Abstract
mBlock v3.4.1 version published extension support about Microsoft Cognitive Service. Once you set up correct API key, you could use the extension to achieve Face detection, Emotion detection, Computer Vision Text detection, and Speech to Text.

Introduce of function blocks

Start function blocks

- Choose face in the list to start detect.
- Choose emotion in the list to start detect.
- Choose text in the list to start detect.

- Start voice recognition.

- Start real-time face detection.
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Result receive function block

- Choose Face to receive result data.
- Choose Emotion to receive result data.
- Choose Text to receive result data.

Start receive voice recognition result data.

Start receive real-time face result data.

Stop function block

- Stop voice recognition function.

Stop real-time face detection function.

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Result return function block

- Return data of Speech to text.
- Return data of text detection.
- Detect 1 to 4 people's faces position and their length and height.
- Detect 1 to 4 people's face emotion, such as anger, contempt, disgust, fear, happiness, neutral, sadness, and surprise.
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Recognize 1 to 4 people's age, gender, and smile.

Sample Projects

Real time Face detection

This project used MS Cognitive Service Face API to detect people’s face in real-time and draw a box around the face.
The result of the project, as the pen tool's color is a little bit light, it's better to set video transparency to 50%.

Human Age detection

This project detect human's age through the MS Cognitive Service Face API.

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The result of human age detection

In order to get the result like this sample project, you need set a very small character on the board. And make it "say" the age.

Emotion Detect

This project use Emotion API to detect human face expression.
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Emotion API detected people's happiness, sadness, surprise, anger, fear, contempt, disgust or neutral.
Text Recognition

This project uses Computer Vision API.

In order to get better result, it's better to use black-white context.

Voice Recognition

This project uses Bing speech API.

Full sentence will provide better result.