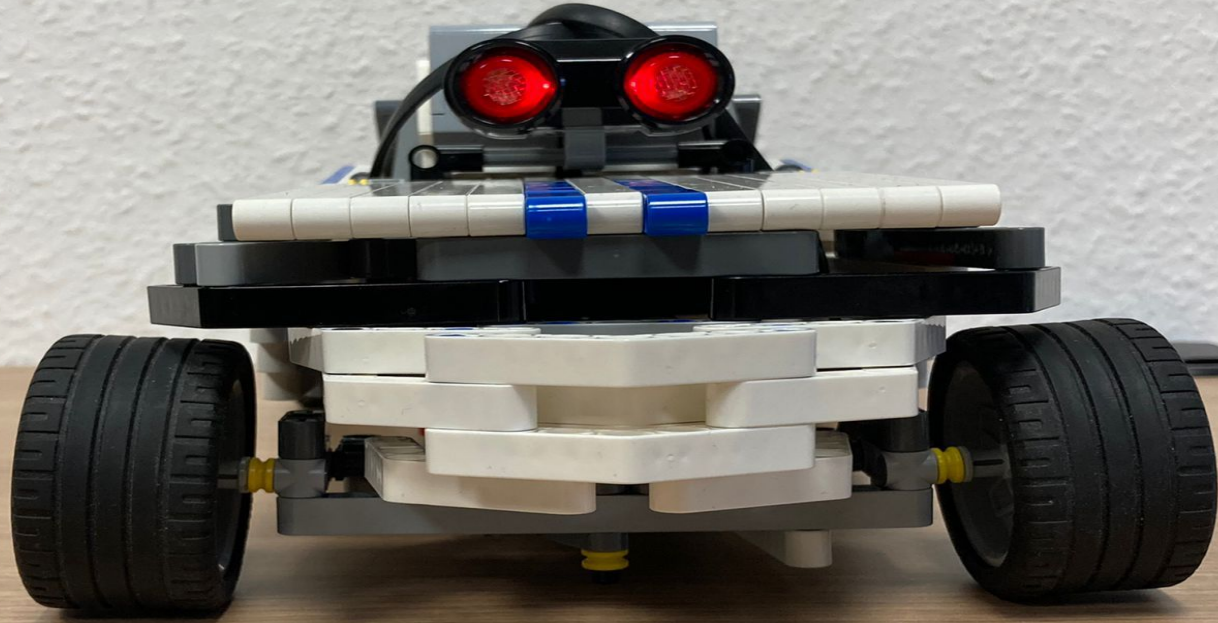


StEV3



the first (*to our knowledge*)
MATLAB remote controlled EV3 Car

Table of Contents

- **Features of StEV3**
 - Ultrasonic Sensor (Distance Warning)
 - Sounds
 - Controller Input
 - How does StEV3 operate?
- Pictures
- Input Layout

How does it work?

- Mapped against the classic Xbox One controller.
 - Implemented using vrjoystick
 - vrjoystick: Primarily used for 3D model simulations
- MATLAB waits for and processes the controller input.
- Waits for specific buttons/shoulder presses.
(see: Input Layout)
- Command is then issued to the EV3 brick.

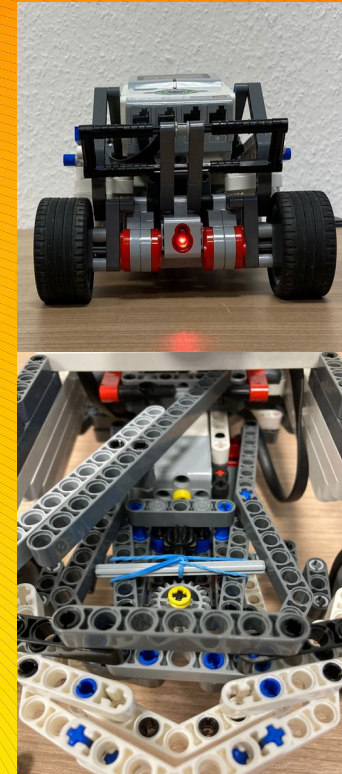
Sounds

- Can play a few sounds. These include:
 - Distance warning (Ultrasonic Sensor: Toggled using X)
 - Honk
 - Entire songs. Seriously.
- StEV3 matches notes to frequencies:
 - Controlled through the command “songPlayer”
 - Songs are stored in vectors. [Note, Length, Note...]

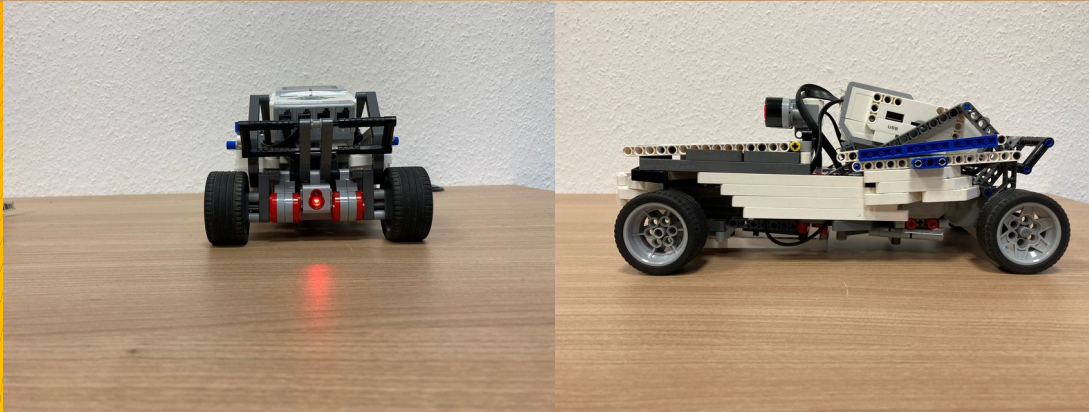


How does StEV3 operate?

- Uses the rear-wheel drive layout
 - One for each wheel
- Ackerman-Axle in front for turning
 - Makes sharp turns possible
 - Greater degree of flexibility
- Sensors used:
 - Distance sensor
 - Color sensor (decorative)

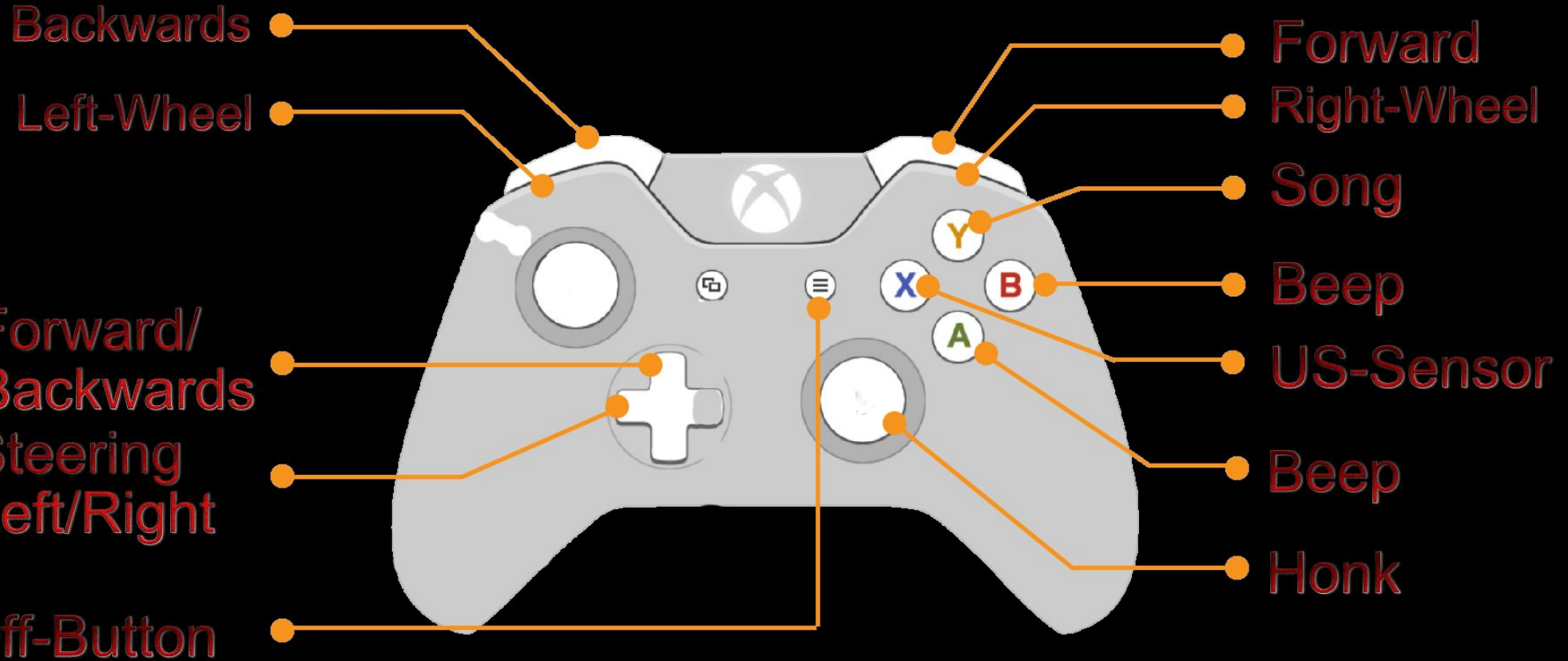


Pictures



12/24/2021

Input Layout



Source Code

The code of the robot has been publicized and is available to anyone.

GitHub: github.com/n0toose/StEV3

Codeberg: codeberg.org/n0toose/StEV3

That's all folks!

**Thank you for your
attention.**

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