





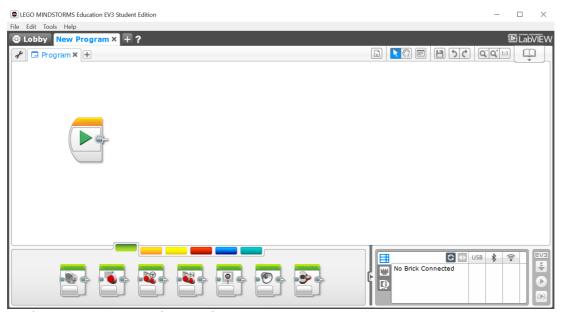


## **LEGO**

The program interface of the Lego Mindstorms Education EV3 is being introduced in this workshop.



The programming area includes code blocks and a communication panel.



Applications are created using the programming area.

## **Using Motion Blocks**











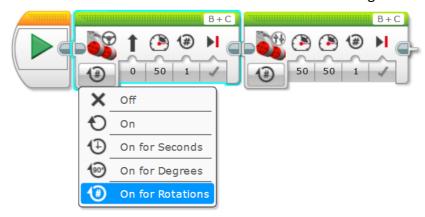








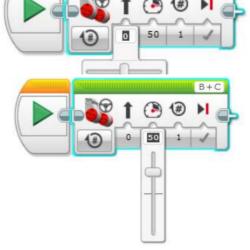
An application for moving the robot forward can be created using the Move Steering block. The command to run both motors for 1 second is given.



The operating modes of the motor include the motor stopping (Off), continuous operation of the motor (On), operating for a specific duration (On for seconds), operating at a specific angle (On for degrees), and operating for a specific number of rotations (On for rotations). The block options vary depending on the selected mode.

The robot turns right or left by adjusting the steering value between -100 and +100.

The speed of the robot is controlled by adjusting the power value between -100 and +100.

















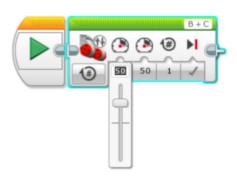




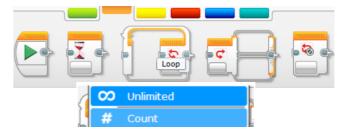
The duration, angle, and rotation modes allow adjusting how much the motors will turn based on the selected mode.

An application for moving the robot forward can be created. A command is given to run both Large motors for 1 second using the Move Tank block.

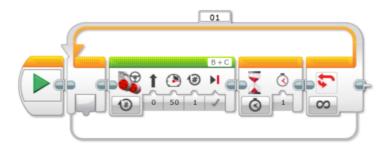
The Tank Movement block enables the independent movement of two motors, allowing them to operate at different power values



The Loop block allows the desired task to be performed a specified number of times. It also allows the task to be executed indefinitely.



Below is an example application that continuously moves forward at a speed of 50 and waits for 1 second.



Various applications are implemented to reinforce Move Steering, Move Tank, and Loop blocks. Similar exercises include the robot moving forward for 50 cm and stopping, drawing a square, and so on.









