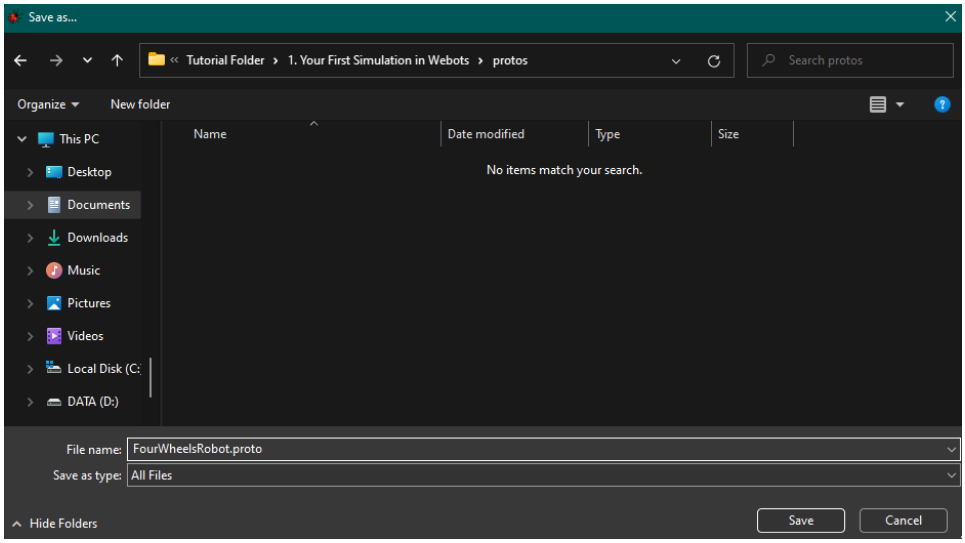
Hands-on 1



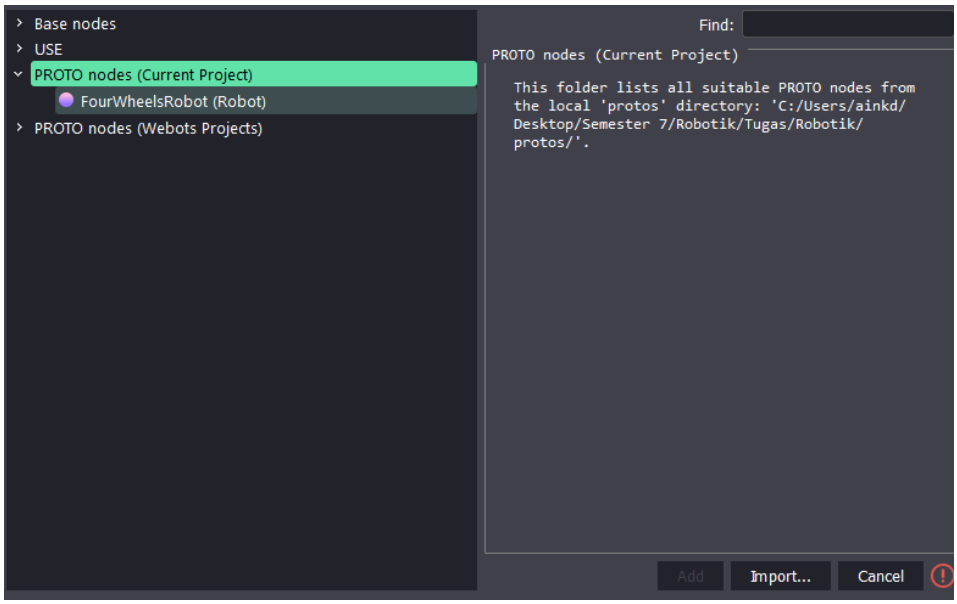
Hands-on 2

FourWheelsRobot.proto

```
#VRML_SIM R2023a utf8
PROTO FourWheelsRobot [

]
{
  Robot {
  translation 0.1615533173615318 -0.09824954769125145 0.0398621001
  rotation 4.091617753830915e-06 2.6371308084952304e-07 -0.999999
  children [
    DistanceSensor {
      translation 0.098 0.020077 0
      rotation 0 0 1 -1.27
      children [
        DEF SENSOR Shape {
          appearance PBRAppearance {
            baseColor 0 0.666667 1
            roughness 1
            metalness 0
          }
          geometry Box {
            size 0.01 0.01 0.01
          }
        }
      ]
      name "ds_left"
      boundingObject USE SENSOR
      physics Physics {
      }
    }
    DistanceSensor {
      translation 0.098 -0.019923 0
      rotation 0 0 1 -1.87
      children [
        DEF SENSOR Shape {
          appearance PBRAppearance {
            baseColor 0 0.666667 1
            roughness 1
            metalness 0
          }
          geometry Box {
            size 0.01 0.01 0.01
          }
        }
```

Hands-on 3

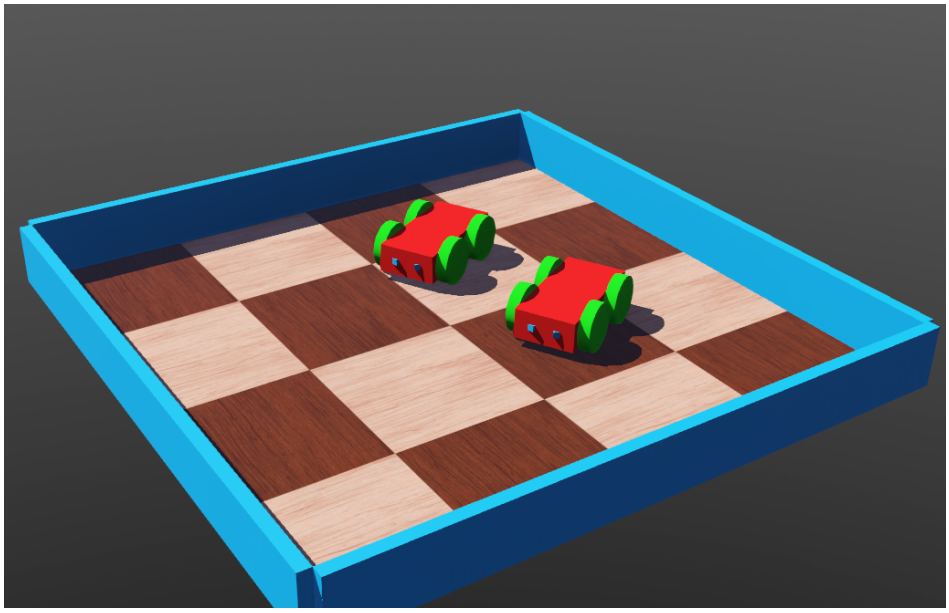


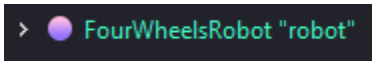
Hands-on 4

FourWheelsRobot.proto*

```
#VRML_SIM R2023a utf8
PROTO FourWheelsRobot [
field SFVec3f    translation  0 0 0
field SFRotation rotation     0 0 1 0
field SFFloat    bodyMass     1
]
{
  Robot {
  translation IS translation
  rotation IS rotation
  children [
```

```
    boundingObject USE BODY_GEOMETRY
    physics Physics {
    mass IS bodyMass
    }
    controller "four_wheeled_collision_avoidance"
  }
  }
```




FourWheelsRobot "robot"