Robotics 101
OVERVIEW

This App you see running on the iPad is the Mblockly program.

This will help you program your Mbot robot.

Mblockly is a user friendly and easy to use application that is similar to the Scratch coding platform.

With this program you can make your robot do anything.
When you open the app you will see an open space, and on the right you will see tabs. Behind those tabs there are commands you will need to use to program the robot. We will mainly use commands from the Begin tab and Move tab.
First the Basics

- Lets make the Robot move forward/backwards

When you press go the robot will move forward slowly
When you press go the robot will move backward.
• Then let's make the robot move left/right.

When you press go the robot will turn right.
When you press go the robot will turn left
Adjusting SPEED • The robot has many different speeds (below are the speed levels)
• Lets Adjust the speed of the robot going forward\backwards

Notice when you run each code individually the robot will go faster going forward

255 is the max speed

Make sure to use each line of code individually
when you run each code individually the robot will Move faster going Backward

Make sure to use each line of code individually
Adjusting Speed and Duration of Movement

- Lets see how far we can get the robot to move.
- So you must factor in the speed of the robot and how long the robot will be moving at that particular speed.

The first code will make the robot cover the longest distance and the second code will make the robot cover the shortest distance.
Putting it all together

when Go

run forward at speed 100 for 5 s

rotate at speed 54 for 2 s

rotate at speed 54 for 2 s

run backward at speed 100 for 5 s

stop moving