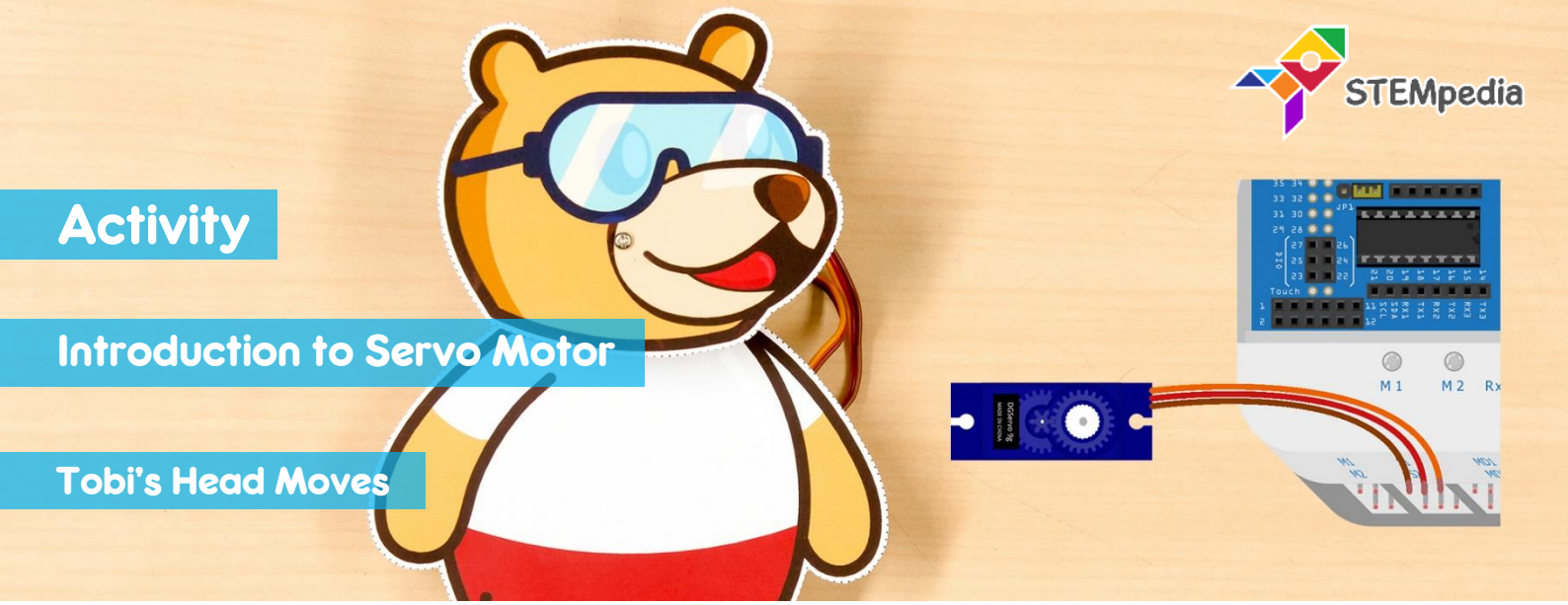


Activity

Introduction to Servo Motor

Tobi's Head Moves

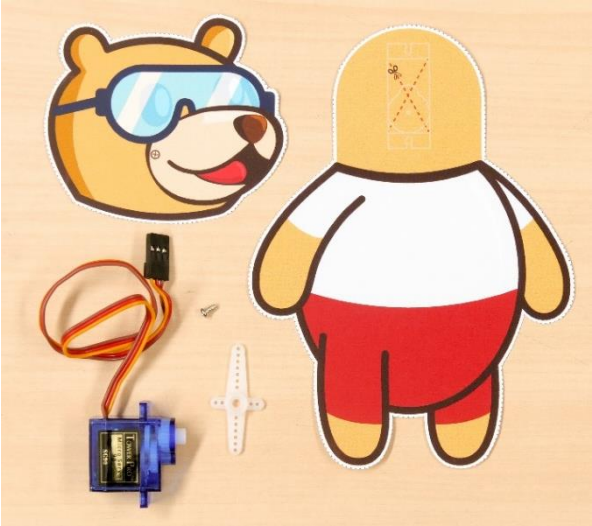
In this activity, you are going to move the head of a cutout of our learning buddy, Tobi with the help of a servo motor.

COMPONENTS

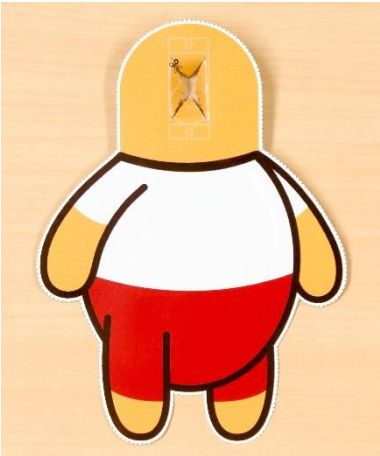
evive, Servo Motor, Screwdriver, Tobi's cut-outs and Scissors.

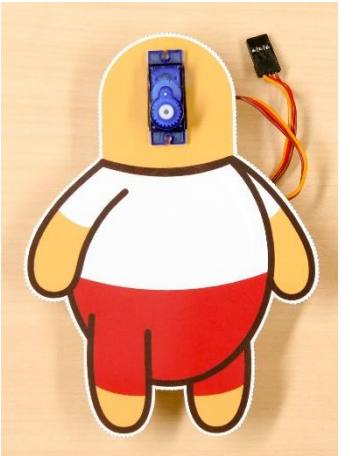
STEP-BY-STEP

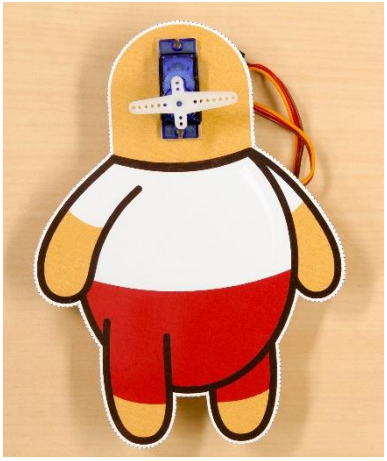
1. Cut out Tobi's head and body using a pair of scissors.



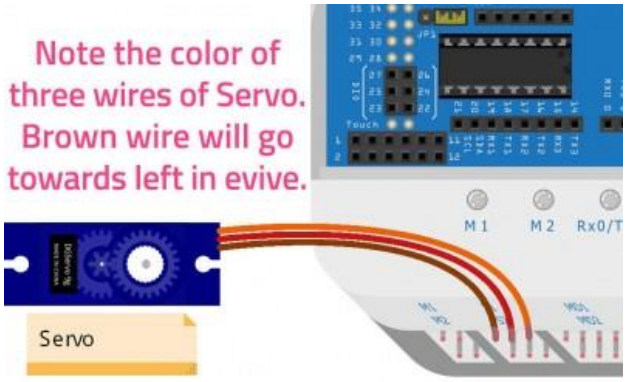
2. On the cutout of Tobi's body, there is a space marked for the servo motor. Cut and fold the flaps inwards to make support for the servo motor.







3. Insert the servo motor in the slot made on the cutout of Tobi's body.
4. Attach the servo head that comes with the servo accessories to the servo motor.
5. Take the cutout of Tobi's head and fix it onto the servo head using a tiny screw provided with the servo.
6. Connect the servo motor to evive. Turn ON evive.



7. The first option in the menu that appears on the screen is **Controls**; select that option by pressing the control button to the right.

8. Next, you'll see three more options, namely *Motors*, *Servos*, and *Stepper Motors*; select ***Servos***.
9. From the three options that now appear on the screen, select ***Servo 1***.
10. The angle can be controlled/changed using the potentiometer knob. As you rotate the knob in a clockwise direction, the angle will increase, and the servo horn will rotate to its left; as you turn the knob anticlockwise, the angle will decrease, and the servo horn will rotate to its right.
11. On rotating the potentiometer 1 and you'll observe that the minimum the angle can go is 0° and the maximum is 180°.
12. Control the servo motor position using potentiometer 1 of evive. Turn Tobi's head.