Multi-agent-rearrangement-planning-for-robotic-chess

Multi Agent Rearrangement Planning for Robotic Chess

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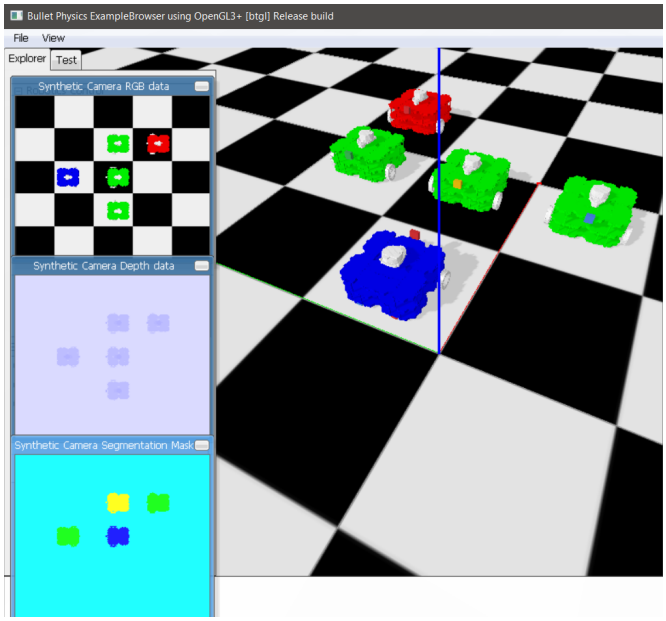
Robots: Turtlebot3

Simulator: Pybullet

Environment Images:



Robot State Information:
Five robots total - Turtle1 - Turtle5
Objective: Turtle1 moves to Turtle5 and “takes” it
Distance to target: 1.118

Robot	Position	Orientation - Euler	Orientation - Quaternion
Turtle1	[0.25,0.25,0]	[0,0,0]	(0.0, 0.0, 1.0, 6.123233995736766e-17)
Turtle2	[0.75,0.25,0]	[0,0,π]	(0.0, 0.0, 1.0, 6.123233995736766e-17)

Turtle3	[0.75,0.75,0]	[0,0,π]	(0.0, 0.0, 1.0, 6.123233995736766e-17)
Turtle4	[0.75,-0.25,0]	[0,0,π]	(0.0, 0.0, 1.0, 6.123233995736766e-17)
Turtle5	[1.25,0.75,0]	[0,0,π]	(0.0, 0.0, 1.0, 6.123233995736766e-17)

Instructions to run the code:
Run all the code snippets in Project.ipynb