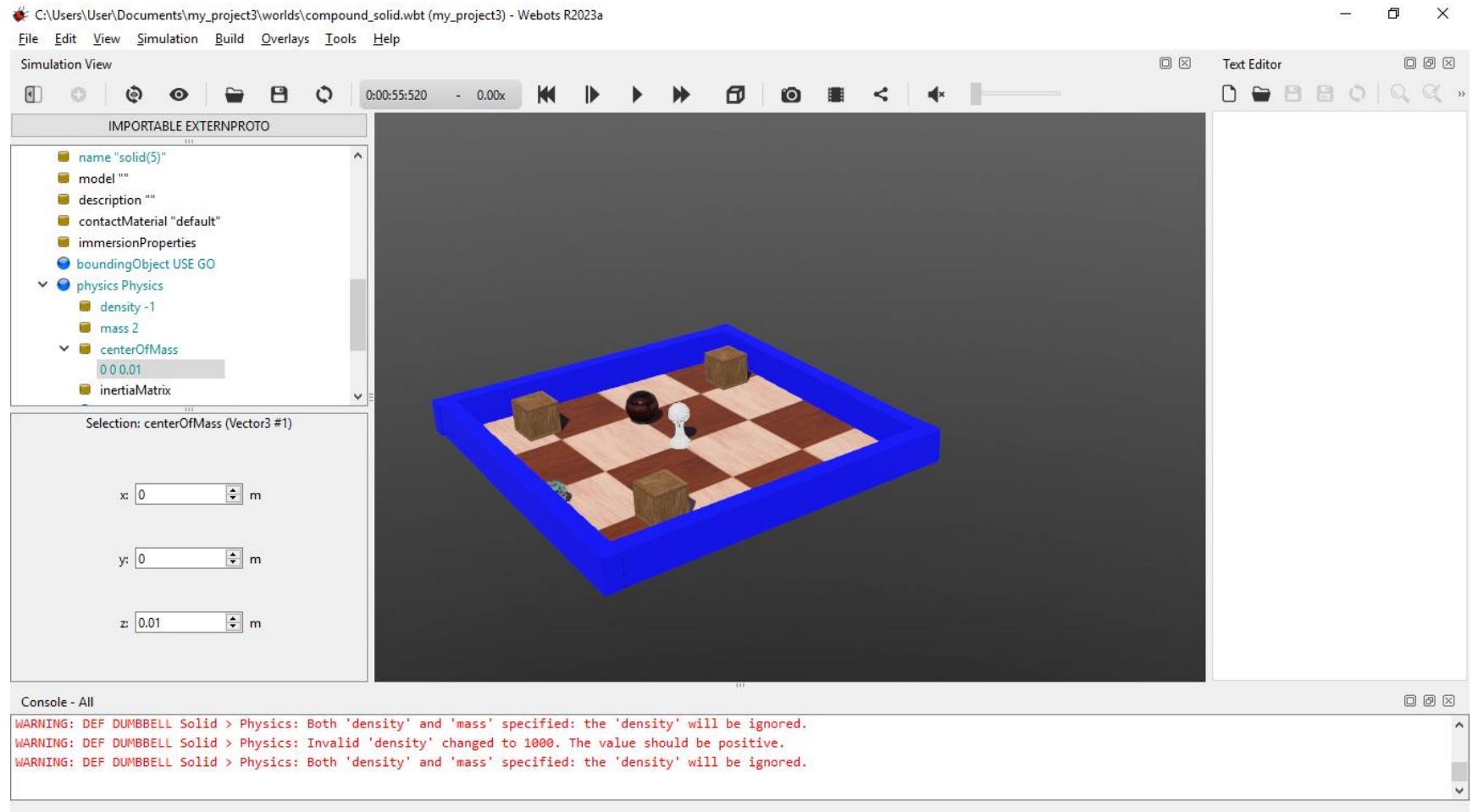


B. Compound Solid

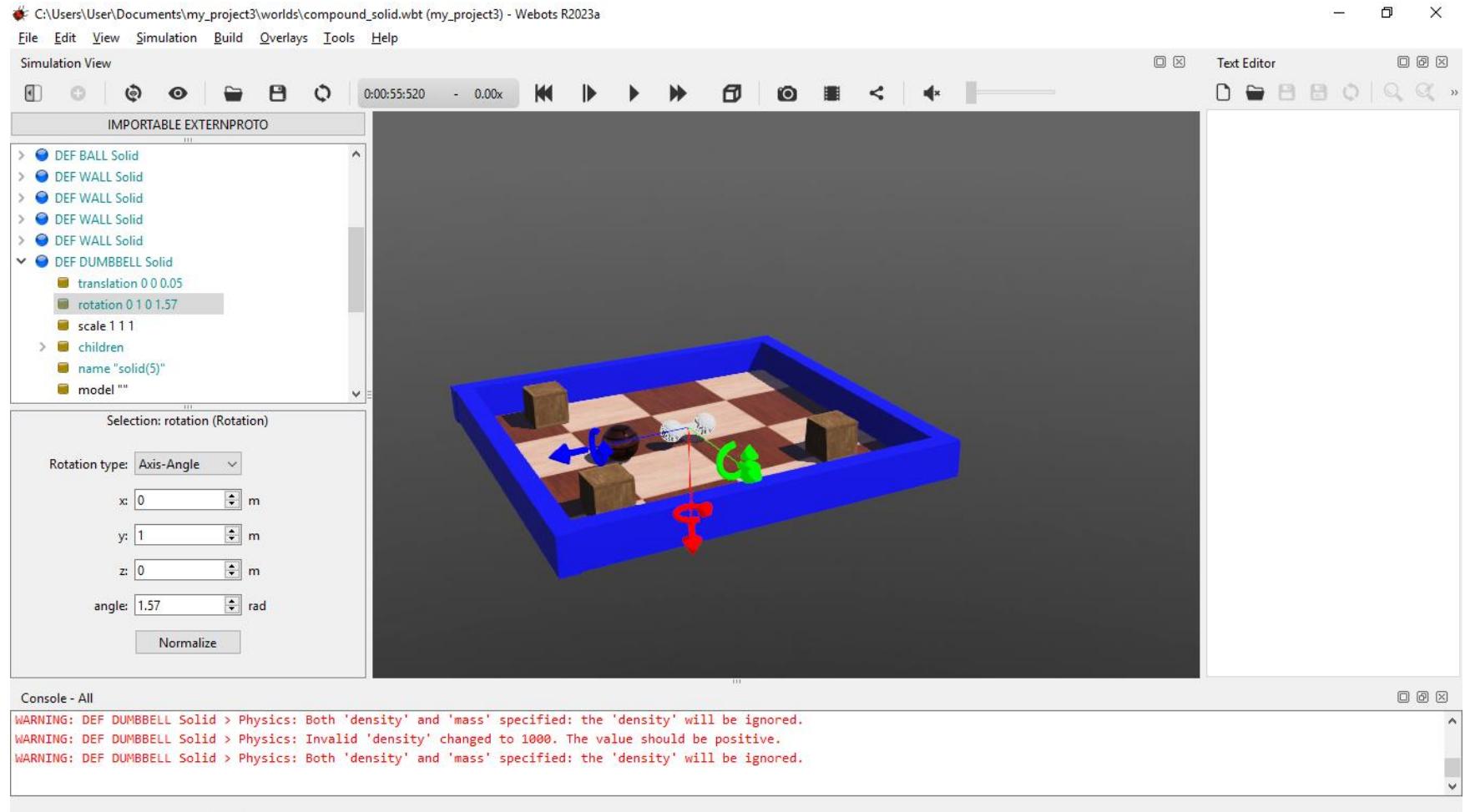


C. Physics Attributes

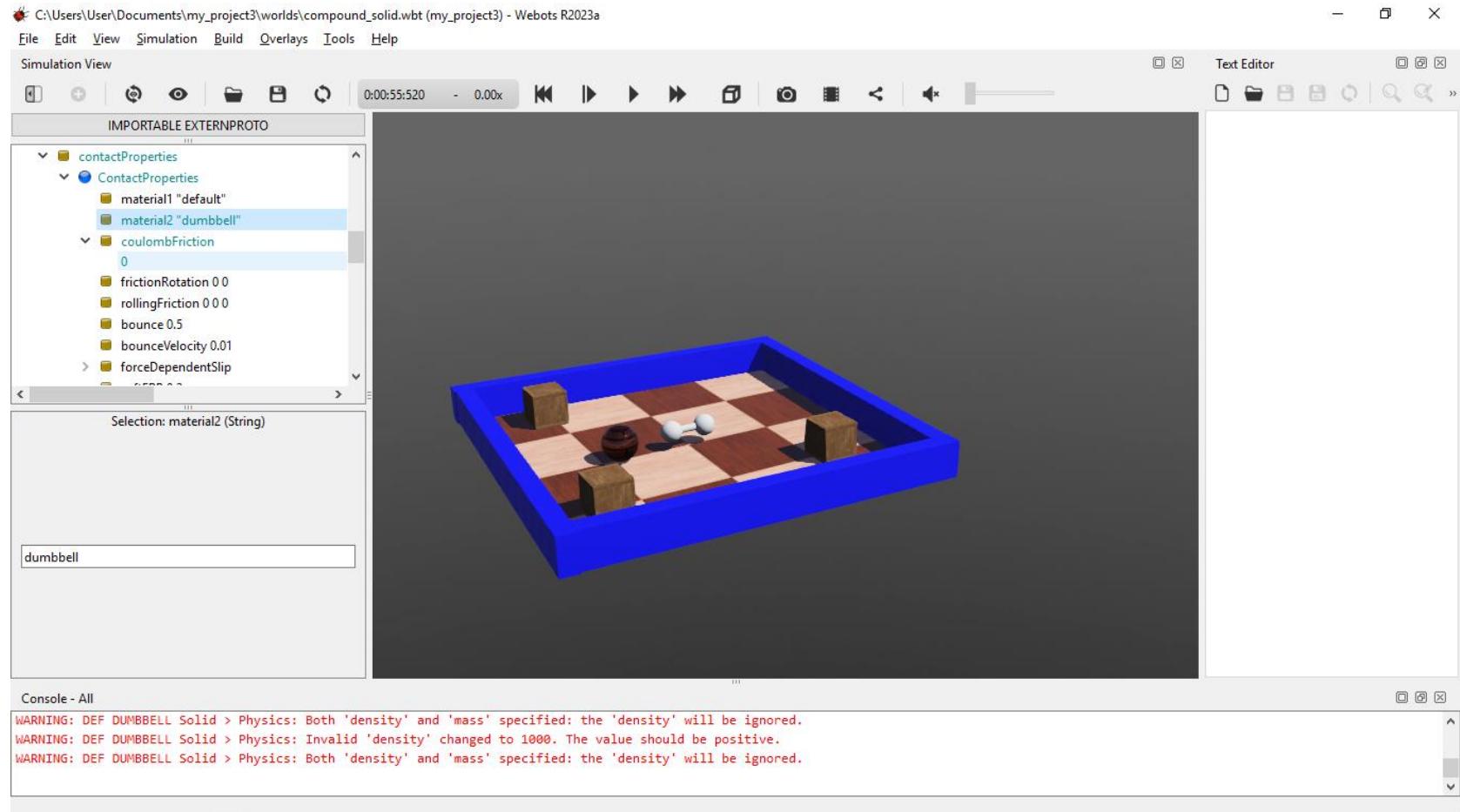




D. The Rotation Field

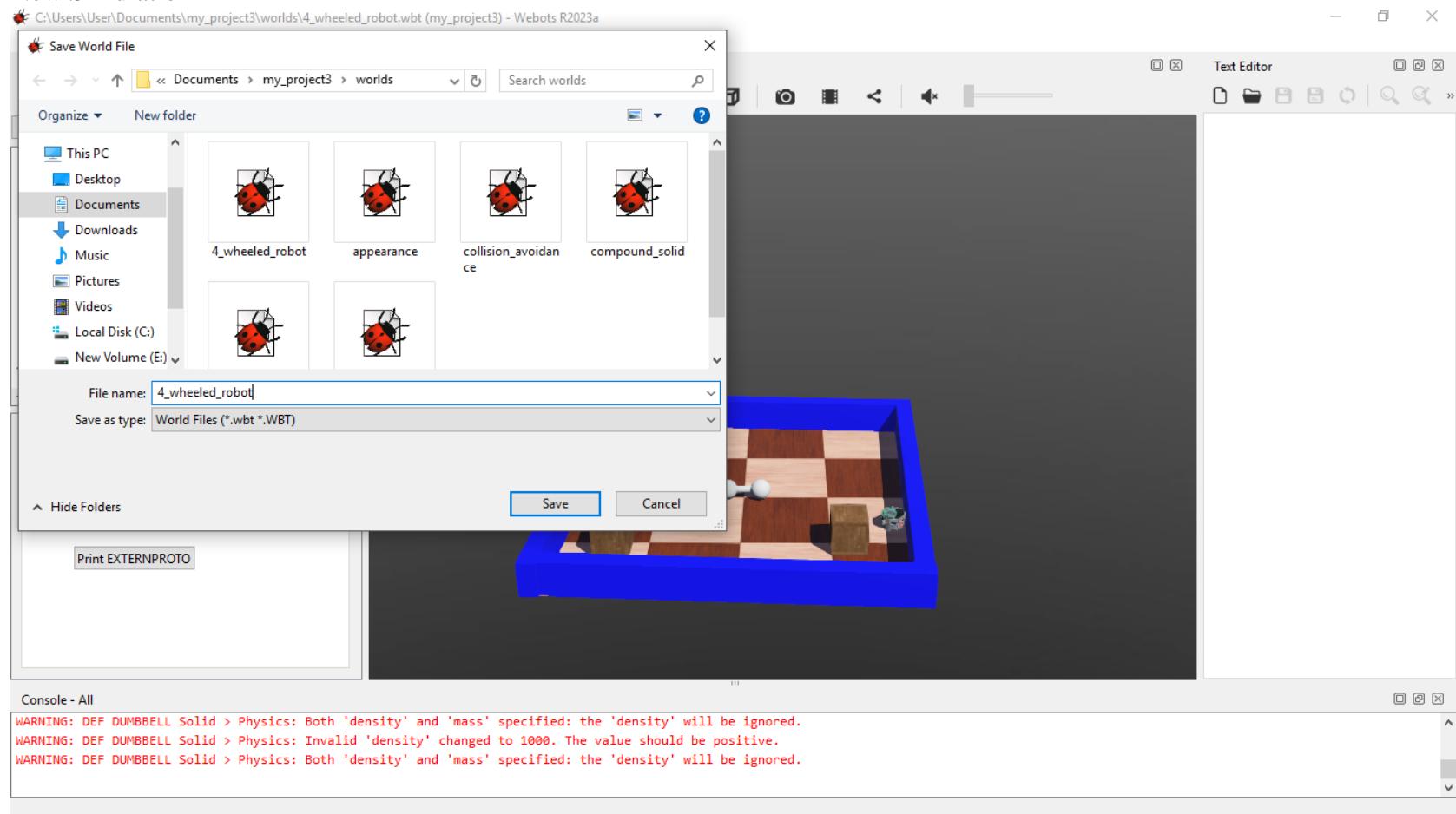


E. Contacts

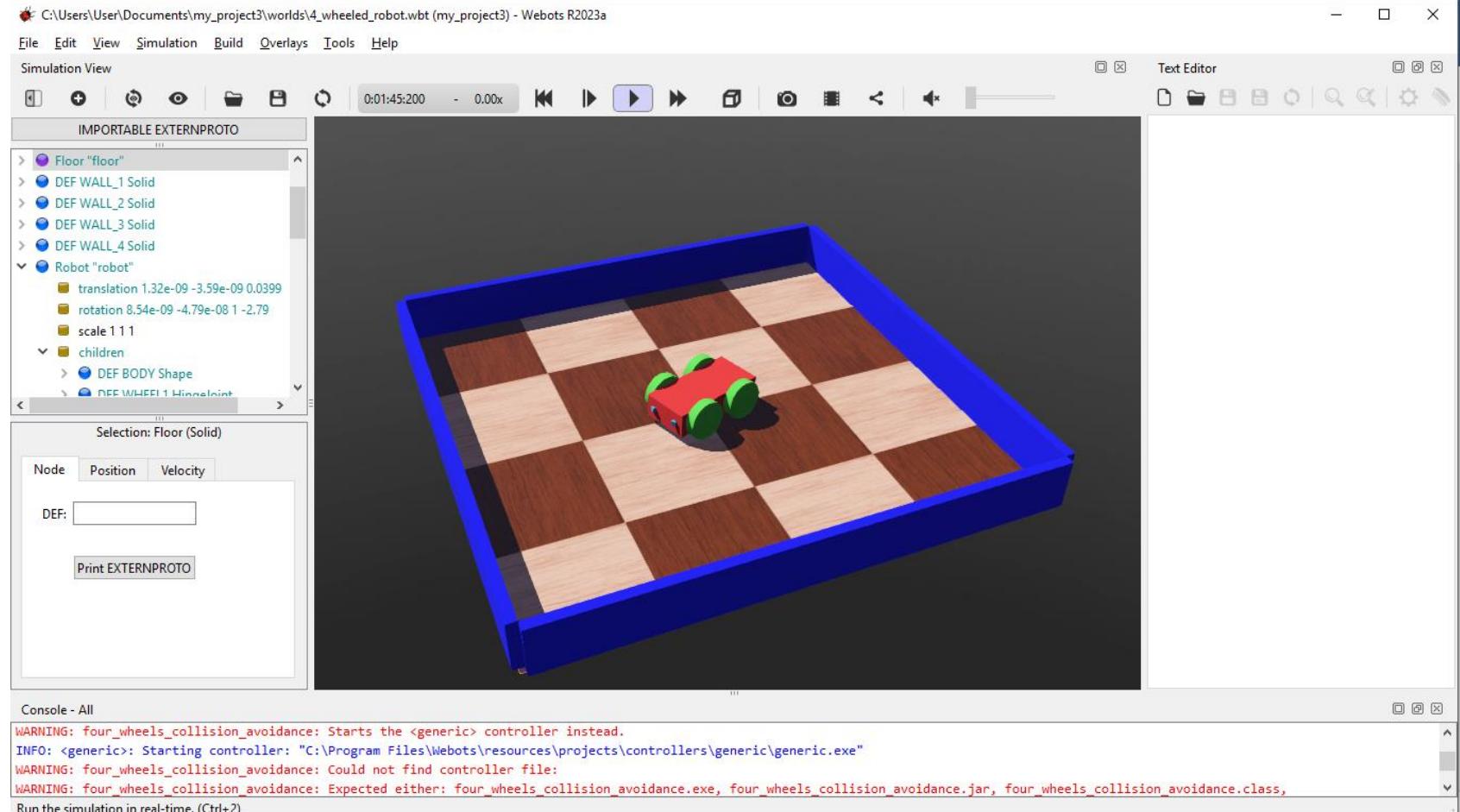


Tutorial 6: 4-Wheeled Robot

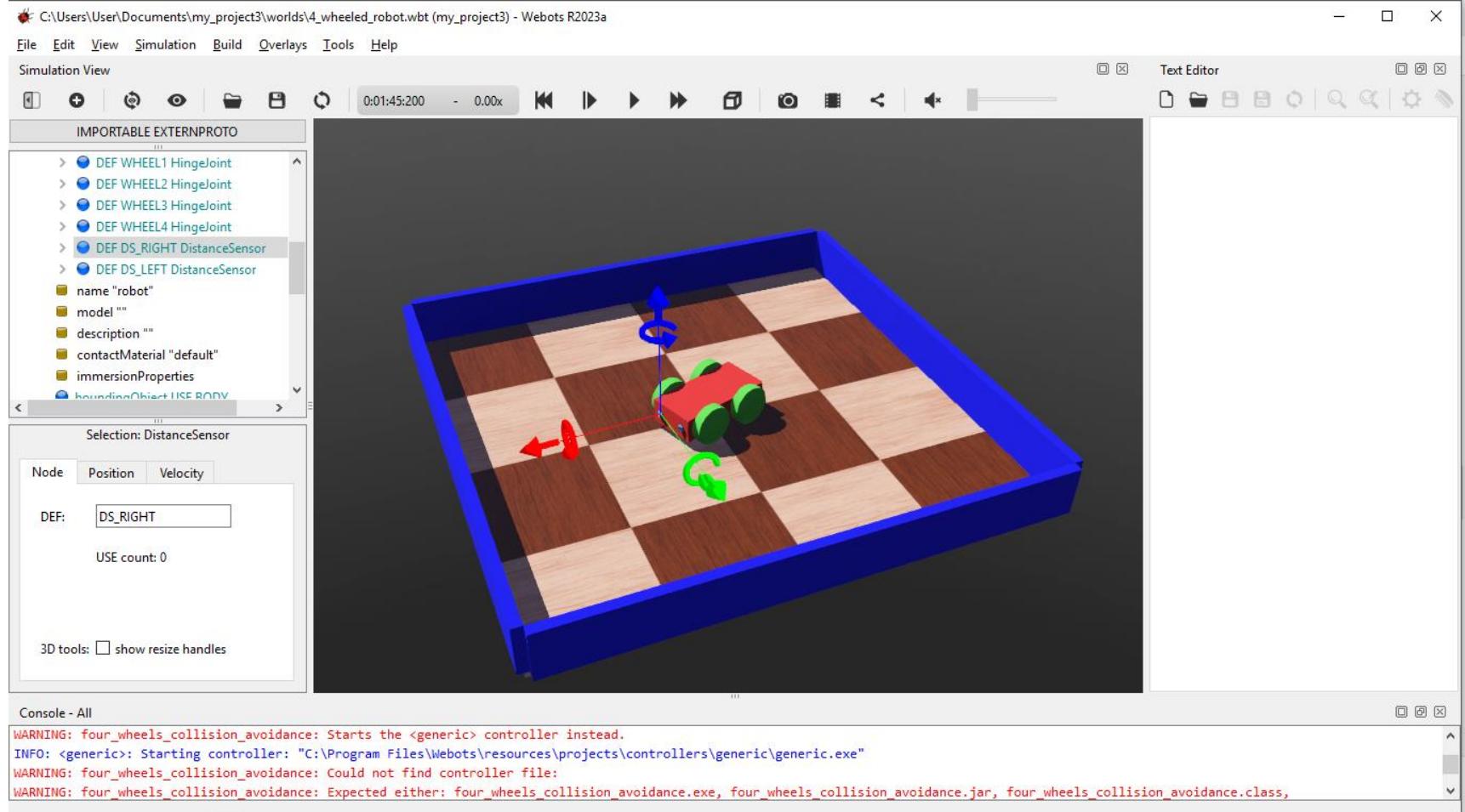
A. New Simulation



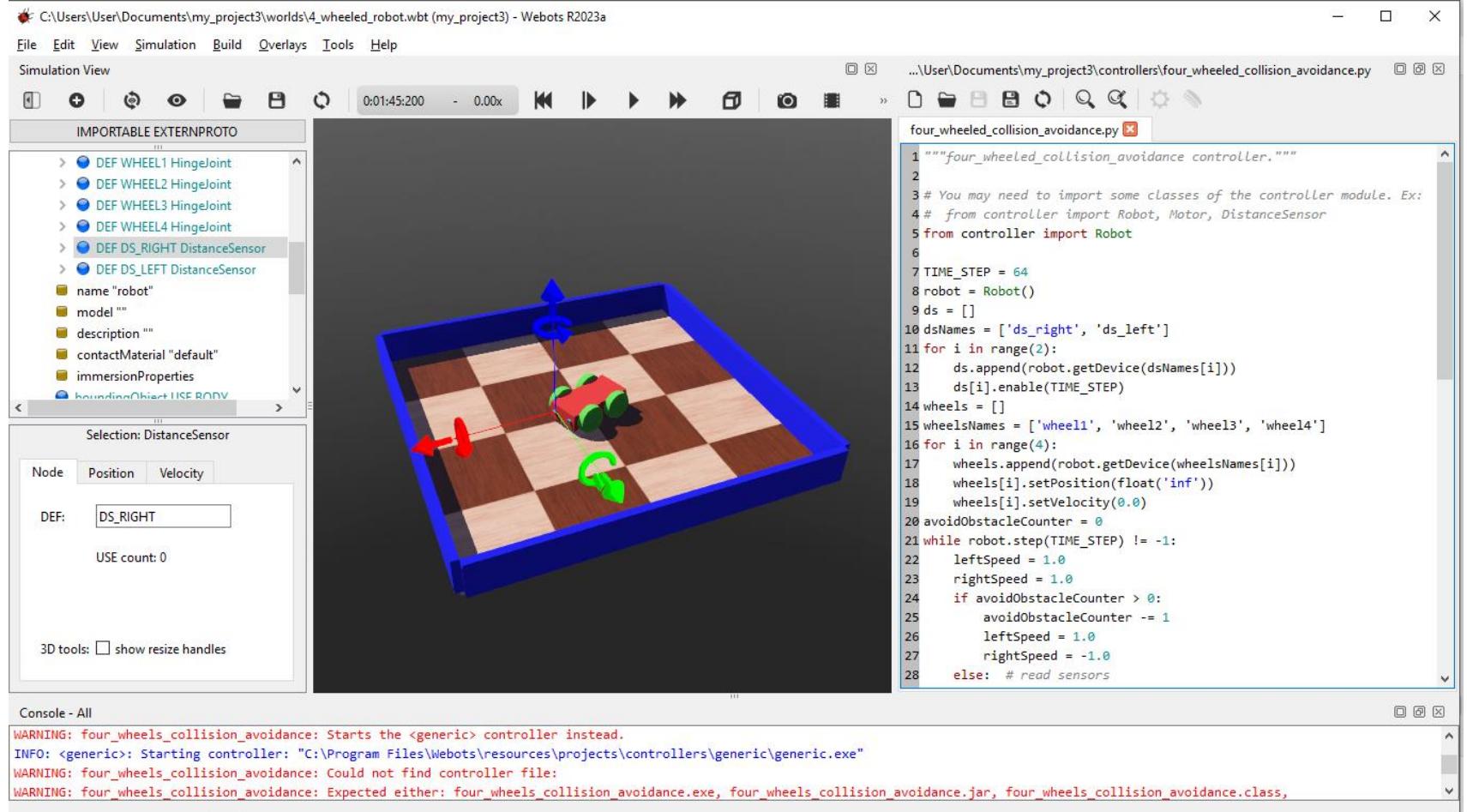
B. Separating the Robot in Solid Nodes



C. Sensors

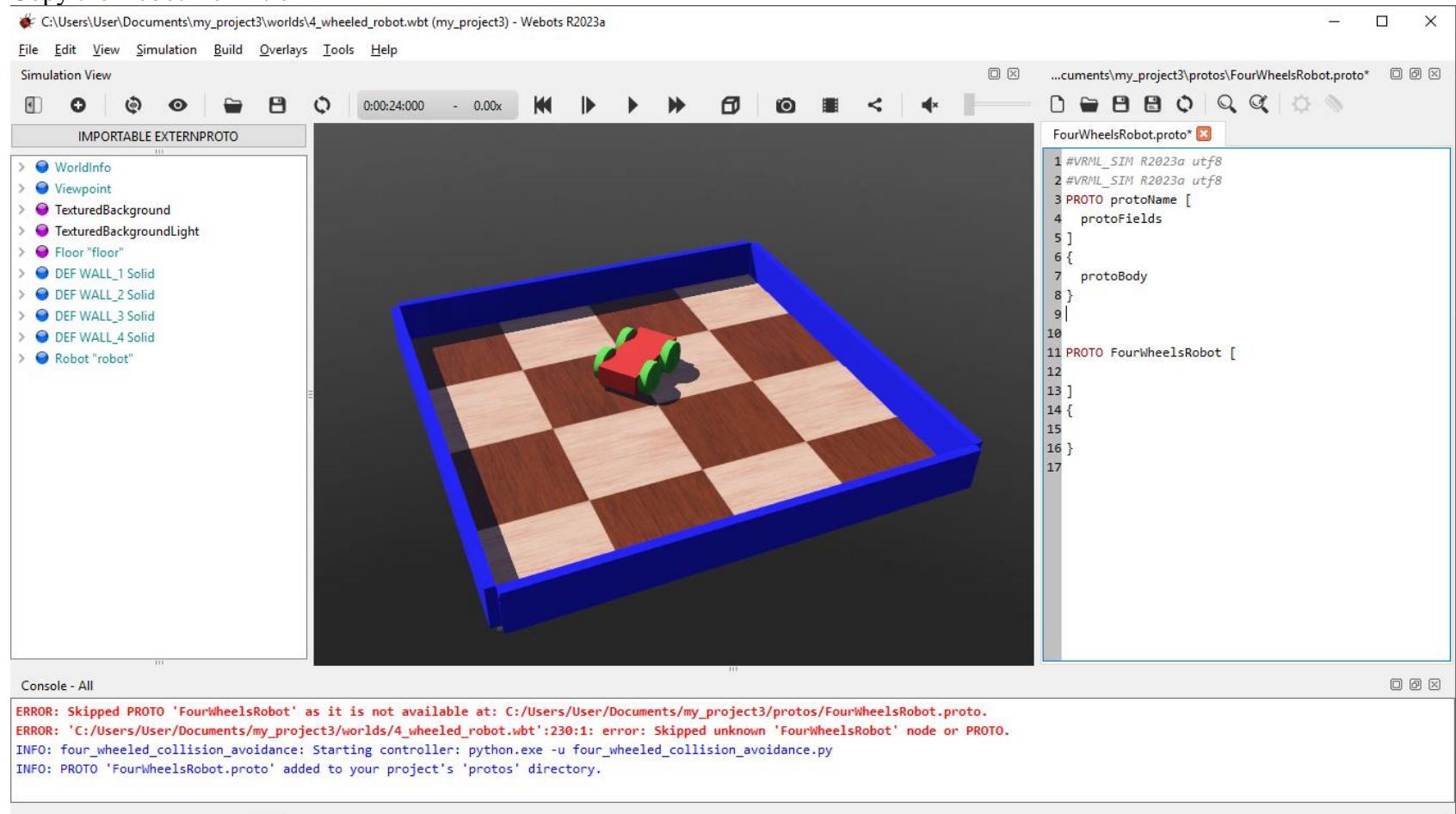


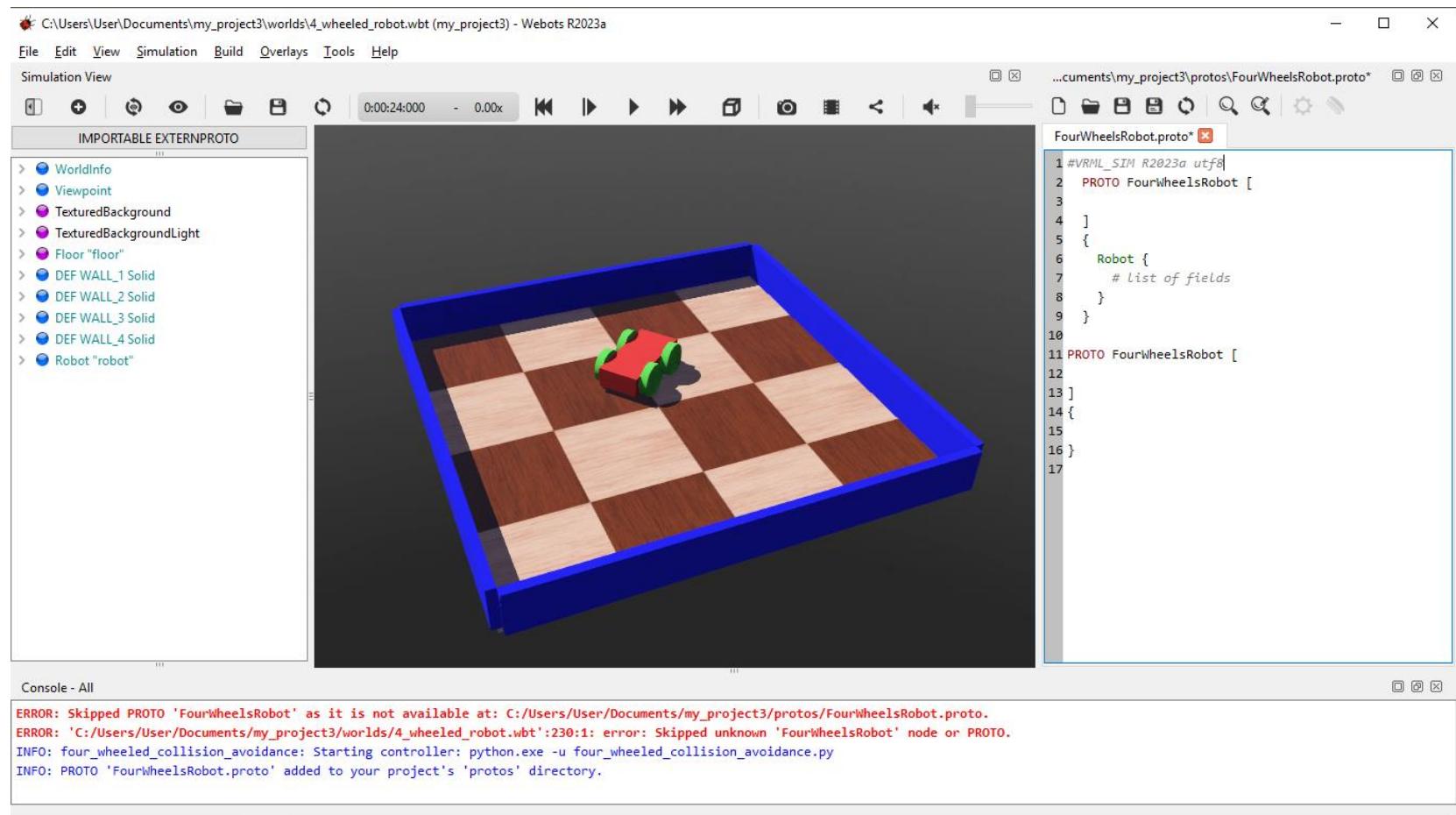
D. Controller



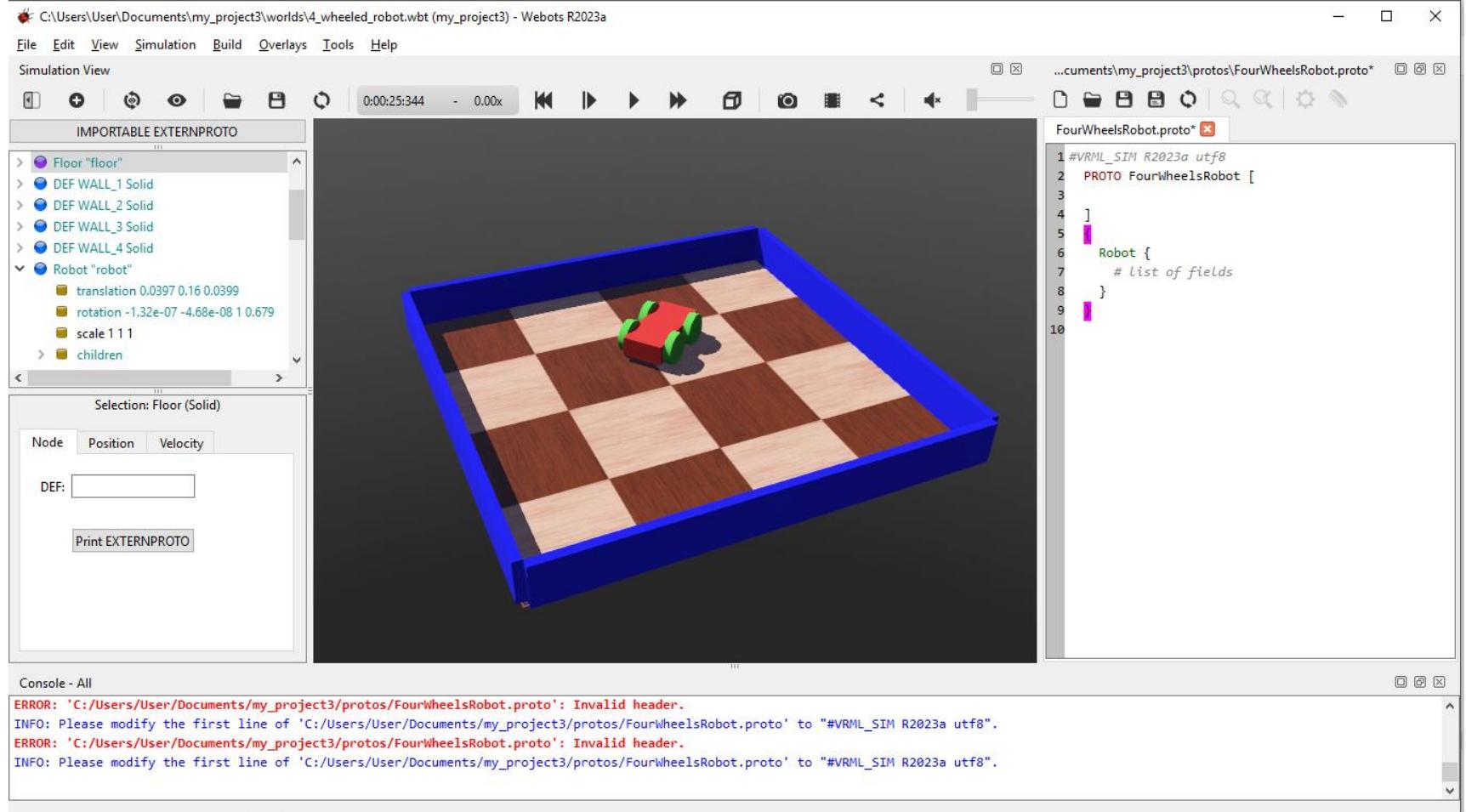
Tutorial 7: Your First PROTO

A. Copy the Robot Definition

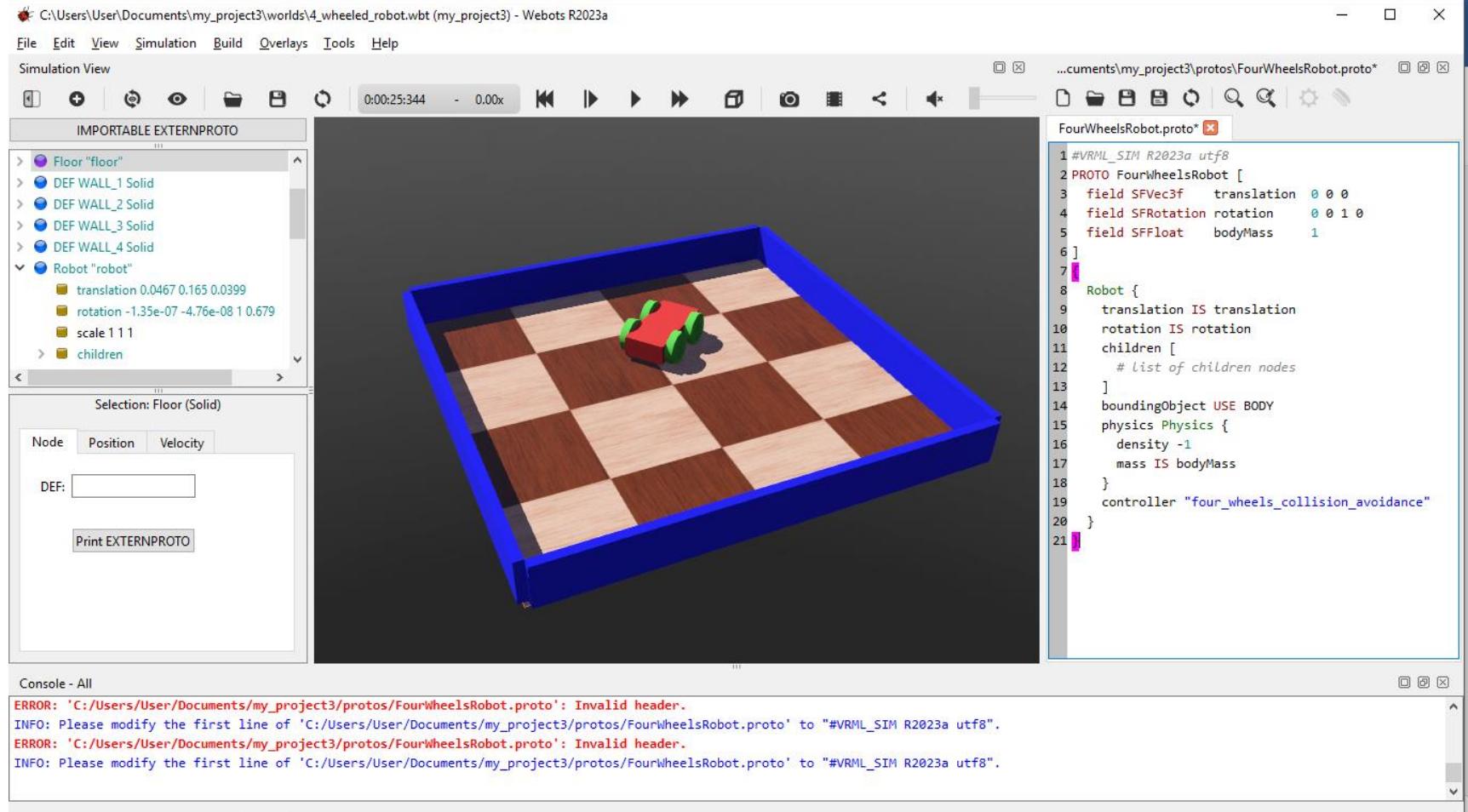




B. Use the PROTO Node

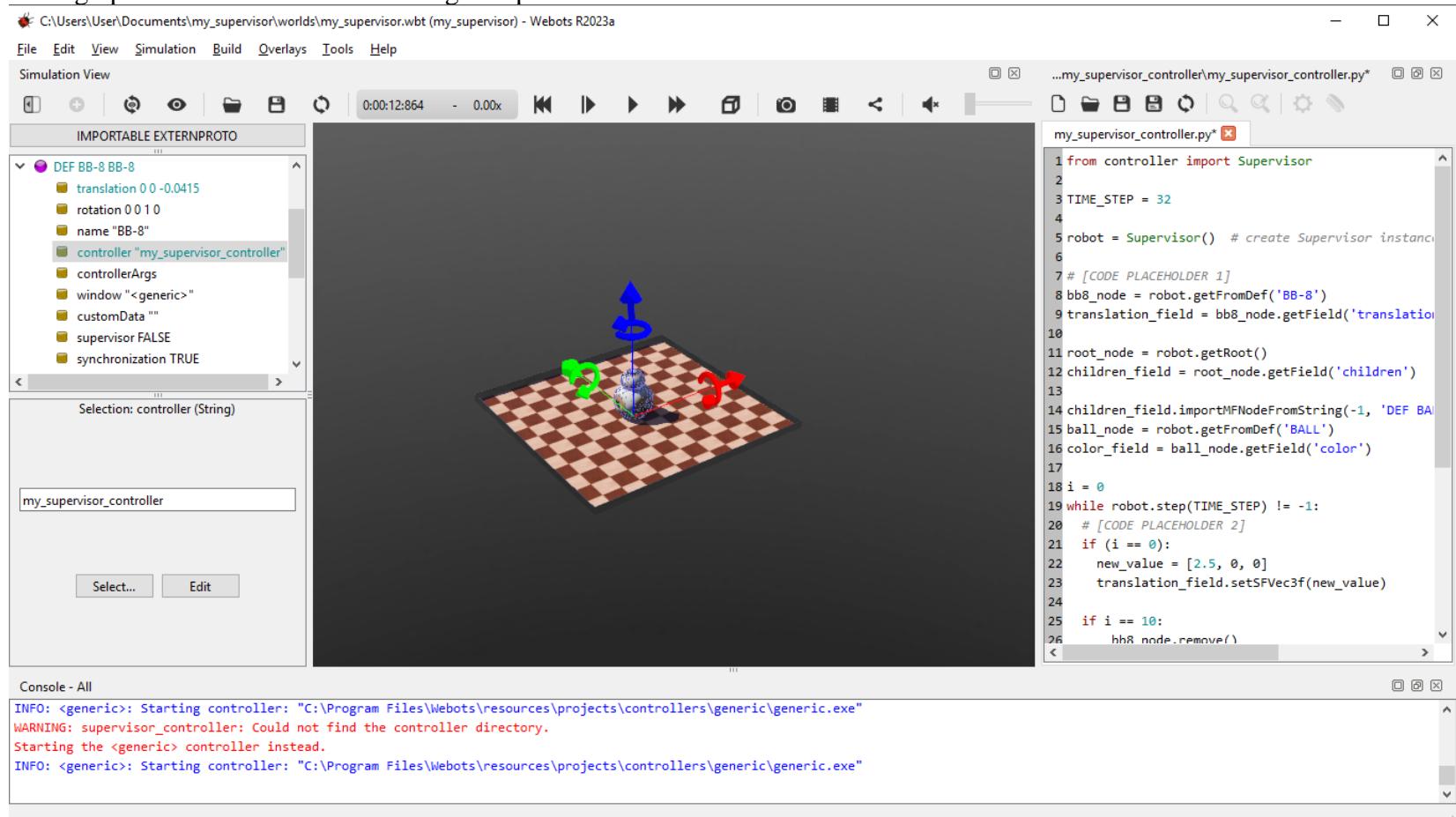


C. Adding Fields



Tutorial 8: The Supervisor

A. Setting up the Environment and Adding a Supervisor



B. Putting Everything Together

