

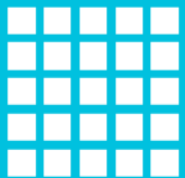
SPIKE PRIME LESSONS

By the Creators of EV3Lessons



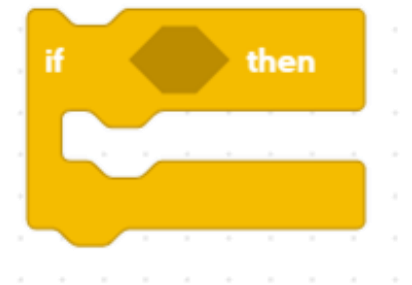
IF THEN BLOCK

BY SANJAY AND ARVIND SESHAN



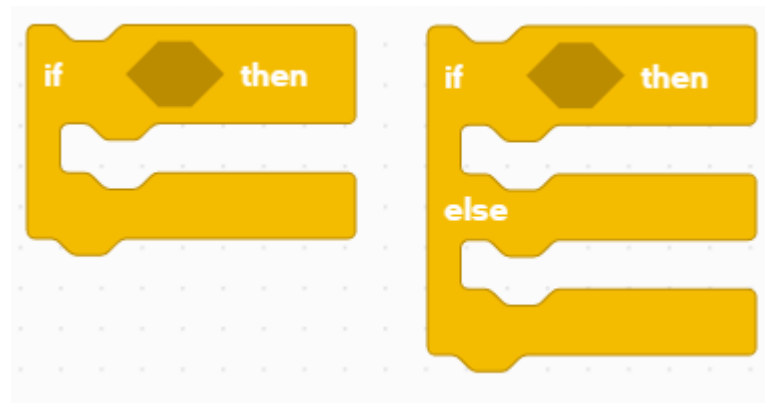
LESSON OBJECTIVES UPDATE!

- Learn how to make your robot decide what to do out of different choices
- Learn how to use an if-then Block



REPEATING CODE

- Asking the robot a question and doing something different based on the answer
- Example:
 - Does the robot see a line? Or not?
 - Is the robot near the wall? Or not?
- It is like a yes/no question

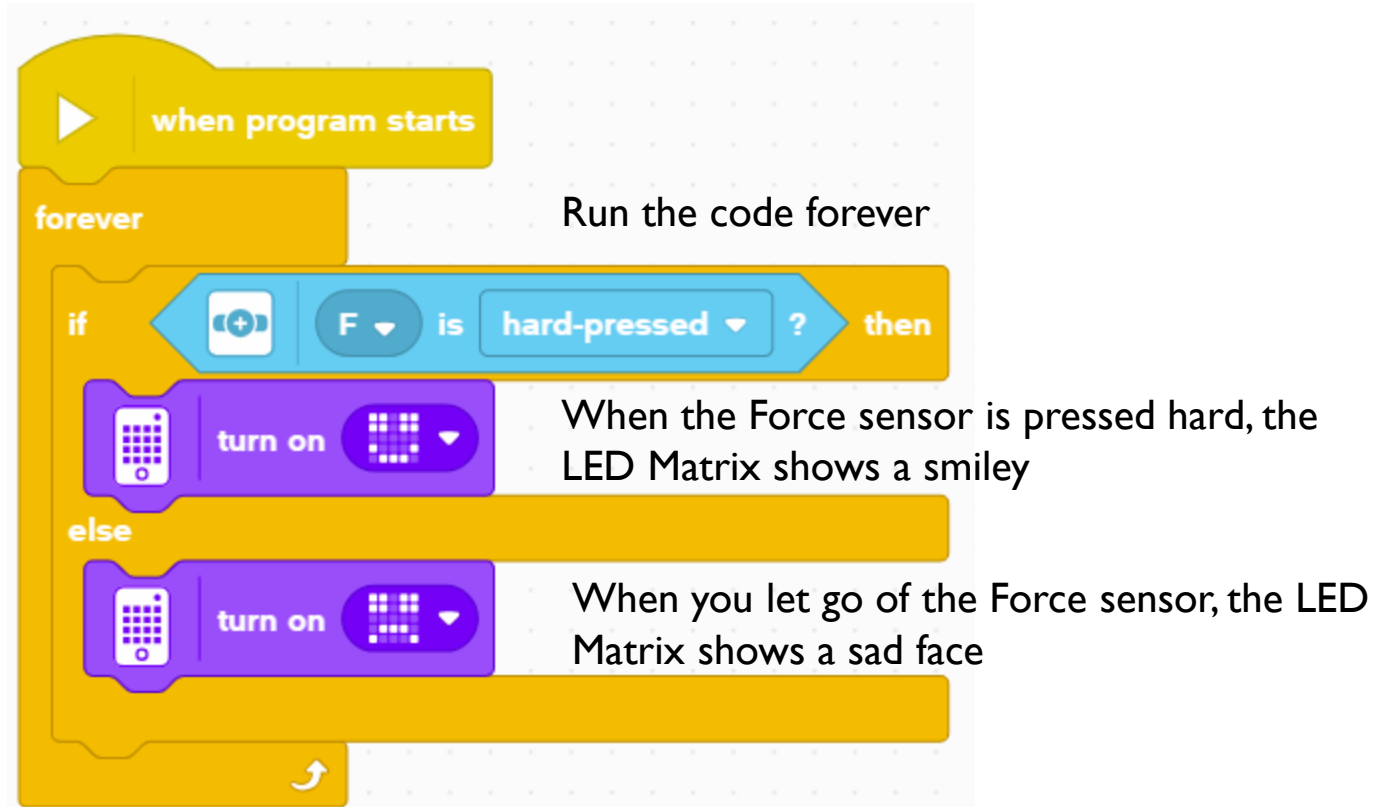


CHALLENGE: HAPPY OR SAD?

- Write a program that changes the display based on if the Force Sensor is pressed or not pressed
- If pressed, your SPIKE Prime is happy. Display a smiley face. On the LED Matrix.
- If not pressed, SPIKE Prime is sad! Display a sad face.
- You will need to use the Light Block, a Repeat Block, and an If-Else block
- You will need to customize the Light Block to create a sad face
- Extensions: Combine what you know and see if you can add a happy laugh when pressed and crying when you stop pressing the sensor. You may have to make some custom sounds.

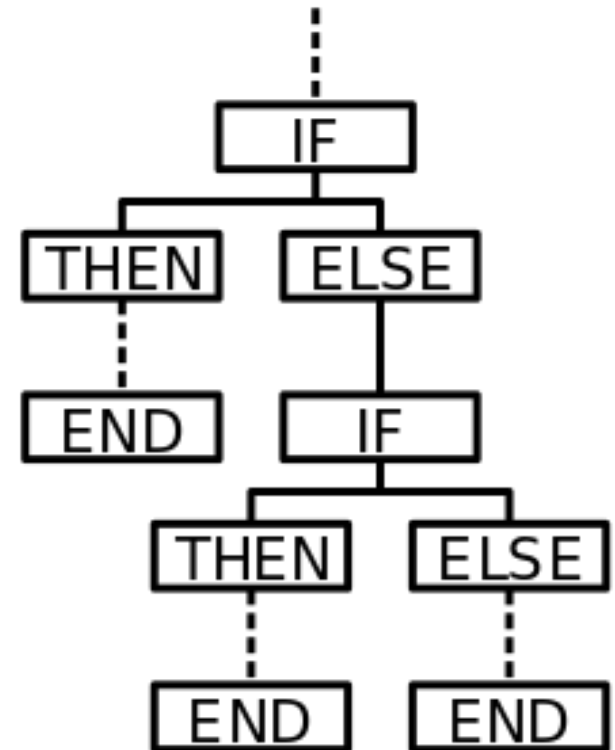


CHALLENGE SOLUTION



TAKING IT FURTHER

- If-Else Blocks can be very powerful tools as you create more complex programs
- Think about situations where you might want to nest more than one inside another



CREDITS

- This lesson was created by Sanjay Seshan and Arvind Seshan for SPIKE Prime Lessons
- More lessons are available at www.primelessons.org



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