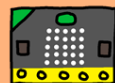# MICRO:BIT & AI
COLOR INDICATOR

INTRO

Use micro:bit and AI to create a color indicator that helps people who struggle to recognize colors by giving real-time feedback and making it easier for them to distinguish between different colors.

WHAT WE NEED

Micro:Bit AI: https://microbitai.inventor.city/

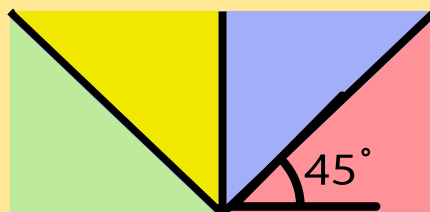MakeCode: https://makecode.microbit.org/

Micro:Bit

ANGLE CALCULATION

We split the cardboard into four parts to display four colors. We use a positional servo (180) to ensure that each section is at a 45 degree angle.
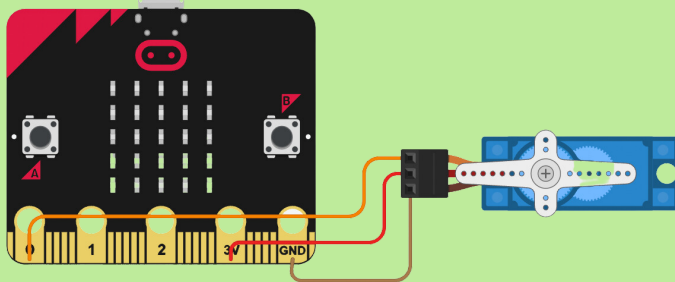
Positional servo
(0-180 deg)

45°

Red: 22.5°
Blue: 67.5°
Yellow: 112.5°
Green: 157.5°

PHYSICAL SETUP

Connect to Pin 0

COLOR INDICATOR

CODE

- **Step 1:**
Create an image recognition model via Google Teachable Machine Site.

- **Step 2:**
Go to the provided MakeCode Starter to adjust the code. The class names should be aligned with your AI model.

- **Step 3:**
Follow instructions on Micro:Bit AI site and connect to your AI models.

The names should be the same with class names in your AI models.

You need to add the servo extension. Angles have been calculated based on four different color sections.

Initial letter of each color showing on Micro:Bit