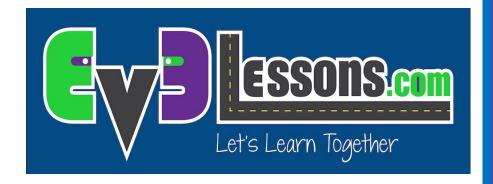
BEGINNER EV3 PROGRAMMING LESSON



Topics Covered: Switches



By: Droids Robotics

LESSON OBJECTIVES

- 1. Learn how to make your robot decide what to do out of different choices
- 2. Learn how to use a Switch Block

SWITCH BLOCKS

Asking the robot a question and doing something different based on the answer

Example: Does the robot see a line? Or not?

Basically a YES/NO QUESTION

Switch blocks are found in the orange/flow tab

the answer is yes

Run this code if

The question being asked: is the touch sensor pressed

Run this code if the answer is no

SWITCH BLOCK CHALLENGE 1

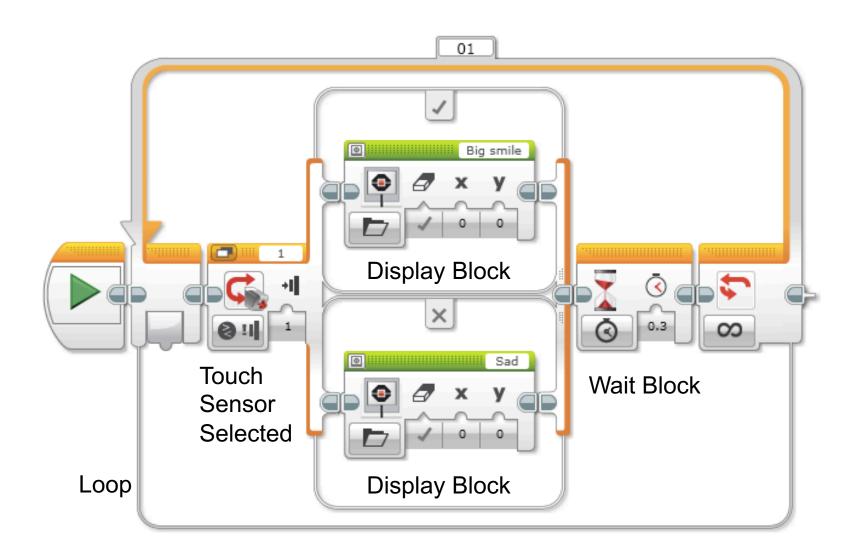
Challenge: Write a program that changes the display based on if the touch sensor is pressed or not pressed.

If pressed, your EV3 is happy! Display a smiley face. If not pressed, the EV3 is sad! Display a sad face.

Hint: You will need to use the display block, loops and switch blocks!



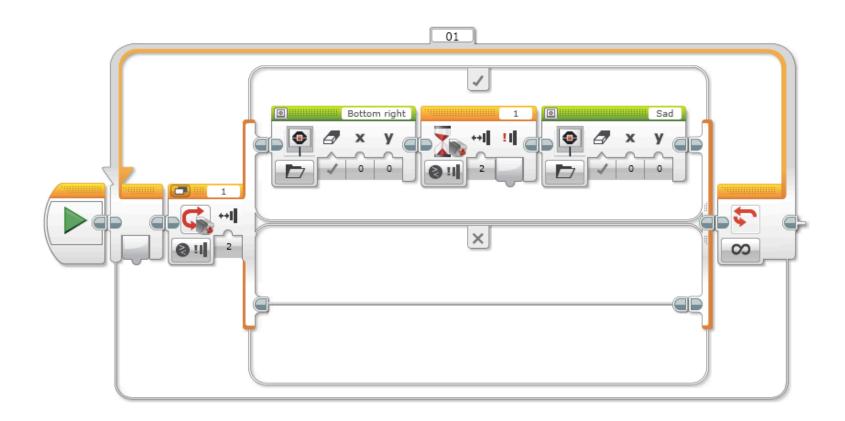
CHALLENGE 1 SOLUTION



SWITCH BLOCK CHALLENGE 2

Can you write a program that display big eyeballs if you touch it once and a sad face if you touch it a second time and toggles back and forth.

CHALLENGE 2 SOLUTION



CREDITS

- This tutorial was created by Sanjay Seshan and Arvind Seshan from Droids Robotics.
- More lessons are available at www.ev3lessons.com
- Author's Email: <u>team@droidsrobotics.org</u>



This work is licensed under a <u>Creative Commons Attribution-</u> NonCommercial-ShareAlike 4.0 International License.