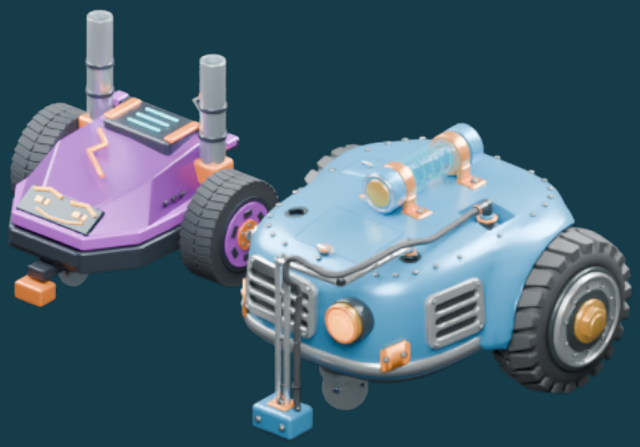
Robot Sumo

Program your robot and stay in the ring.



How to play

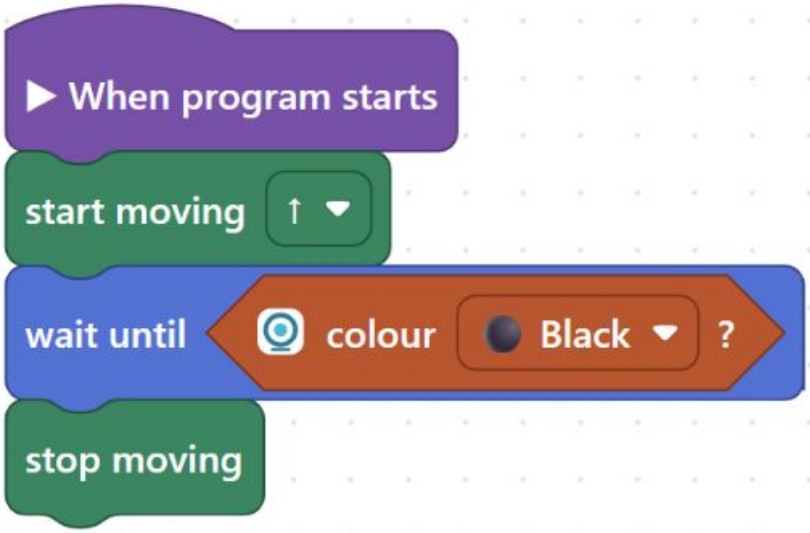
Alone	Open “Practice match” and leave the opponent set to “Alone”. You can try starting in reverse here.
With an opponent	Pick a robot from the practice opponent menu. The starting rule applies when you face another robot.
Online Arena	Choose “Play” or “Just watch”. The queue shows when it is your turn. Make up a name for your robot.

Match rules

Start	First drive straight forward to the black line. You can turn once you reach it.
Barrier	You lose the round as soon as any part of your robot touches the red barrier.
Tipping	A robot also loses if it stays on its side or back.
Time	If neither robot wins within 45 seconds, it is a draw. In the Online Arena, the robots can play one rematch from a different starting position.

Your first program

Open Program. Open the categories on the left and drag the blocks below “When program starts”. Test these three steps first.



1 Move forward

The arrow points up. Your robot starts driving straight forward.

2 Detect the black line

Fit “colour?” from Sensing into the slot and choose black. The motors keep running while the robot waits for the line.

3 Stop

Your robot should now stop when it reaches the black line.

Turn your first drive into a strategy

Try replacing “stop moving” with “move” set to reverse, steer right and 0.8 rotations. Test the turn. When it works, drag “repeat forever” around the sequence so your robot keeps returning to the line and turning away.

How the movement blocks work

“Start moving”	Keeps the motors running until another movement block takes over or you use “stop moving”.
“Move”	Drives for a set number of wheel rotations. On a turn, the wheel travelling farther counts. You can enter 0.5 for half a rotation.
Speed and steering	Change one value at a time. Turning, braking distance and grip vary by robot model.

Test, watch and improve.

Does your first drive work? Then add the next block.