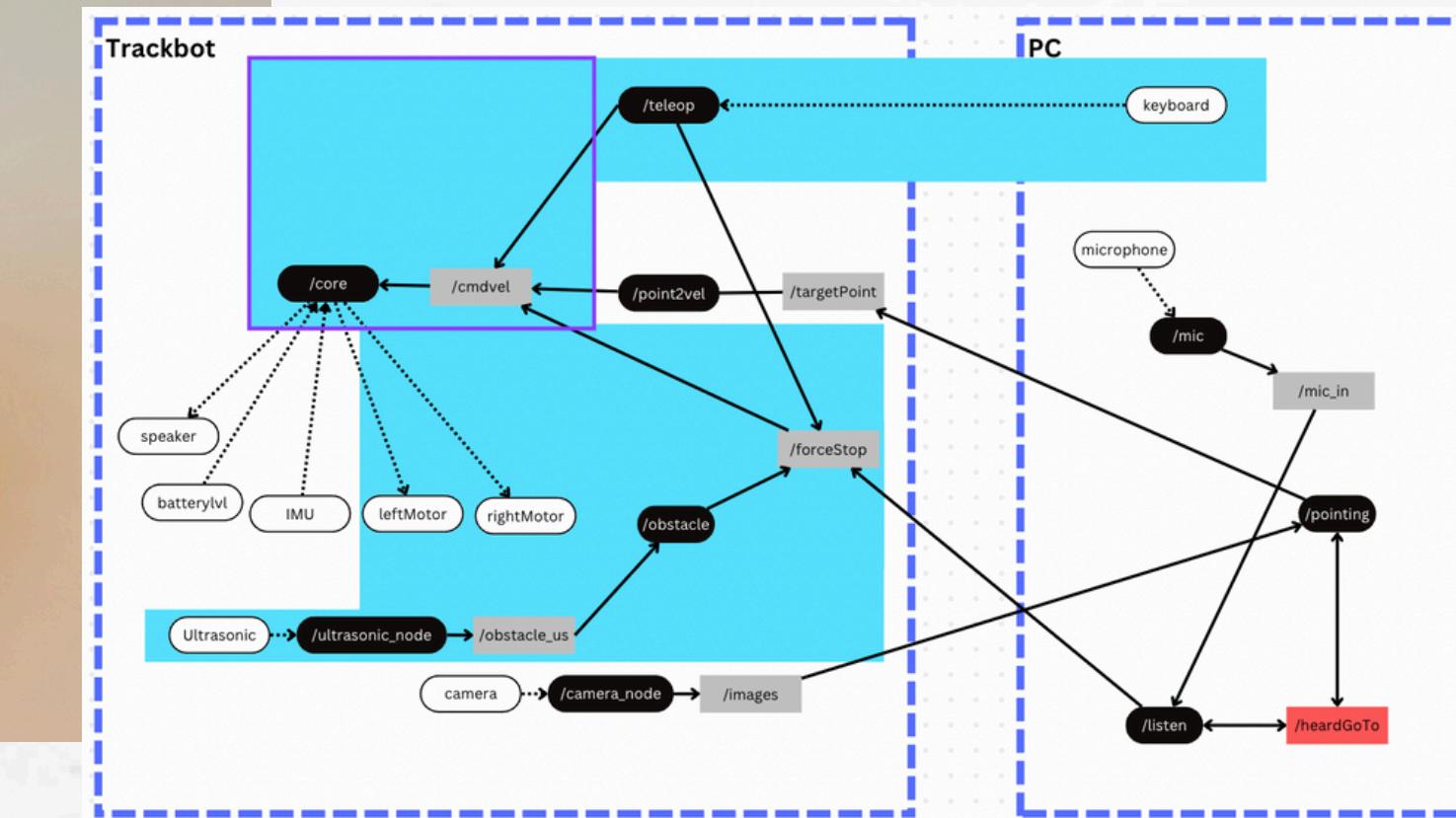
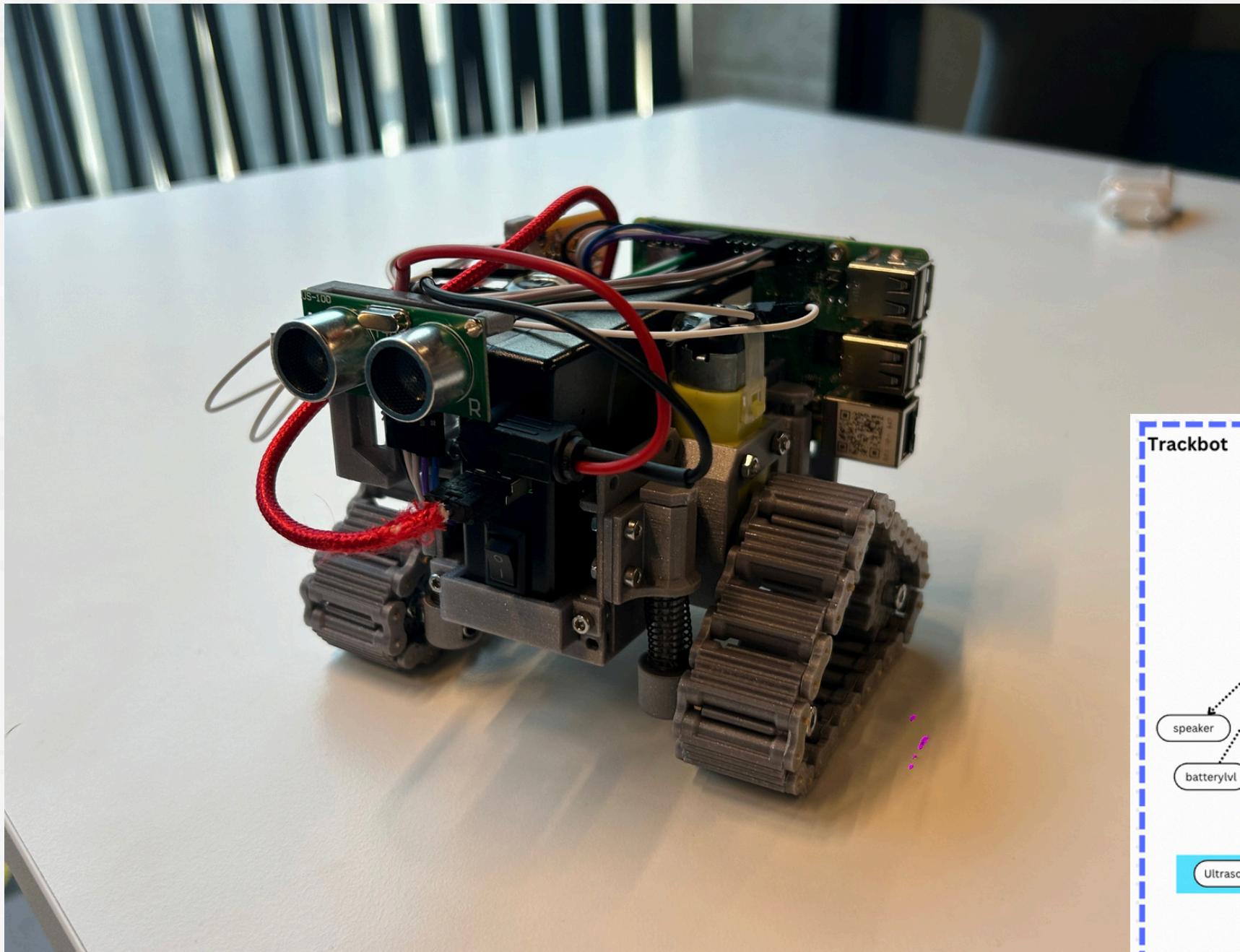


ROBOTICS PROJECT

SPRINT ASSESSMENT 5

Julian Leclerc

RECAP



SPRINT OVERVIEW

TOTAL CARDS: **24**

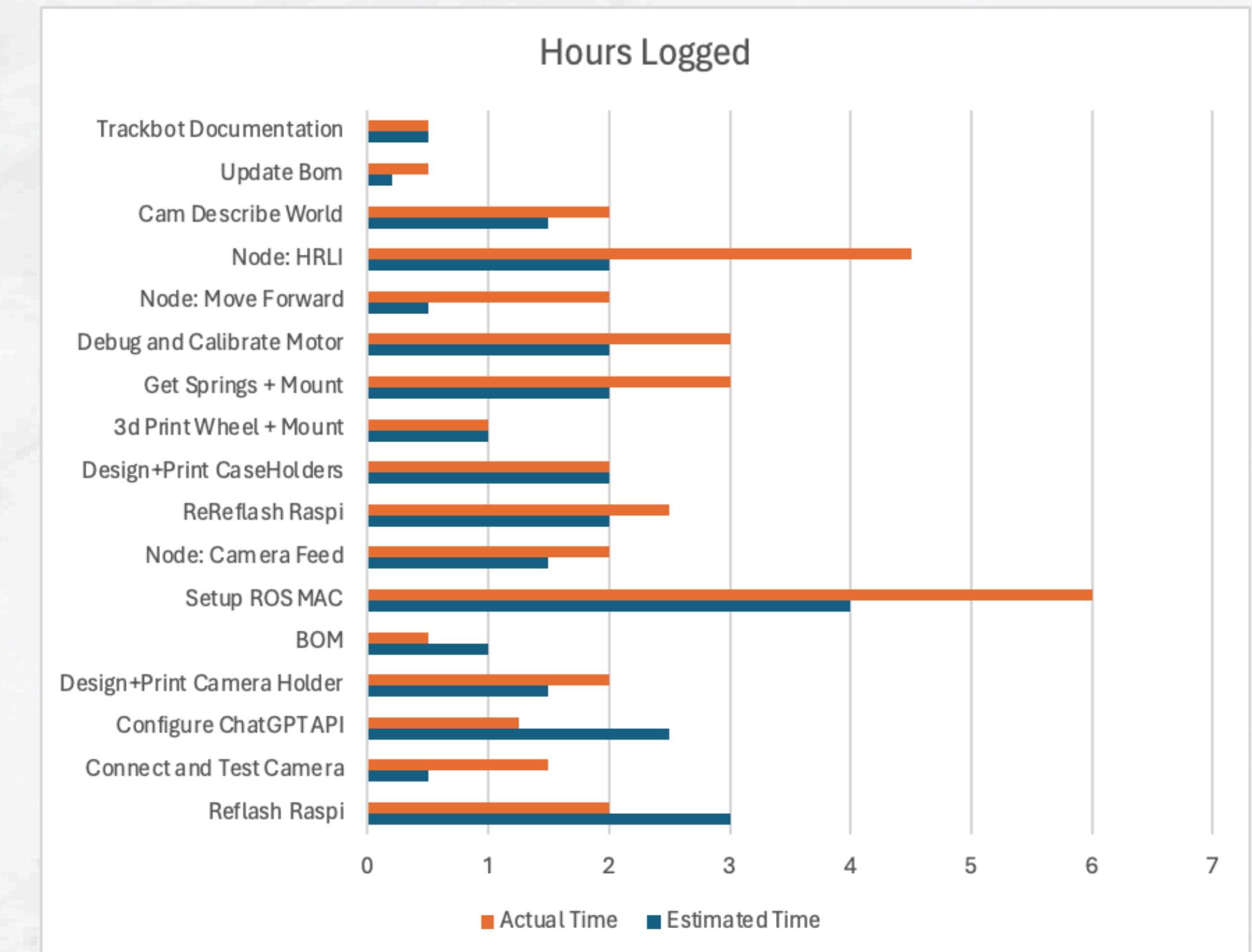
- 9 cards added during sprint

HOURS PLANNED: **33.6 + 7.5 incl. midSprint**

HOURS DONE: **36.2 + 7.5 incl. midSprint**

HOURS DONE PREV
MID-SPRINT: **16 + 2.5 incl. midSprint**

- 3 cards in Backlog: 6h planned
- 0 cards in Doing
- 0 card in Feedback (Suspension Blocker)
- 0 card in Testing
- 21 cards in Done



correct: 3

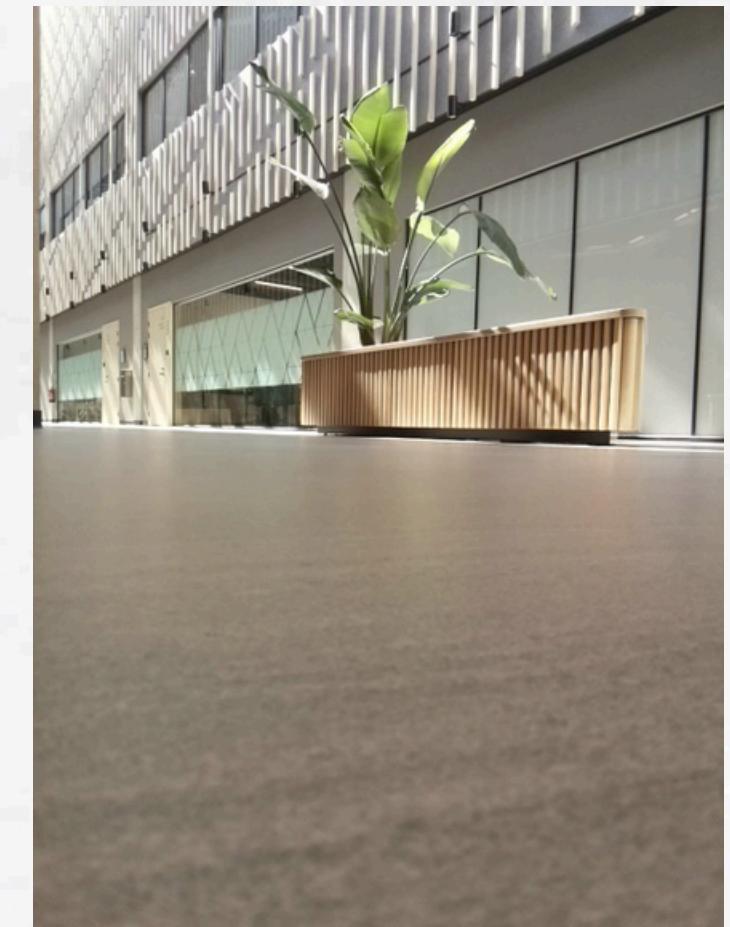
overspent: 12

underspent: 3

*not incl midSprint or Backlog

DEBUG CALIBRATE HRL_MOVEMENT TO WORLD

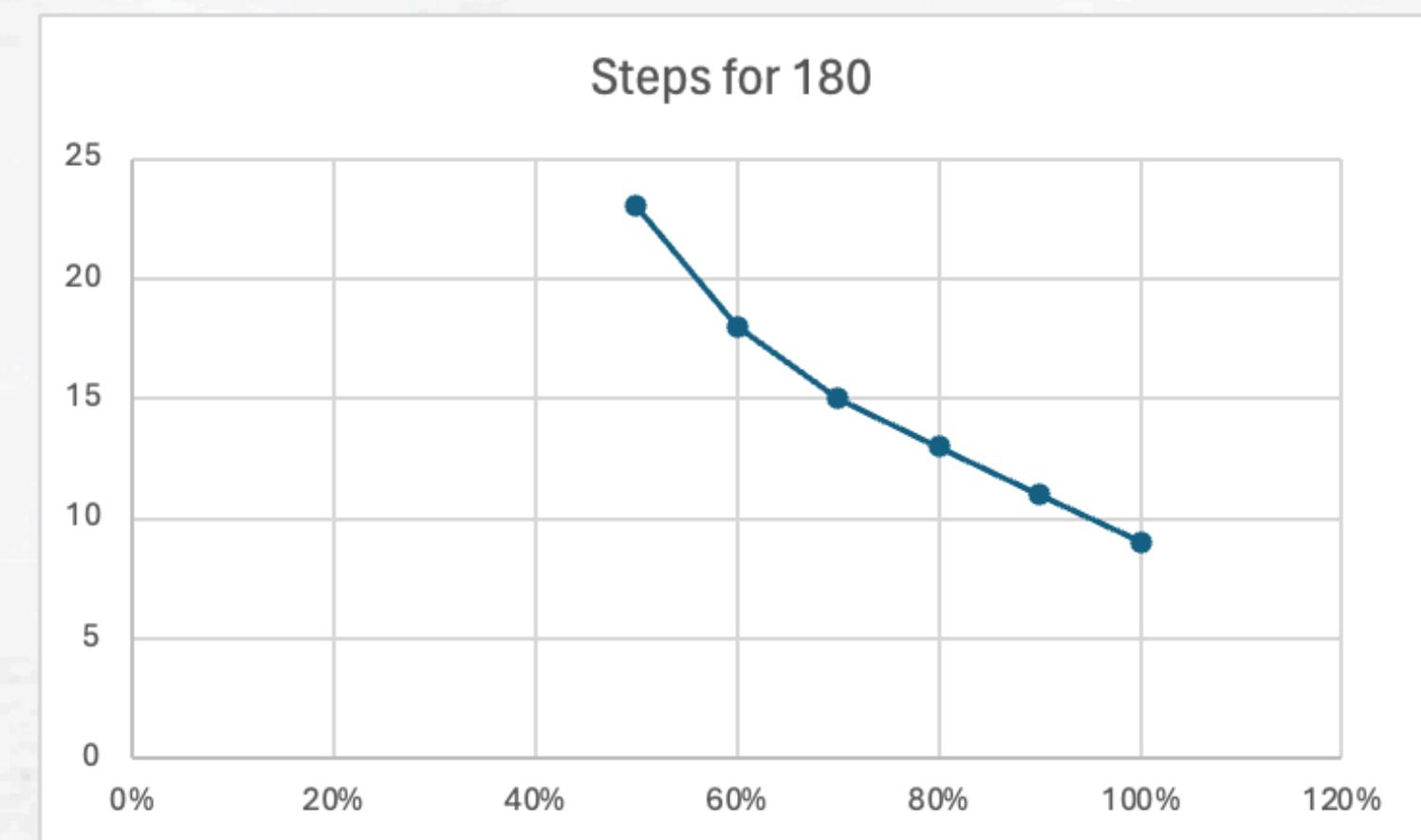
PLANNED 2 , SPENT: 3



HAVE CAMERA DESCRIBE WORLD

PLANNED 1.5, SPENT: 2

**BEST
CARDS**

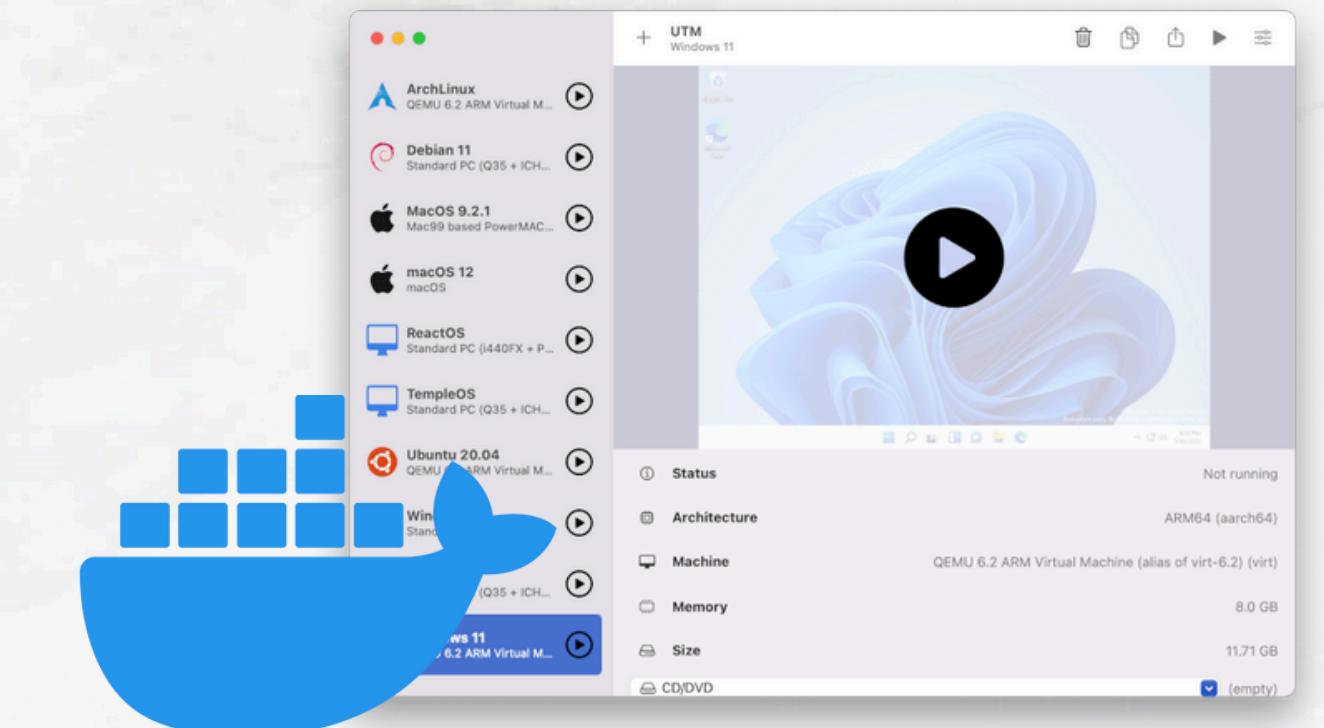


SETUP ROS ON MAC

PLANNED 4 , SPENT: 6

REFLASH AND SETUP ROS AGAIN :)

PLANNED 3, SPENT: 2

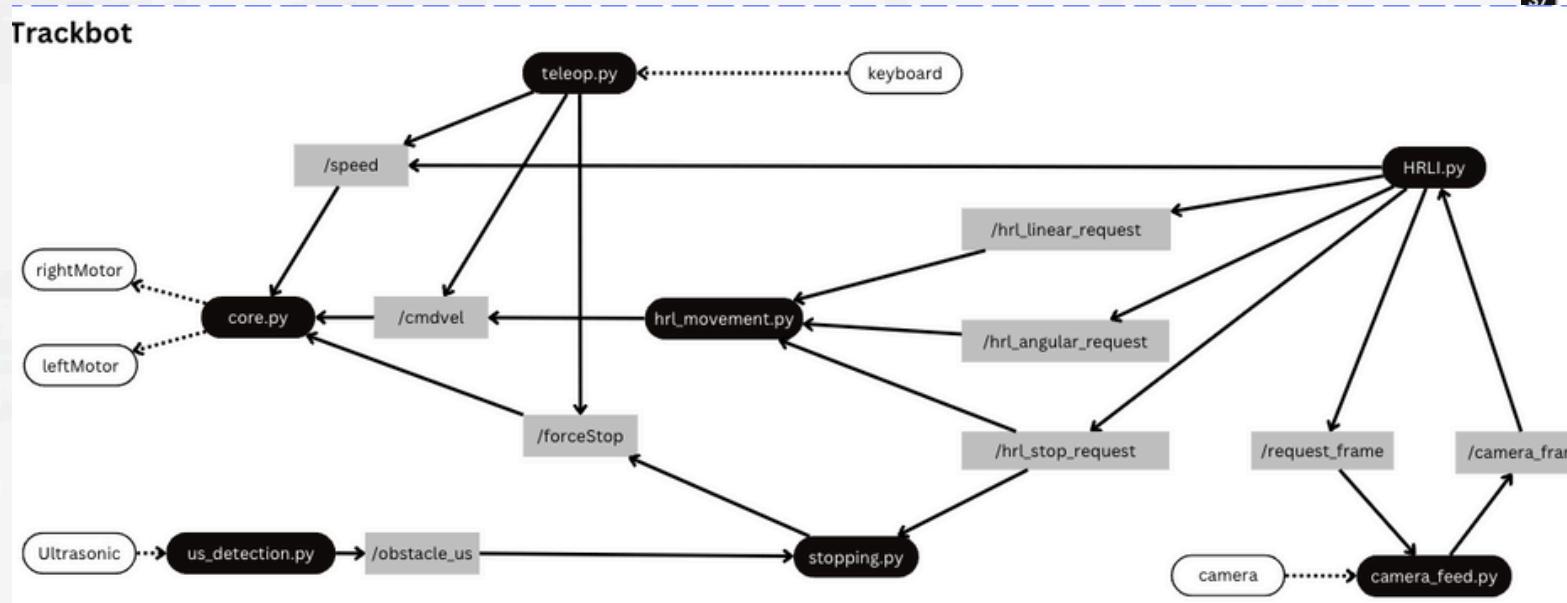


docker®

WORST CARDS

ROS

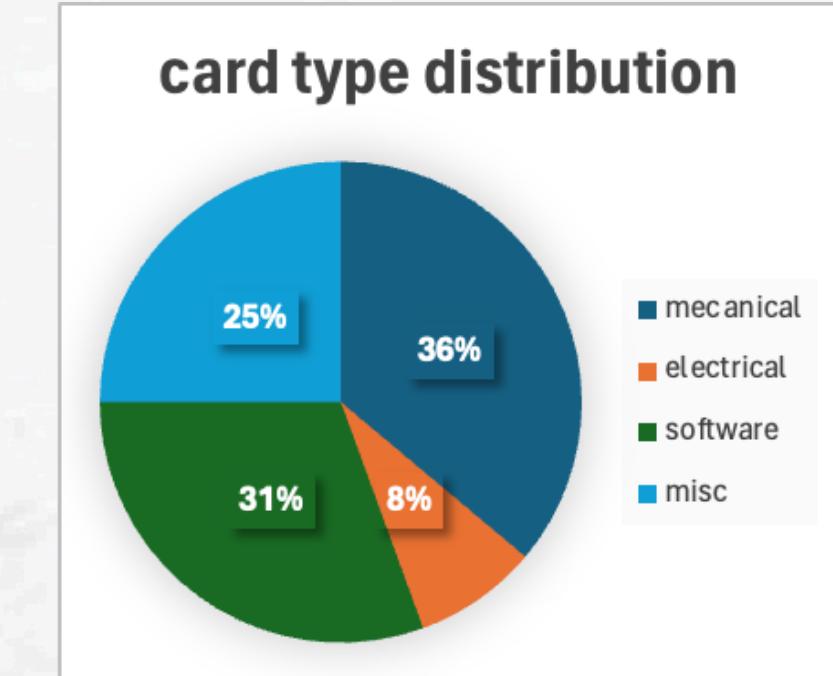
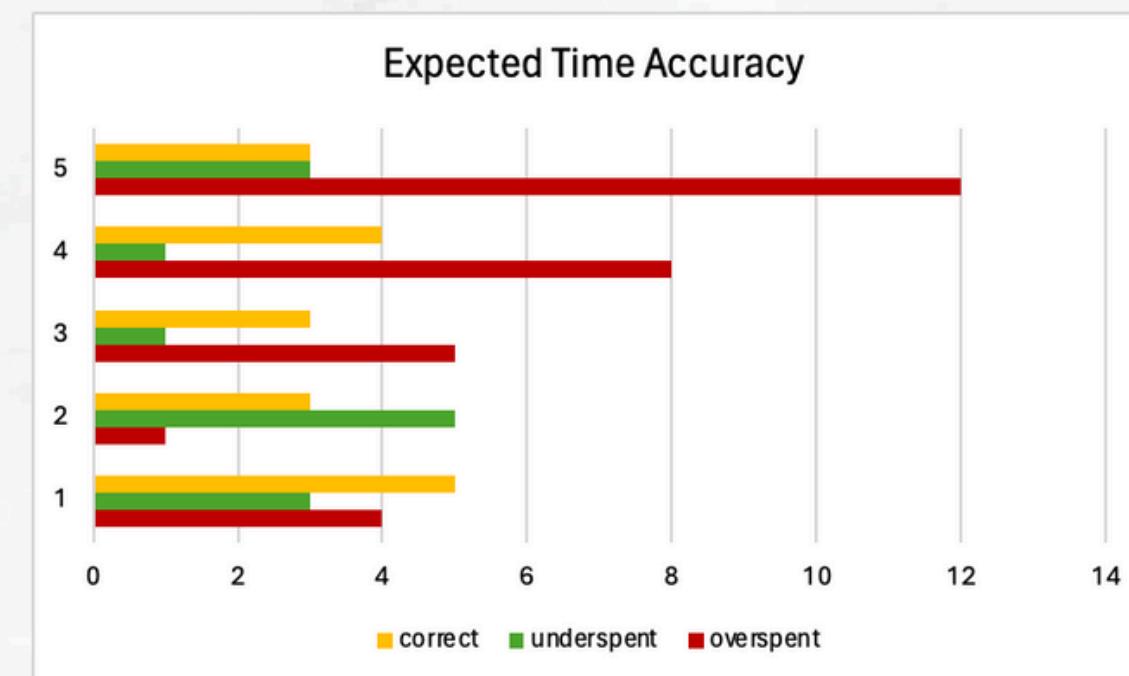
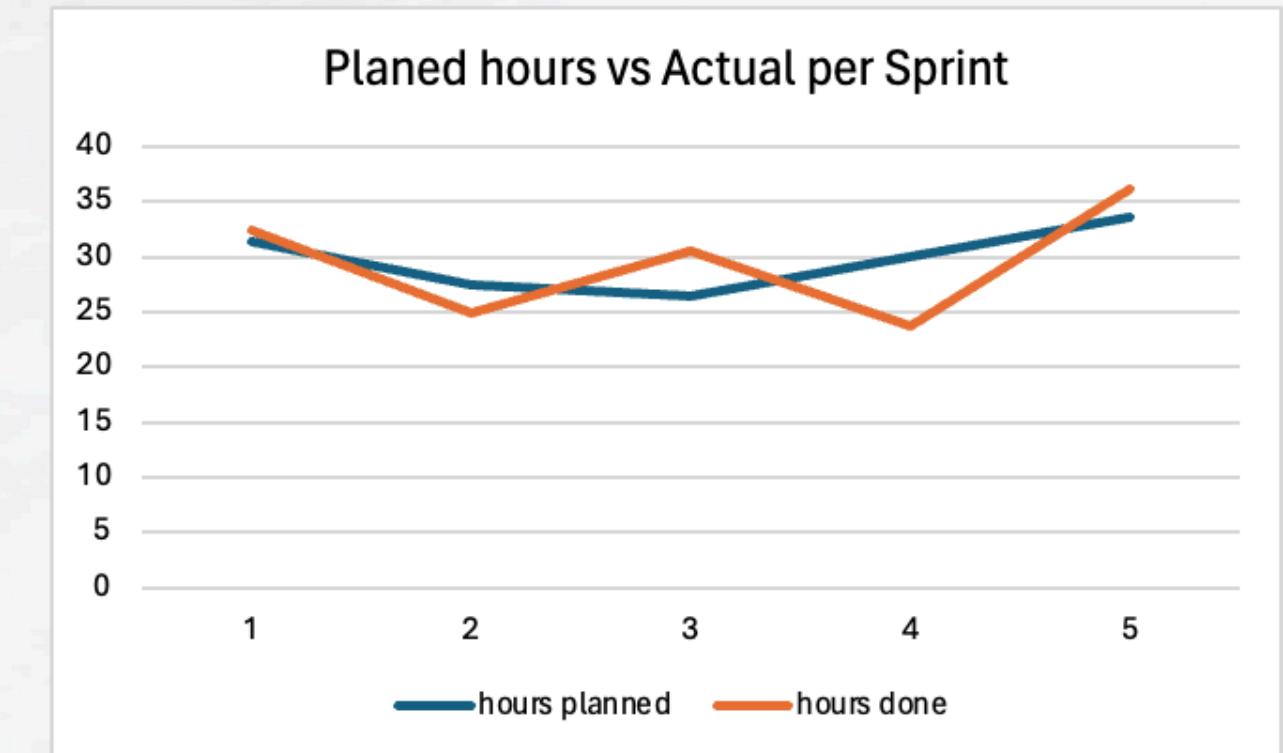
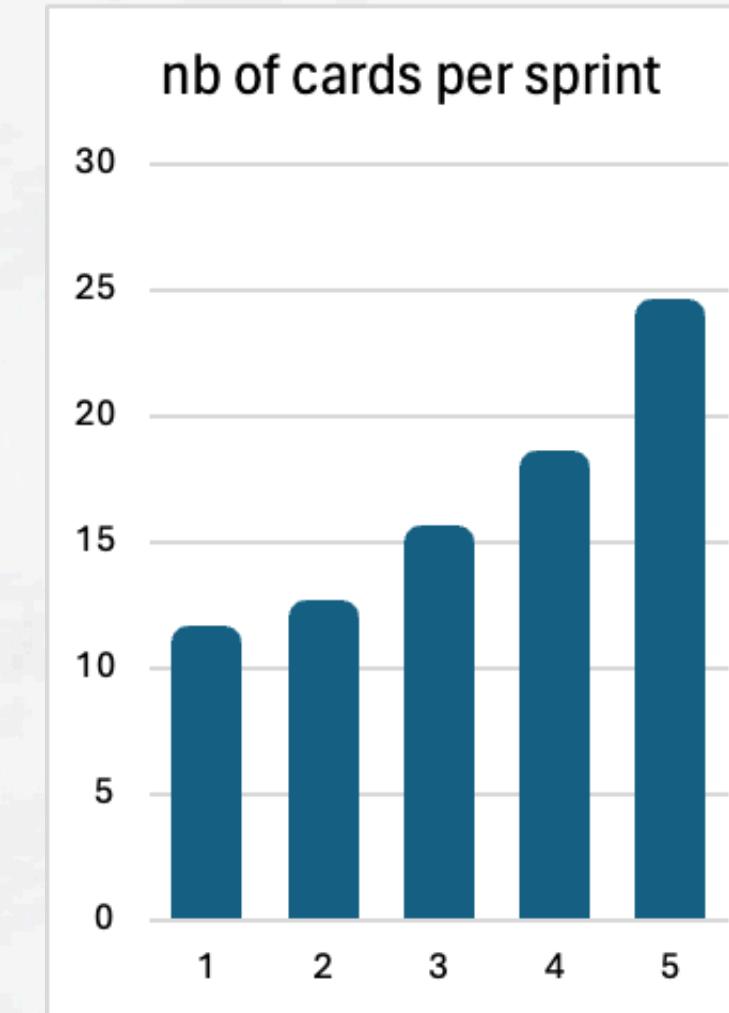
Most Spectacular ??



Bill Of Materials: TrackBot			
Quantity	Name	Description	Part #
1	Chassis Robot	Main body of the Robot where the parts are assembled	
1	CircuitHolder	Holds the Circuit in place	
2	MotorWheel	Wheel that fits onto the motor shaft	
1	Raspi Holder	Holds the Raspberry in place	
1	Sheel Robot	External Shell of the robot, used as design constraint	
4	Suspension Back	Keeps Suspension Damper in place and Links Suspension to Chassis	
4	Suspension Body	Holds and Drives Damper	
4	Suspension Joint	Damper being driven through Suspension, holds Damping Spring	
28	Track Component	Tracks that are in contact with the ground and Wheels	
56	Track Linker	Link the Track Components together, held by Toothpicks	
1	US Holder	Holds the Ultrasonic Sensor in place	
4	SuspensionWheel	Wheel that is linked to Suspension mechanism	
1	Camera Holder	Holds and Camera in place	
4	Springs	Provides Damping suspension to system	
56	Toothpicks	Hold in place Track Linker to Track Component	
1	Shell Holder	Holds in place Shell to Robot	
96.5g	PLAfilament	PLA filament needed (not including supports)	
SCERWS			
29	M2.5x8 Screw	Assemble parts to Chassis	
3	M2.5x12 Screw	Hold in place Raspi, Shell Holder to Chassis	
32	M2.5 Nut	Assemble parts to Chassis	
4	M4x35 Screw	Wheel Joint Screw	
12	M4 Nut	Hold in place Wheel	
4	M4 Mutter	Hold in place Wheel Joint	
2	M2x12Screw	Hold in place US Sensor	
4	M2x10 Screw	Hold in Place Camera	
6	M2 Nut	Hold in place US Sensor and Camera	
4	M3x12Screw	Hold in place Motor	
2	M3x6 Scew	Hold in place Circuit Board	
2	M3x8 Scew	Hold in place Shell	
6	M3 Nut	Hold in place Motor	
ELECTRONICS			
1	Protoboard	Connecting Electronic components together	
1	Battery	Alimenting Raspberry and Motors	
1	BatteryCable	Connects Battery to Circuit	
1	RaspberryCable	Connects Battery to Raspberry	
1	Raspberry3B+	Provides	
1	H Drive	Drives to 2 Motos	
1	Voltage Regulator	Reduces Voltage to good level for Motors	
2	Motors	Provides movement to Robot	
20	JumperWire	Provides connections to electronic components	
1	Solid FillWire	Provides connections to electronic components	
1	Camera Cable	Connect camera to Raspberry	

PROJECT OVERVIEW

TOTAL CARDS: **80**
 HOURS PLANNED: **149.1**
 HOURS DONE: **147.9**
 OVERSPENT: **31**
 UNDERSPENT **14**
 CORRECT: **19**



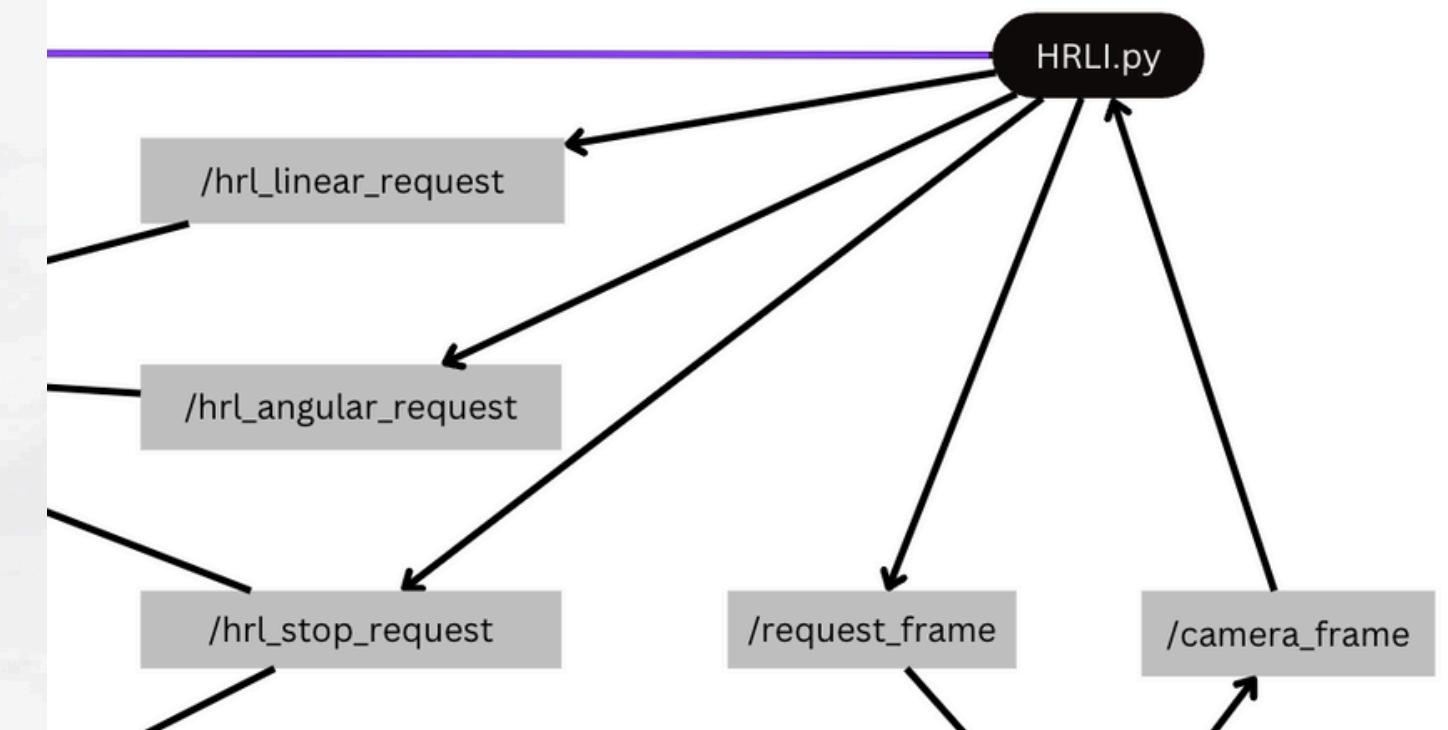
HRLI NODE CREATION

PLANNED 2 , SPENT: 4.5

3D PRINT TRACK AND WHEELS

PLANNED 2, SPENT: 3

BEST CARDS



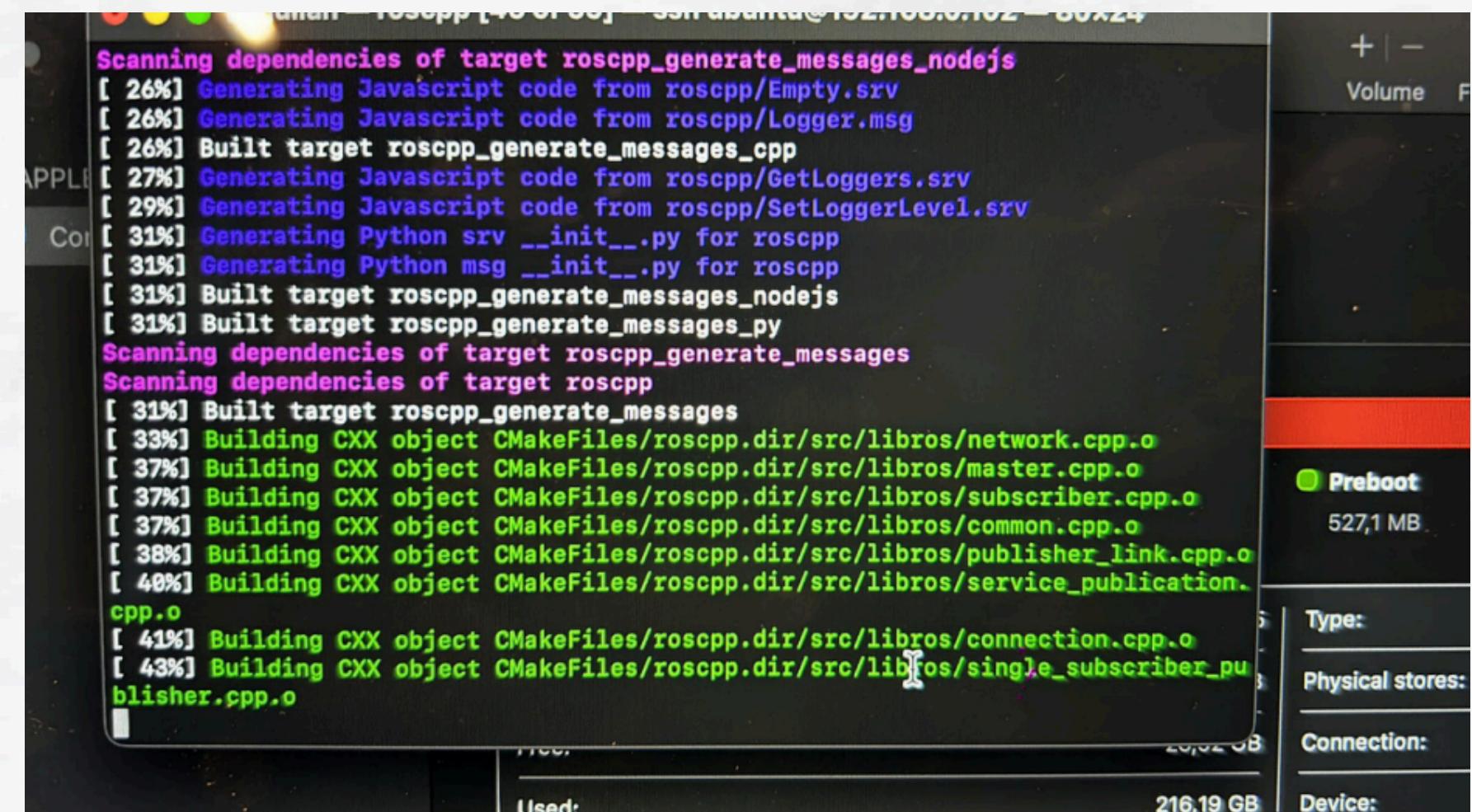
ROS ENVIRONMENT CREATION

PLANNED 4 , SPENT: 8

REFLASH AND SETUP ROS AGAIN :)

PLANNED 3, SPENT: 2

WORST CARDS

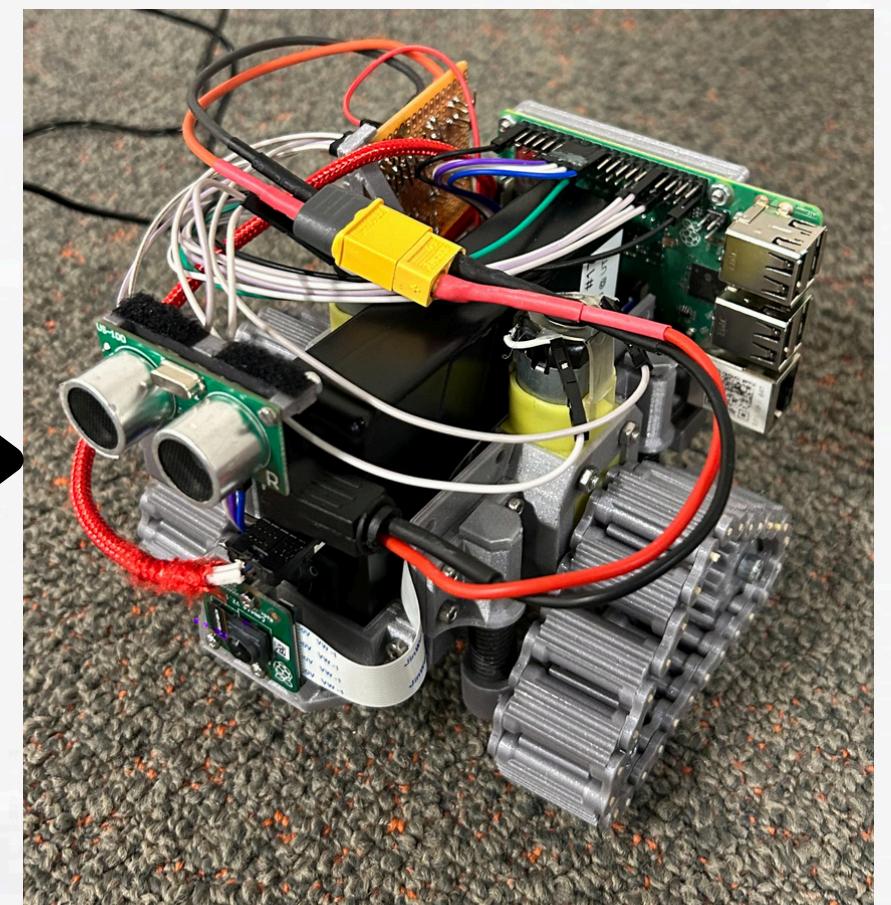
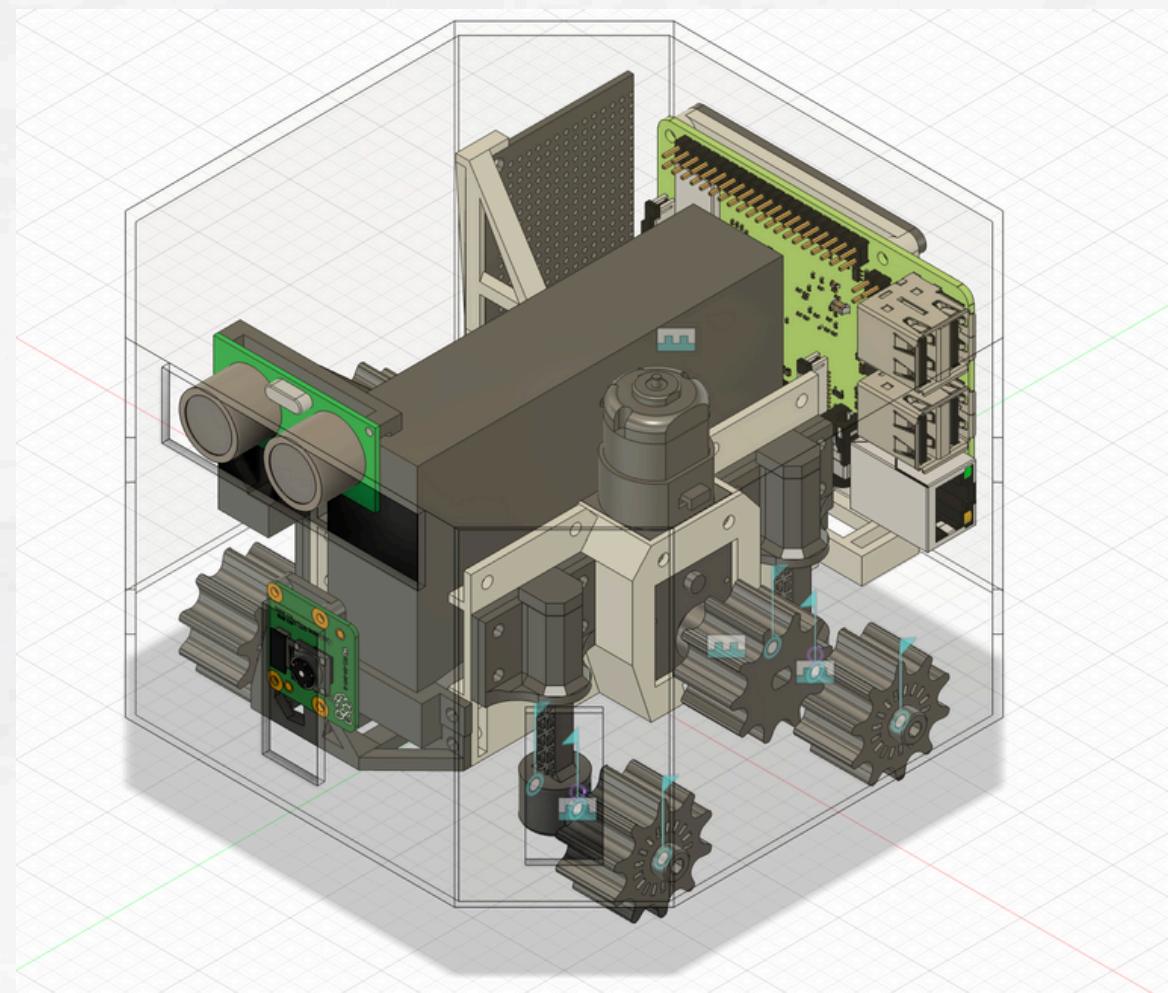


```
Scanning dependencies of target roscpp_generate_messages_nodejs
[ 26%] Generating Javascript code from roscpp/Empty.srv
[ 26%] Generating Javascript code from roscpp/Logger.msg
[ 26%] Built target roscpp_generate_messages_cpp
[ 27%] Generating Javascript code from roscpp/GetLoggers.srv
[ 29%] Generating Javascript code from roscpp/SetLoggerLevel.srv
[ 31%] Generating Python srv __init__.py for roscpp
[ 31%] Generating Python msg __init__.py for roscpp
[ 31%] Built target roscpp_generate_messages_nodejs
[ 31%] Built target roscpp_generate_messages_py
Scanning dependencies of target roscpp_generate_messages
Scanning dependencies of target roscpp
[ 31%] Built target roscpp_generate_messages
[ 33%] Building CXX object CMakeFiles/roscpp.dir/src/libros/network.cpp.o
[ 37%] Building CXX object CMakeFiles/roscpp.dir/src/libros/master.cpp.o
[ 37%] Building CXX object CMakeFiles/roscpp.dir/src/libros/subscriber.cpp.o
[ 37%] Building CXX object CMakeFiles/roscpp.dir/src/libros/common.cpp.o
[ 38%] Building CXX object CMakeFiles/roscpp.dir/src/libros/publisher_link.cpp.o
[ 40%] Building CXX object CMakeFiles/roscpp.dir/src/libros/service_publication.cpp.o
[ 41%] Building CXX object CMakeFiles/roscpp.dir/src/libros/connection.cpp.o
[ 43%] Building CXX object CMakeFiles/roscpp.dir/src/libros/single_subscriber_publisher.cpp.o
```

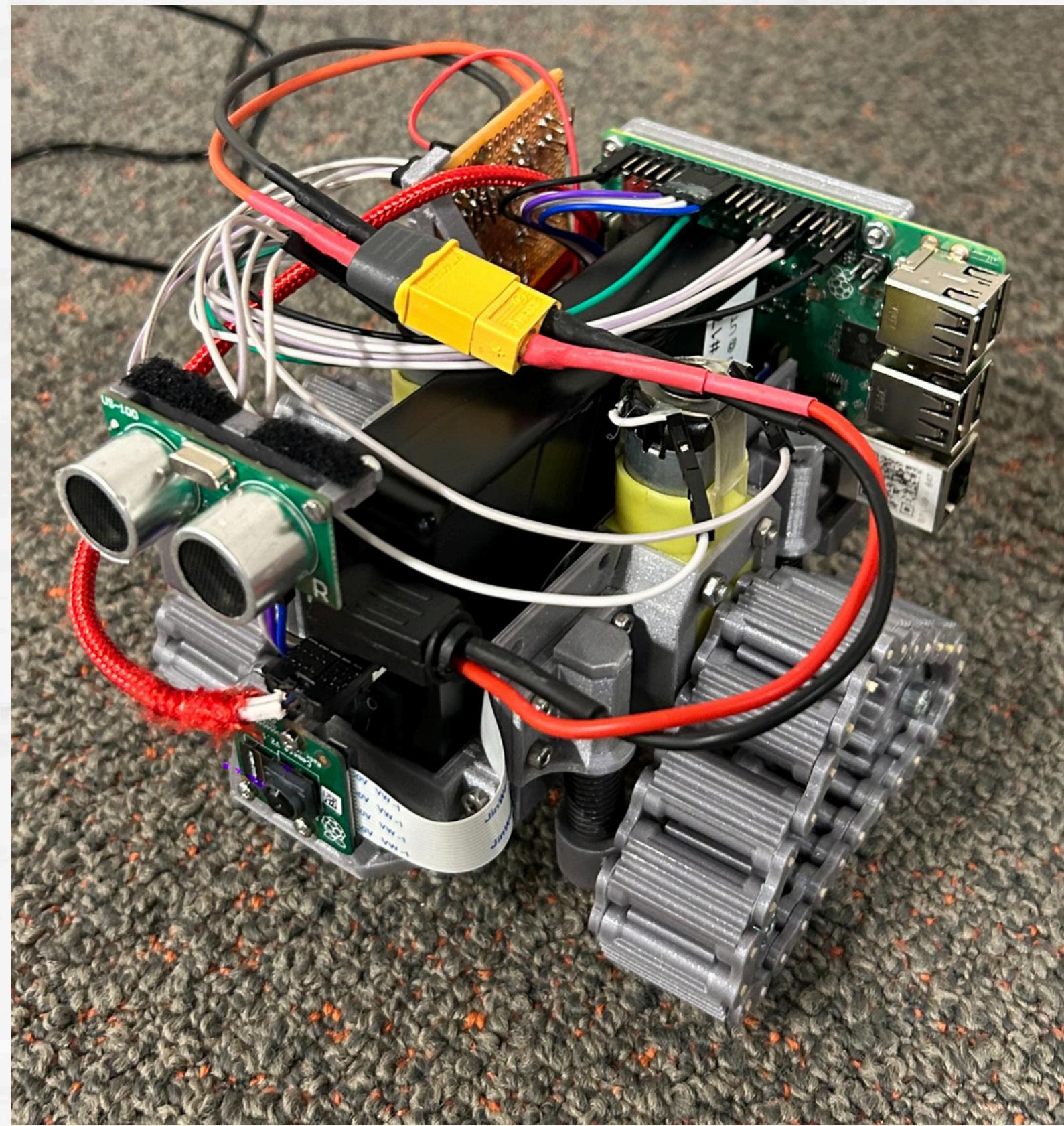


ROS

Most Spectacular ??



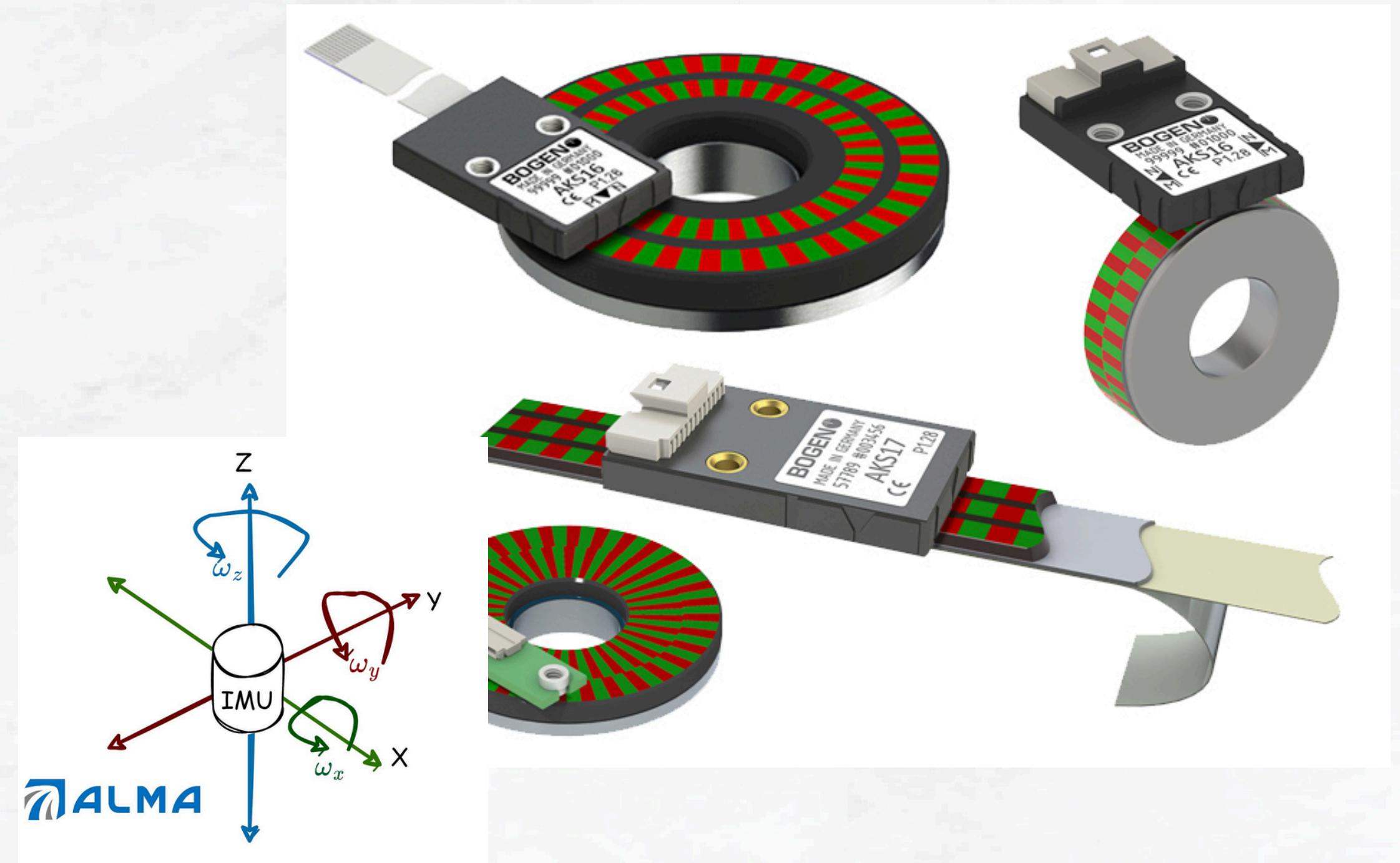
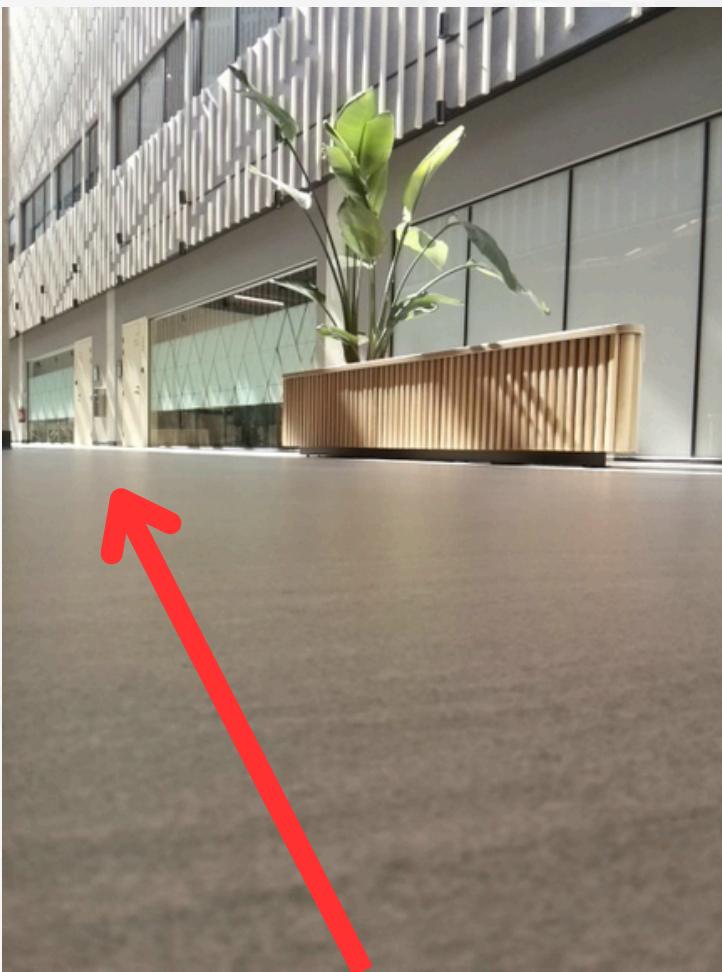
RESULT



GITLAB

Name	Last commit	Last update
📁 Code	Update 37 files	16 hours ago
📁 Parts	Update 37 files	16 hours ago
📁 Sprint_Presentations	Update 5 files	3 weeks ago
📅 BOM.xlsx	Update 37 files	16 hours ago
📝 README.md	Update file README.md	16 minutes ago
📄 Trackbot_Info.pdf	Update 3 files	47 minutes ago

WHATS NEXT



University of Tartu

THANK YOU

Julian Leclerc