

Milestone:

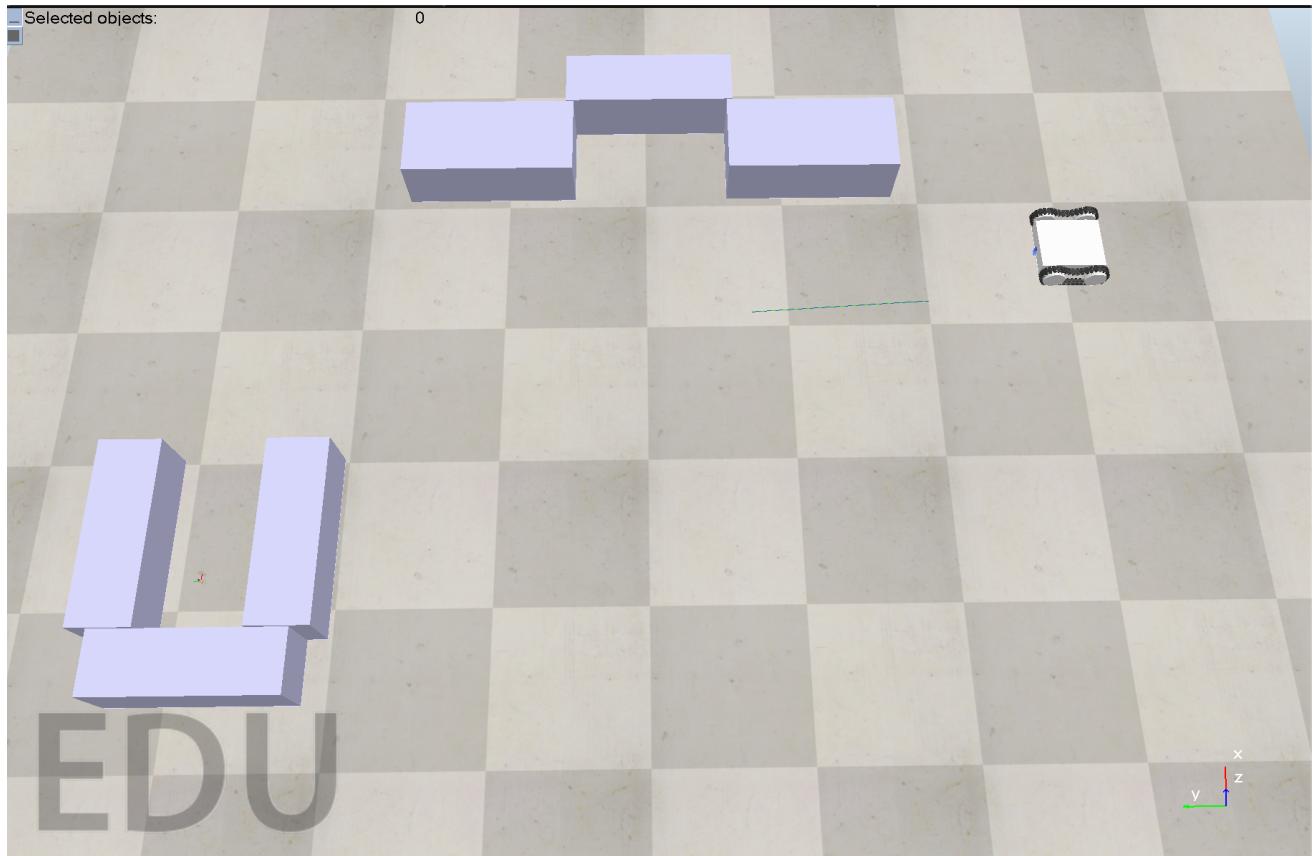
Milestone	Date	Status	
Run first successful PythonRobotics Path Planning Algorithm with CoppeliaSim	08.11.2023		
Run first successful PythonRobotics Path Tracking Algorithm with CoppeliaSims	15.11.2023		
Raspberry Pi Software Deployment	15.11.2023		
Path Planning - Car Model Adaption	29.11.2023		
Path Tracking - Car Model Adaption	29.11.2023		
Path Planning/Tracking Runtime Optimization	13.12.2023		

Results in the report period

Results (achieved, not achieved, planned)	
Results achieved	<p>Software Tasks (assigned to Laurens)</p> <ul style="list-style-type: none"> Implementation of a first Path Tracking Algorithm <p>Deployment Tasks:</p> <ul style="list-style-type: none"> Deploy Path Planning SW to RaspberryPi (assigned to Laurens) <p>Environment Modeling Tasks (assigned to Roman)</p> <ul style="list-style-type: none"> CoppeliaSim: Model car/robot (Model decision by Car Hardware Team) CoppeliaSim: Model common parking scenes (Parallel Parking, Perpendicular Parking) <p>Documentation Tasks (assigned to Roman)</p> <ul style="list-style-type: none"> Documentation of Issues and Solvings <p>Deployment Tasks:</p> <ul style="list-style-type: none"> Runtime and PathLength Profiling SW for RaspberryPi (assigned to Lam)
Results not achieved	

Planned results for the next period	POSTPONED TOPICS: <ul style="list-style-type: none"> • Build OMPL Python binding for C++ (Windows & MacOS) • Use OMPL Path-Planning-Algorithms in CoppeliaSim

Problems, Risks, Measures in Report Period	
a) Which problems have been occurred?	<ul style="list-style-type: none"> •
b) Which (new) risks can lead to problems?	<ul style="list-style-type: none"> • Runtime of Motion Planning algorithms
c) So far undertaken countermeasures? Who? Until when?	<ul style="list-style-type: none"> • Runtime Analysis on Raspberry Pi (assigned to Lam) • Runtime Optimization Planning/Tracking (assigned to tbd)
d) Necessary decisions to take? By whom? Until when?	<ul style="list-style-type: none"> • •



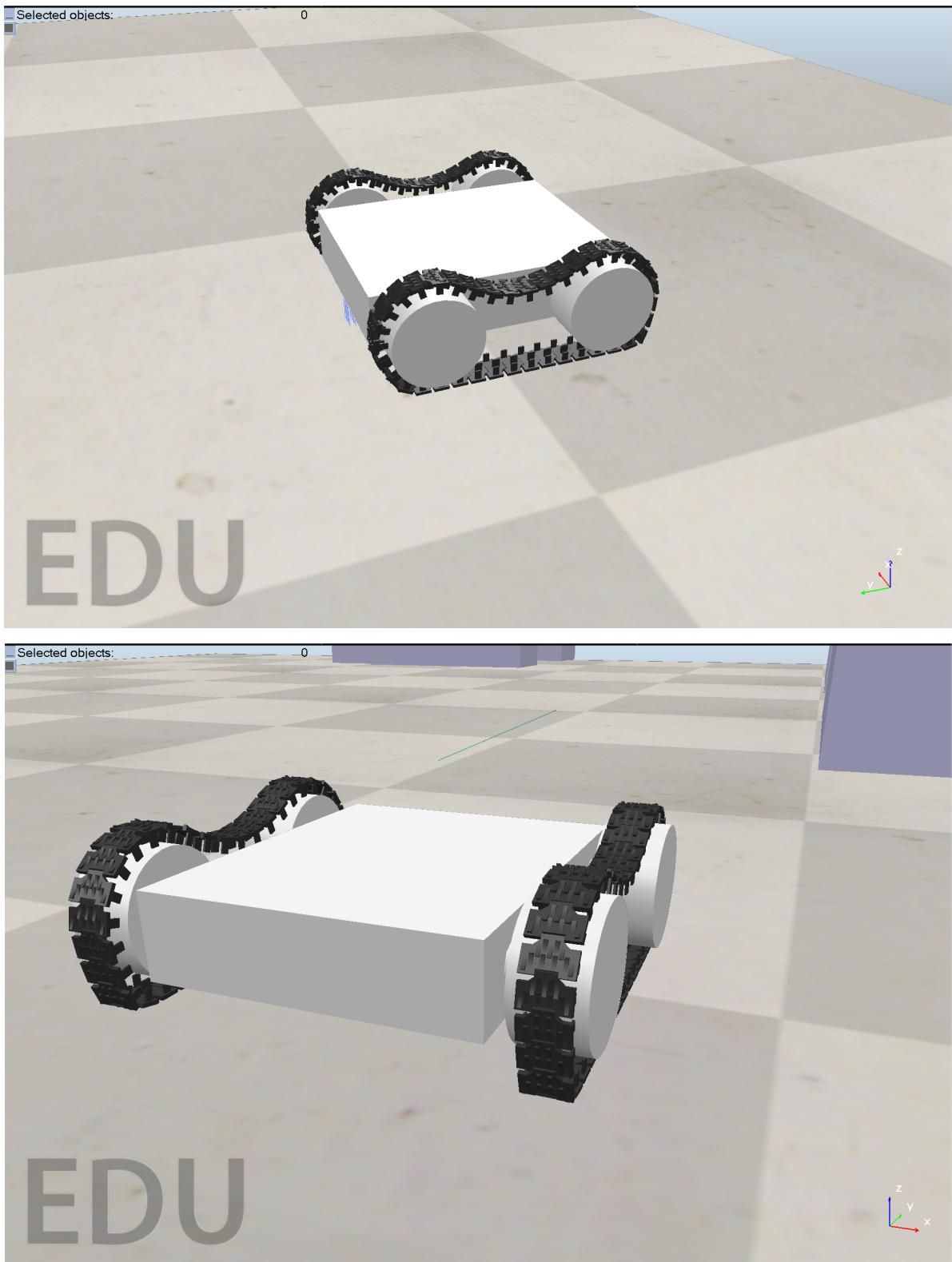
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Status Report

Report Period:

CW 46

Project Path Planning Team1



Issues

Issues	Name Model parking scenes	Category Environment Modeling Tasks
Issues appeared	The script is not working, all videos and documentations are too old for this version of CoppeliaSim	
What we tried	<p>1) Watched 03: Path Planning with a Differential Drive Robot V-Rep/CoppeliaSim Tutorial (▶ 03: Path Planning with a Differential Drive Robot V-Rep/CoppeliaSim Tutorial) - version used in this video is too old and there is no Path planning module in CoppeliaSim now.</p> <p>2) Watched CoppeliaSim: Differential Drive Car, Control (2 of 3) (▶ CoppeliaSim: Differential Drive Car, Control (2 of 3)) - the script is not working on our model (maybe because of 4 wheels instead of 2)</p> <p>3) Watched CoppeliaSim: Line Follower Car, Vision sensor (all parts) (▶ CoppeliaSim: Line Follower Car, Vision sensor (part 2 of 4)) - we will try to do it on 15.11</p>	
Solutions		

Issues	Name	Category
Issues appeared		
What we tried		

Solutions	
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Issues	Name	Category
Issues appeared		
What we tried		
Solutions		