

Project 143

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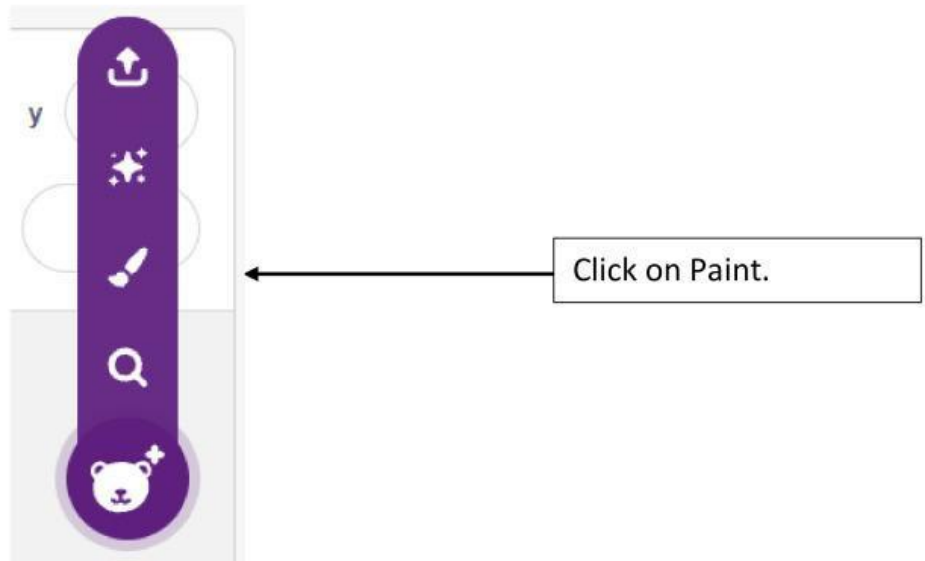


Coding School



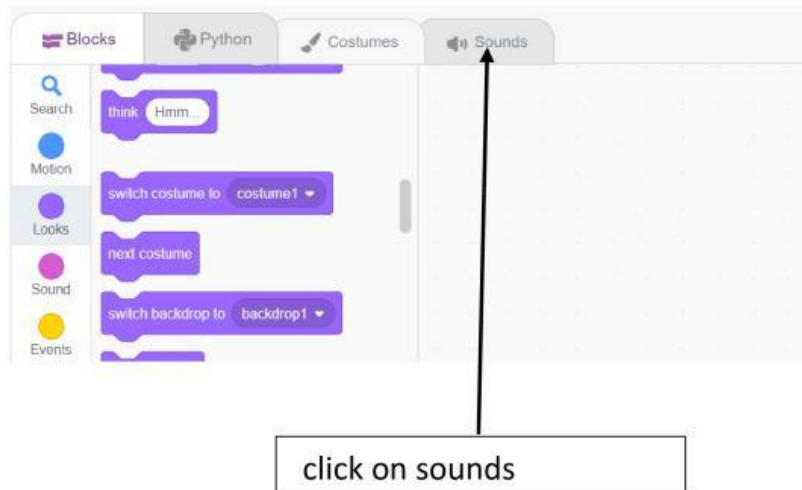
PictoBlox

- ❖ Let's make an app to recognize your facial expressions.
- ❖ First click on paint and add a sprite.

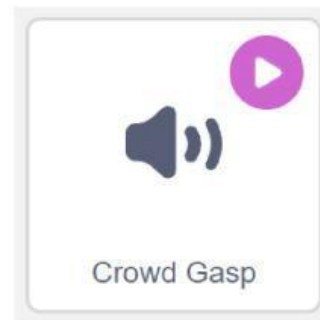
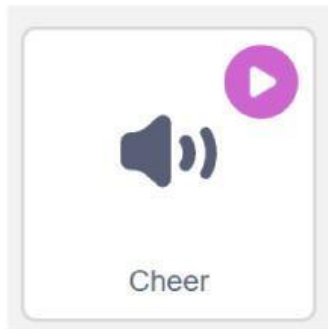


- ❖ Let's get the sound needed to prepare this one.

- First click on sounds.



- Click on Choose a sound and click on voice.
- Select Cheer and Crowd Gasp under Voice.

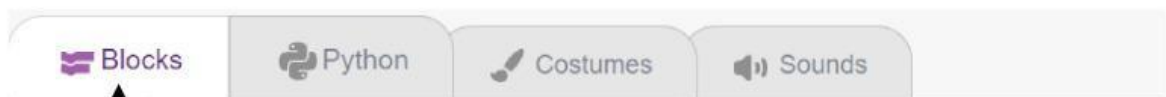


- Download the sad sound to your computer using the google drive link below.

https://drive.google.com/drive/folders/1VGZ8zzYh9lxjTpEot1abwU3mtC-wUpF?usp=drive_link



- Upload the sad sound using the sad sound that you have downloaded.
- ❖ Let's prepare the codes related to the app that will be created to recognize your facial expressions as follows.
- ❖ Let's click on Blocks and arrange them as follows.

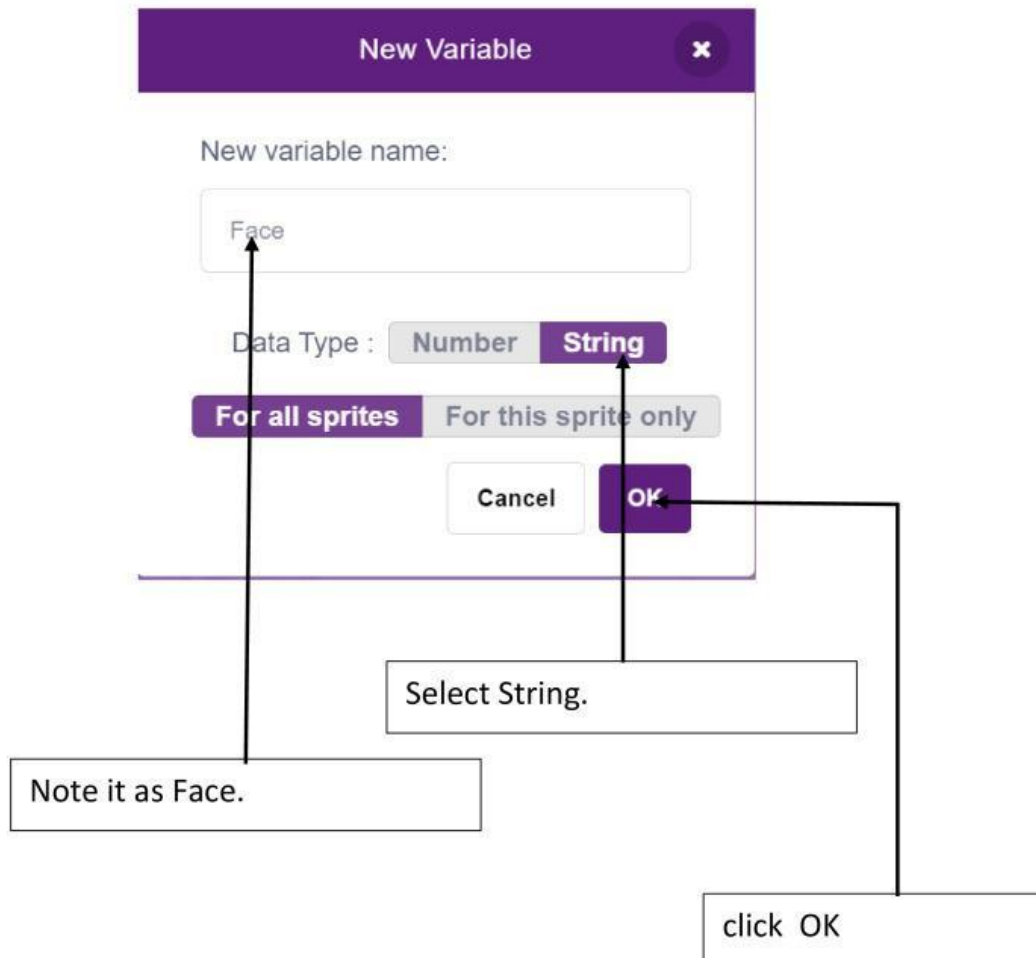


Click on Blocks

- ❖ Add a Face detection extension using Add extension.



- ❖ Prepare the code so that the following events occur when the green flag is clicked.
 - Continuously analyze your image with the camera.
 - Prepare the code to get the position of the face for X position and Y position.
 - Set the code to make your facial expression think for 2 seconds.
 - Create a variable as Face using Make a variable. Adjust that variable as follows.



- Assign facial expressions to the face variable.
- If the face variable is assigned as happy, prepare the code to play the cheer sound.
- If the face variable is assigned as surprised, prepare the code to play the crowd gasp sound.
- If the face variable is assigned as sad, prepare the code to play the sad sound.

- Below are the codes related to all the above events.

```
when clicked
  turn on video on stage with 0 % transparency
  forever
    analyse Image from camera
    go to x: get x position of face 1 y: get y position of face 1
    think get expression of face 1 for 2 seconds
    set Face to get expression of face 1
    if Face = happy then
      play sound Cheer until done
    if Face = surprised then
      play sound Crowd Gasp until done
    if Face = sad then
      play sound Sad until done
```

The image shows a Scratch script starting with a 'when clicked' event. It turns on a video on stage with 0% transparency. A 'forever' loop contains the following steps: 1. 'analyse Image from camera'. 2. 'go to x: get x position of face 1 y: get y position of face 1'. 3. 'think get expression of face 1 for 2 seconds'. 4. 'set Face to get expression of face 1'. 5. Three conditional 'if' blocks: 'if Face = happy then play sound Cheer until done', 'if Face = surprised then play sound Crowd Gasp until done', and 'if Face = sad then play sound Sad until done'. The loop ends with a refresh arrow.