**What is Teachable Machine?**

Teachable Machine is a free, easy-to-use tool by Google that lets you train a computer to recognize images, sounds, or poses — without writing any code!

You can use it to:

* Recognize **facial expressions** (like happy or sad)
* Detect sounds or voice commands
* Track body movements
* Build fun and creative projects with AI!

**😊 Step 1: Train Your Emotion Model**

1. Go to Teachable Machine [(<https://teachablemachine.withgoogle.com/>](https://teachablemachine.withgoogle.com/))
2. Click **“Get Started”** > Choose **“Image Project”** > **“Standard Image Model”**
3. Create two classes:
   * **Happy**
   * **Sad**
4. Use your webcam to record at least **30 images** for each expression.
5. Click **“Train Model”** and wait for it to finish.
6. Click **“Export Model”** > Choose **“TensorFlow.js”**
7. Click ‘Upload my model’
8. Copy the **model URL** (it should end with a /)

**Step 2: Use the Code**

1. Open the p5.js editor <https://editor.p5js.org/>
2. Click on the ‘Arrow’ button  
     
   A screenshot of a computer

   AI-generated content may be incorrect.
3. Select ‘Index.html’ and delete the code
4. Open the provided HTML file (studentCode.html)
5. Replace the code in index.html with studentCode.html
6. Replace this line in the code:

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AI-generated content may be incorrect.

with your own model URL from Teachable Machine.

1. Save the file and open it in a browser.
2. Allow webcam access.
3. Try your **happy** and **sad** faces — you should see the emoji change!

**Challenge: Add a Neutral Expression**

Want to go further?

1. Go back to Teachable Machine and add a third class called **Neutral**.
2. Record your neutral face and retrain the model.
3. Export the new model and update the model URL in your code.
4. In the code, find this part:

**// Map emotion labels to emojis**

**if (label === "Happy") emoji = "😄";  
 else if (label === "Sad") emoji = "😢";  
 else emoji = "🤖";**

1. Add a new line for your neutral expression:

else if (label === "Neutral") emoji = "😐";

1. Save and test it out!