Simple Remote Control

Time required: 60 minutes

Please read all the directions carefully before beginning the assignment.

- Comment your code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Description

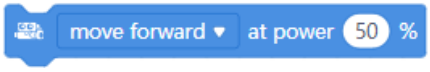
The IR remote control can be programmed to control the mBot's movement and other program commands. This project will get you started with remote control movement.

Understanding

Demonstrate understanding of:

IR remote, remote control, movement blocks

Knowledge Point

	The forward-moving rotation speed is -100%~100%. A positive number represents moving forward, and a negative one moving backward. 0 speed represents stop. The bigger the number is, the quicker it moves. In the tutorial example the speed is set to 50%. Do not use a speed of less than 30%, or the motor will stall.

What if the rotation speed for moving forward is beyond 100%?

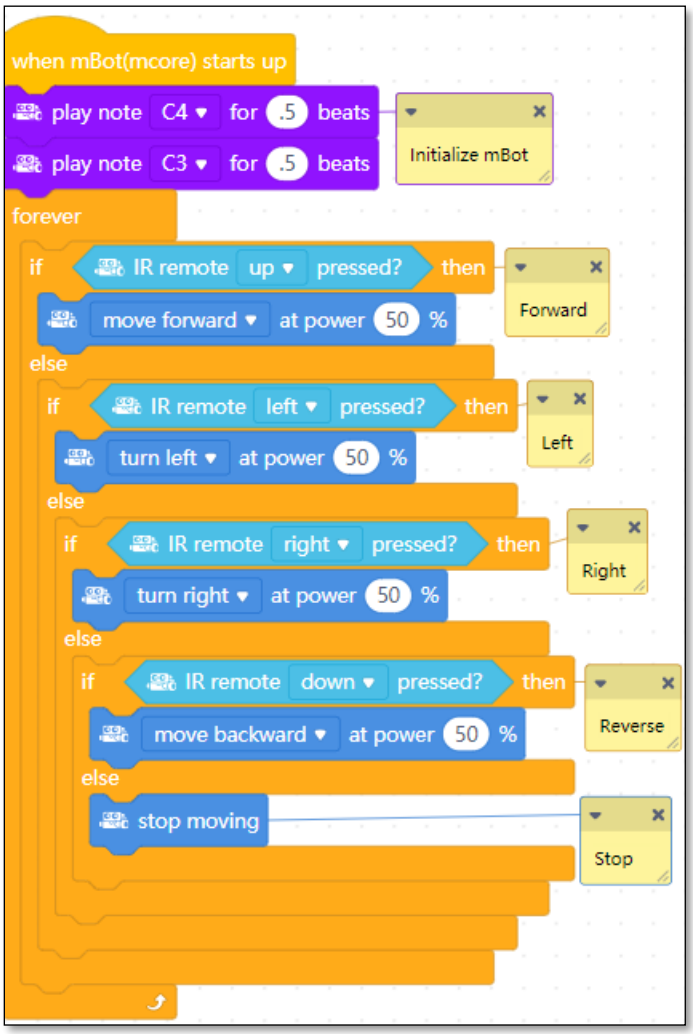
If the speed is set beyond 100%, it will be automatically set as 100% which is the maximum speed.

Requirements

- The robot will move in the direction of the arrow keys on the remote, then stop when the keys are released.
- The nested if then else decision structure only allows one key to be accessed at a time.

Tutorial Assignment

1. Start mBlock. Save the program as **Simple Remote Control**.
2. Complete and test the program as pictured with the requirements listed.



Assignment

Start with your tutorial project and add the following.

- Use LED's to indicate direction and movement.

Assignment Submission

- **All students** → Attach finished programs to the assignment in Blackboard.
- **In class assignment submission** → Demonstrate in person.

- **Online submission** → A link to a YouTube video recording showing the assignment placed in the submission area in BlackBoard.