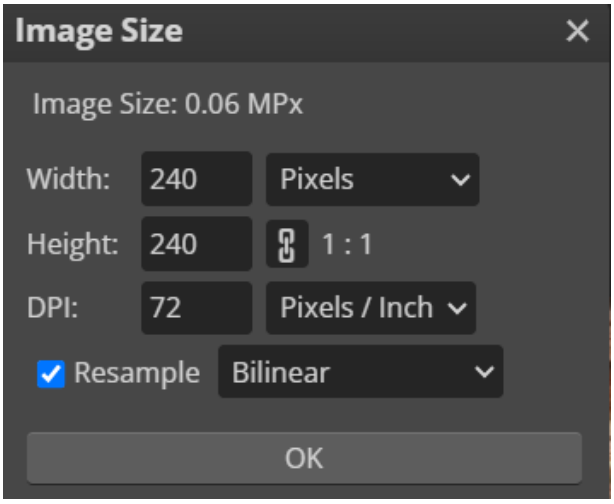
CodeX and JPG Images

You can use your own JPG images and display them on the screen. **Note:** Images loaded on a CodeX are only on that CodeX. You must use the CodeX the files are loaded on to include them in a program.

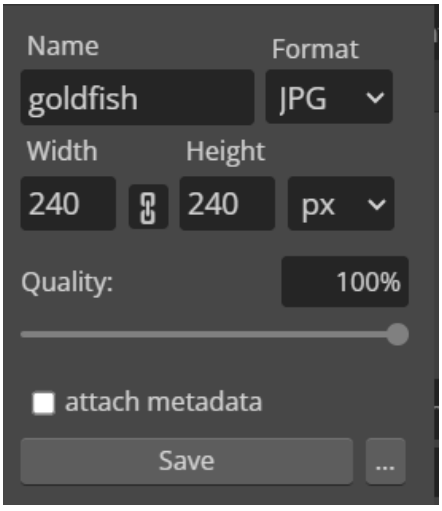
First, any JPG you want to use needs to be formatted for the CodeX. Follow these steps:

Part 1: Resize the image and change the compression

- First select an image (your own or one from the Internet)
- Then use the online photo editing software PhotoPea **(https://www.photopea.com/)**
    - This is a free online photo editing tool -- no account required and no download
    - Open your image.
    - Go to IMAGE ➔ IMAGE SIZE
    - Change the DPI to 72
    - Keep the Resample as Bilinear
    - Change the width and height to no larger than 240x240 pixels



- Go to FILE ➔ EXPORT AS and select JPG



Part 2: Upload JPG images to the CodeX

Before you can upload the files, your CodeX needs to be writable.

- Your CodeX needs to be plugged in to the computer
- Press and hold the BTN_A and BTN_L at the same time.
- While pressing the 2 buttons, press the RESET button on the back of the Codex. Just press it but don't keep holding it down.
- Keep holding the BTN_A and BTN_L. You should see the red LED lights under the screen turn on and off one at a time. After all four turn on and off in order, they will blink twice.
- Then release BTN_A and BTN_L. A CodeX file window will pop up on your computer screen. Your CodeX is ready for you to add your image to the CodeX.
- In the CodeX window, create a folder for the images: pics
- Drag your JPG images to the CodeX pics folder.

Now you need to make the CodeX read-only before it will run any code.

- Unplug the CodeX from the computer.
- Plug the CodeX back into the computer.
- When the window pops up, you can check that your images are in the pics folder.
- Close the pop-up window, and you are ready to code your program.

Part 3: Use your file in a program

- Use the Sandbox in CodeSpace.
- Start a new file in CodeSpace (Picture_Bot).
- Import the modules you will need (codex, random, time).
- Use the **`display.draw_jpg(filename)`** function to test each image file.
    - Make sure it displays before continuing the code.
    - If a JPG file doesn't display, check the file type, spelling, and specifications.
- Create a program similar to Answer_Bot to:
    - Use a list of JPG images.
    - Display a random image when BTN_A is pressed.