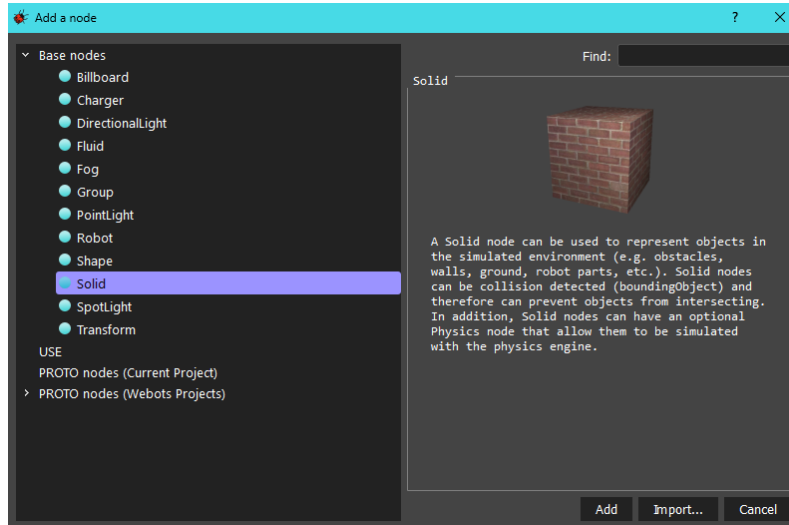


Nama : Pusaka Manggala  
NIM : 1103194021

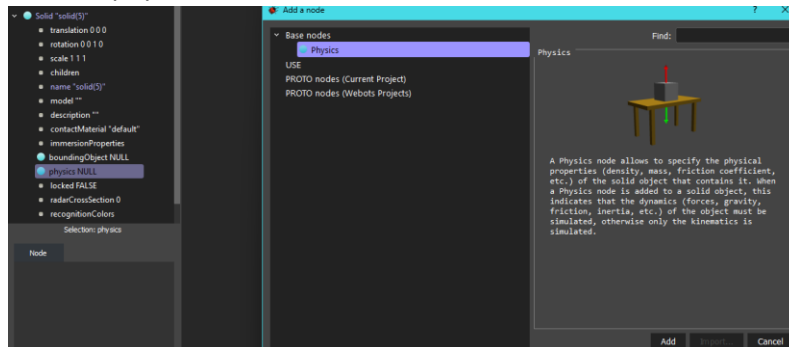
## Tutorial 5: Compound Solid and Physics Attributes

- A. Duplikat project tutorial 4 lalu berinama world compound\_solid.wbt
- B. Compound Solid

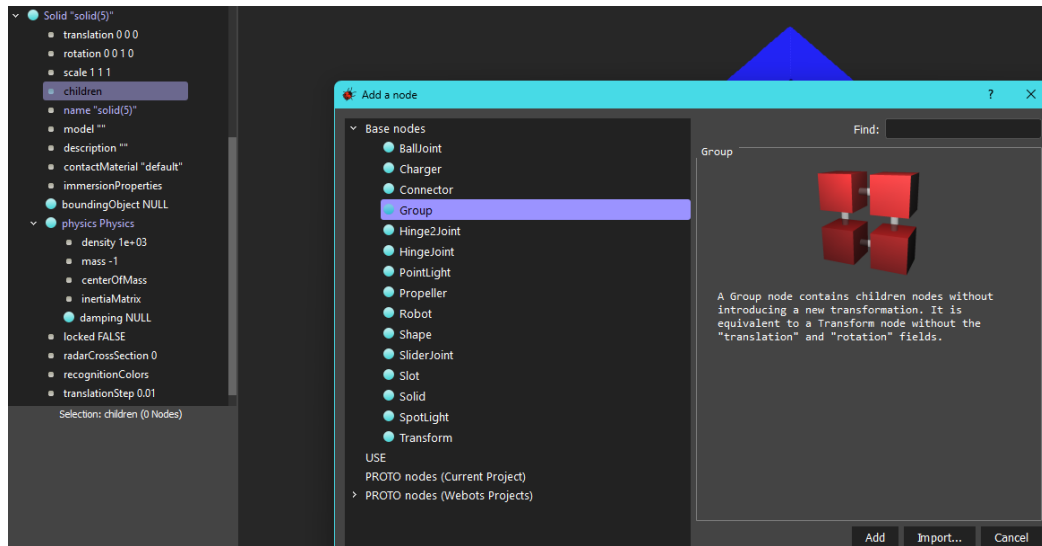
- 1. Tambah node Base nodes -> Solid



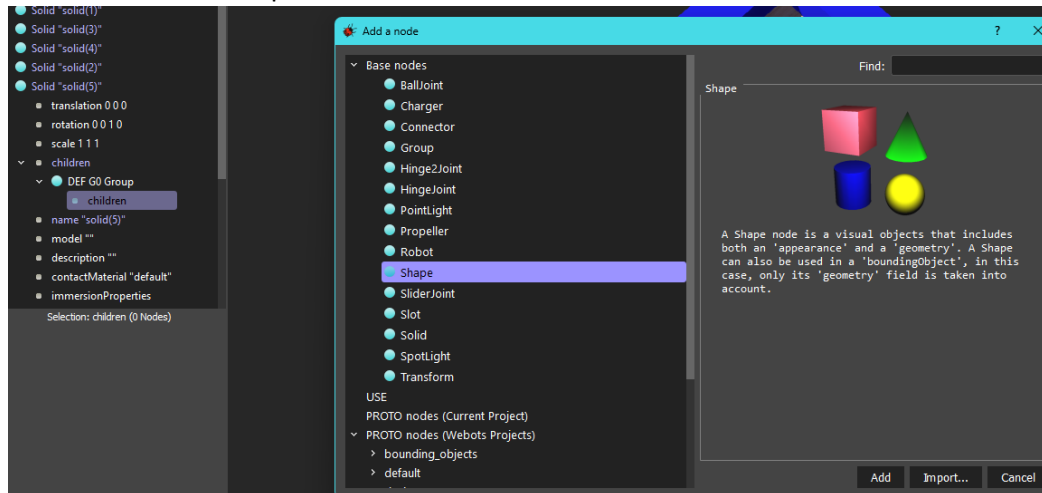
- 2. Tambah physics



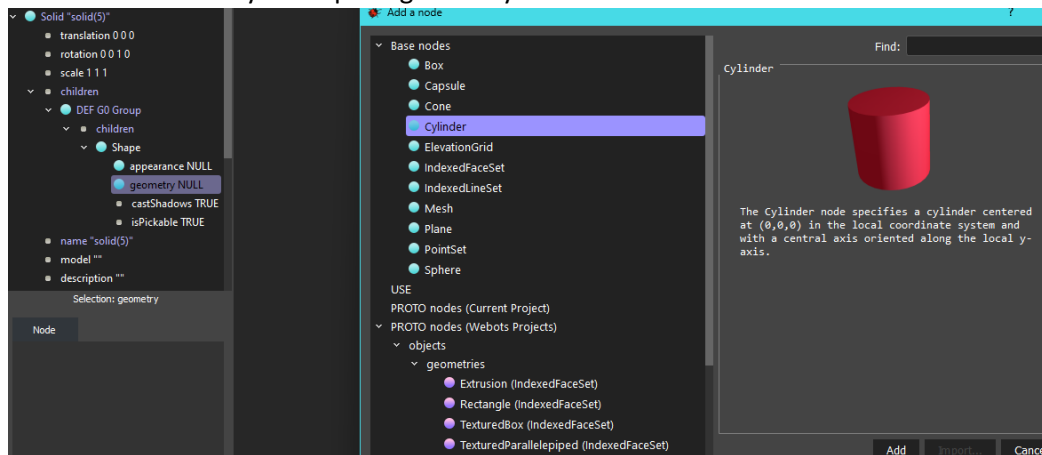
- 3. Tambah node Group pada node children



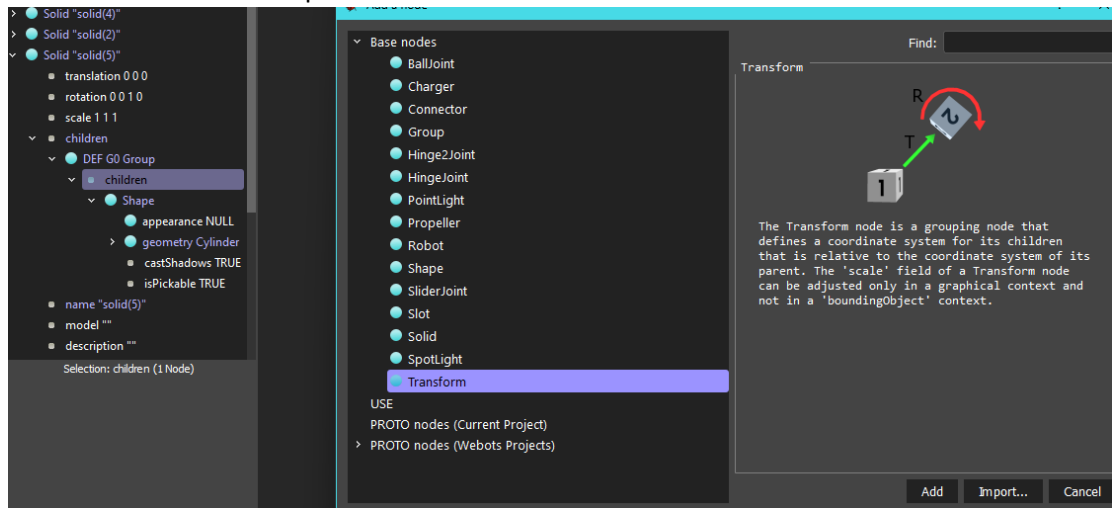
#### 4. Lalu tambah node shape



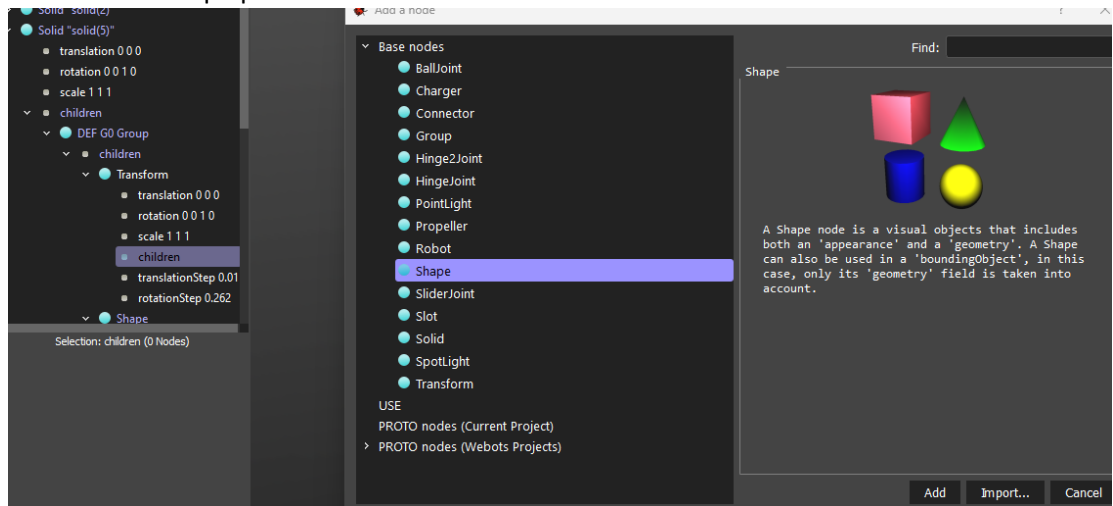
#### 5. Lalu tambah node Cylinder pada geometry



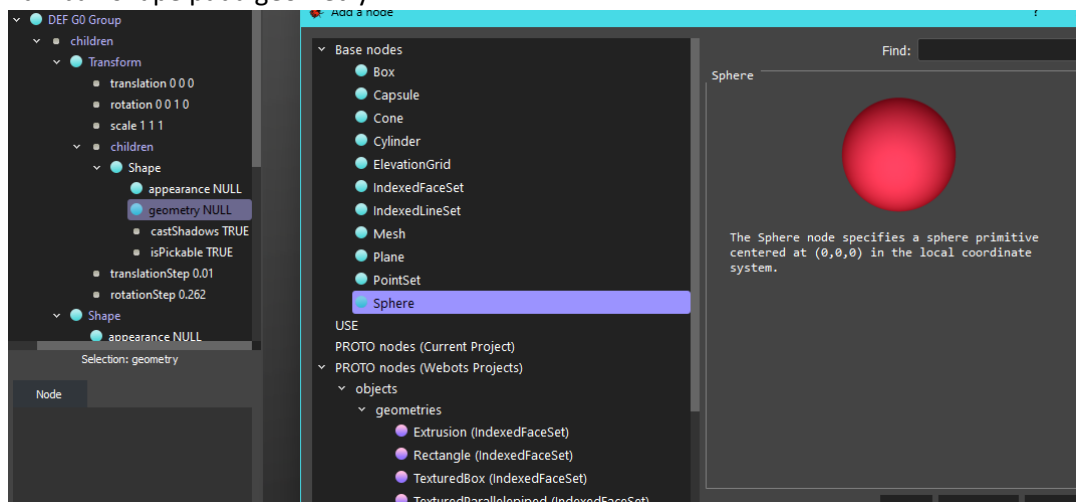
6. Tambah node transform pada children.



7. Lalu tambah shape pada children transform



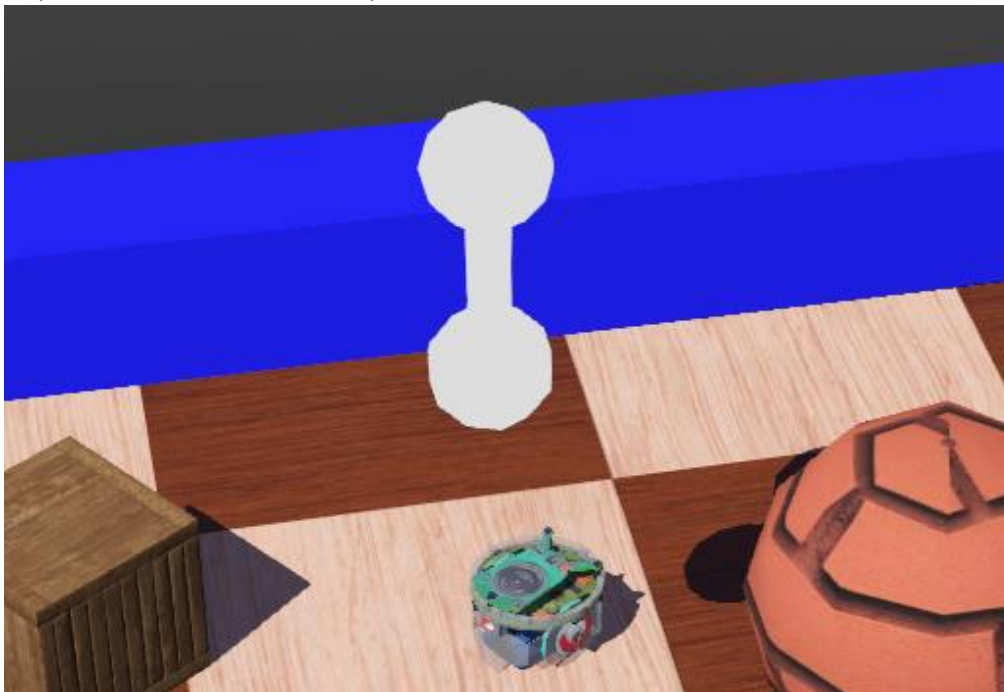
8. Tambah shape pada geometry



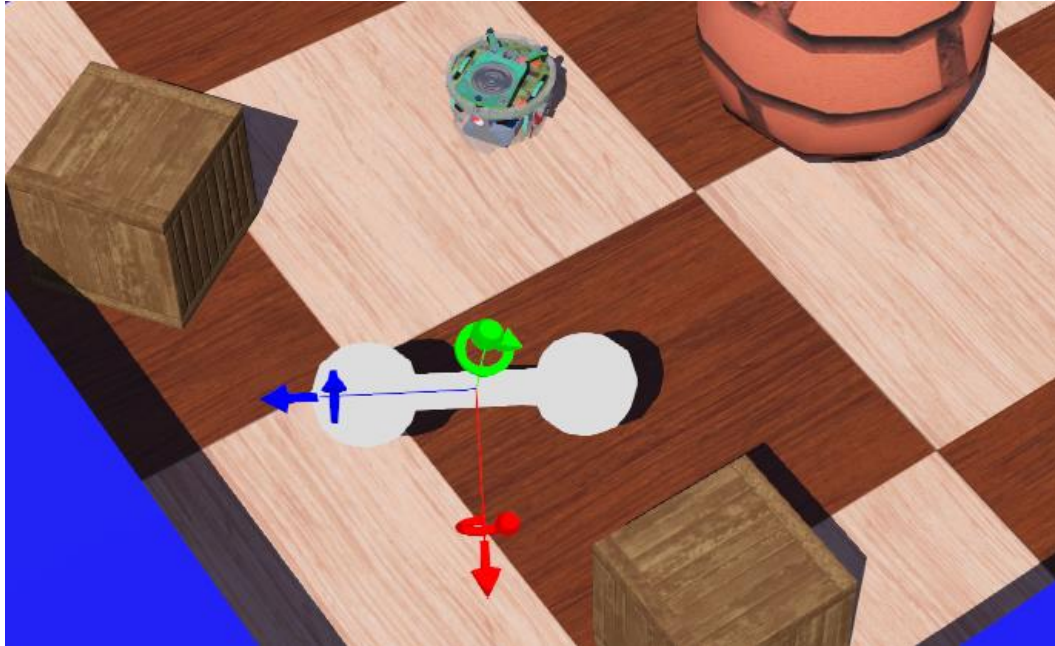
9. Ubah radius ke 0.03 pada bola, dan angkat objek ke atas



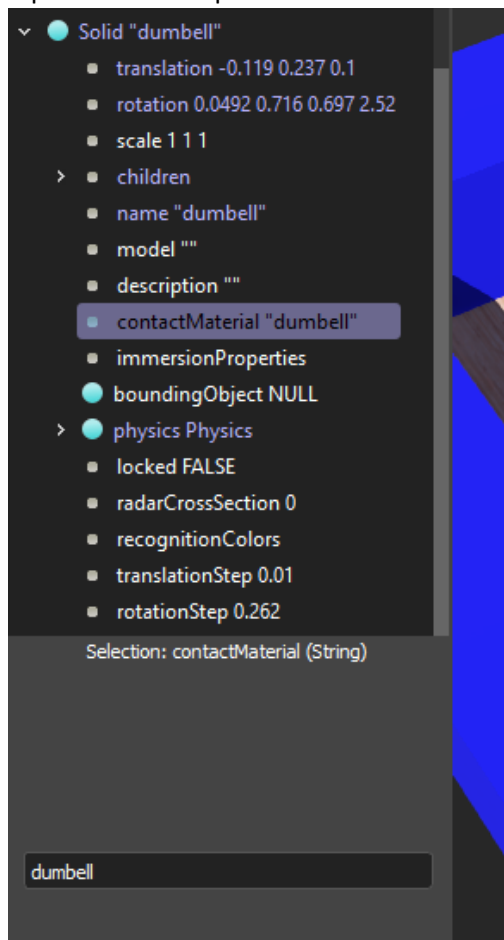
10. Duplikasi node transform, lalu posisikan bola dibawah



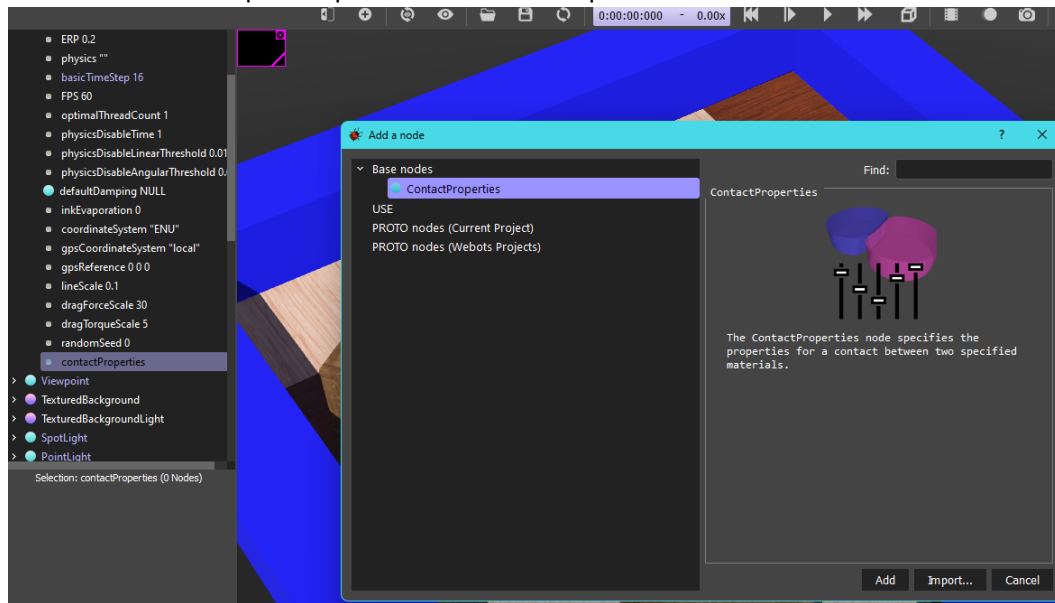
11. Rotasi dumbell



12. Input "dumbell " pada contactMaterial



### 13. Tambah ContactProperties pada node contacProperties WorldInfo



### 14. Ubah material 2 menjadi dumbell

