# Gradio application for detection of poor compliance ICP wave
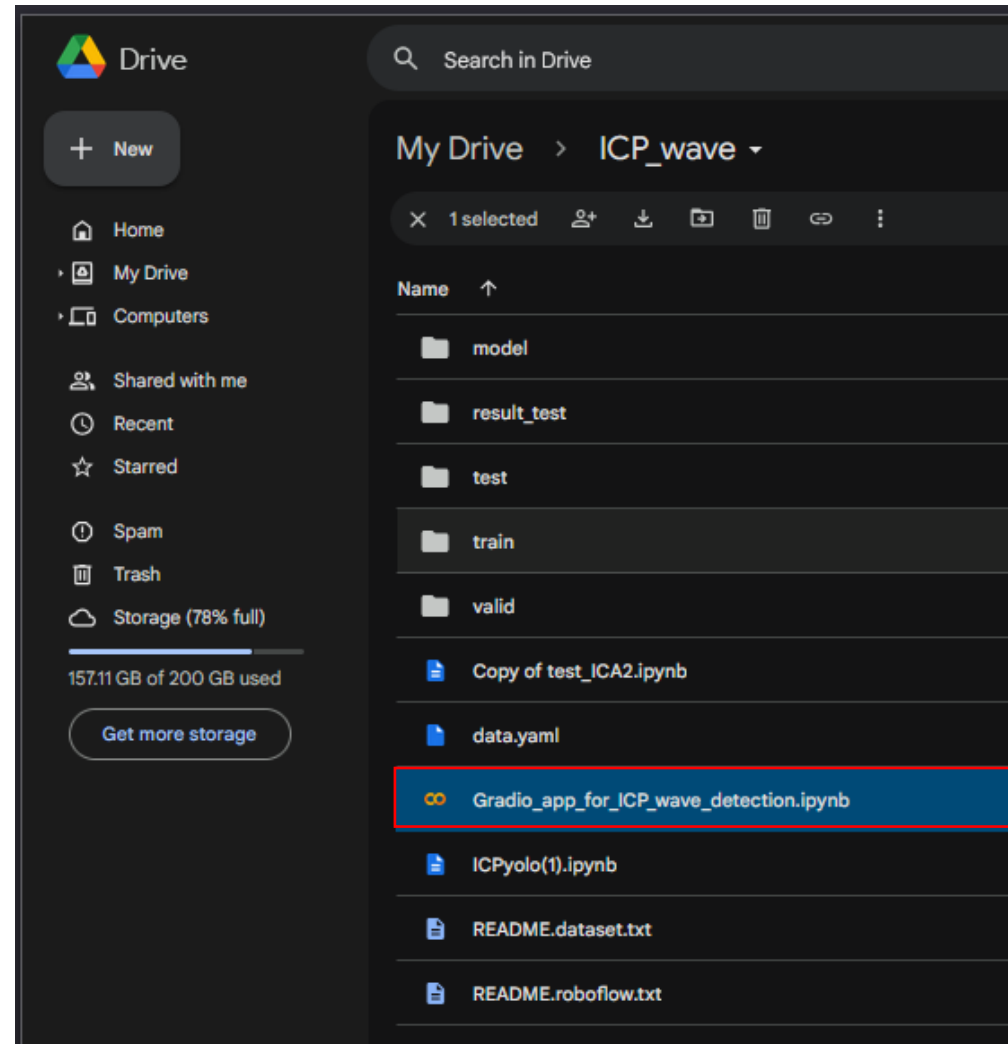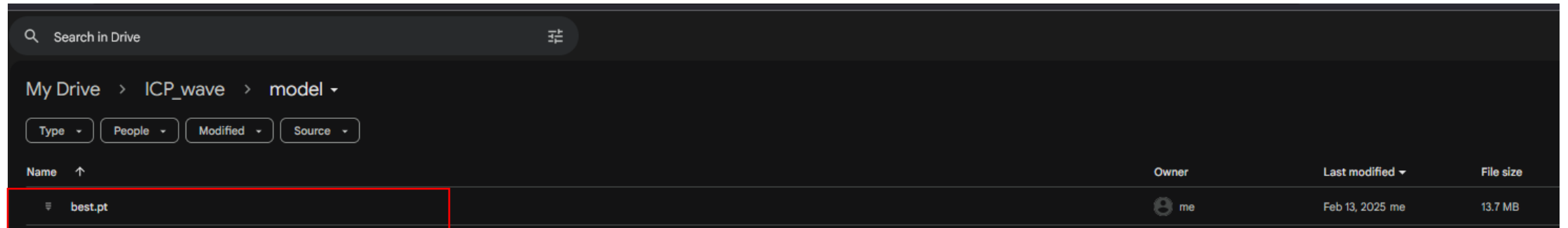
# Upload file.ipynb in your google drive

# Upload best.pt in your google drive
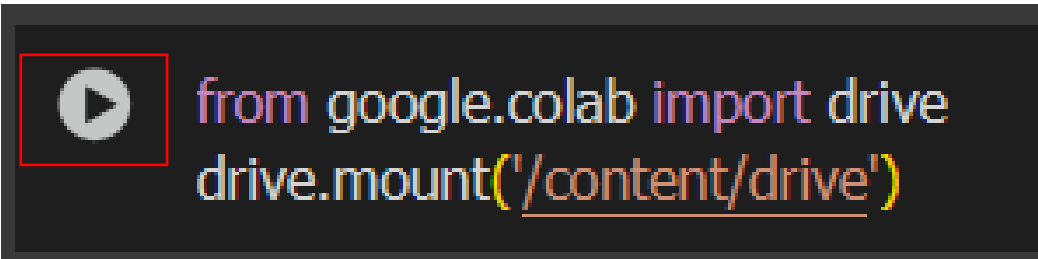
# Open file.ipynb and run 1$^{st}$ script to mount your drive

click 

Then, consent to the mounting of your drive
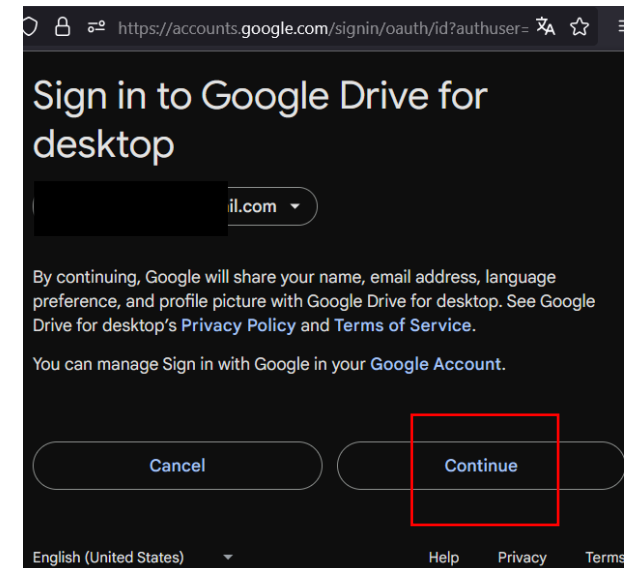
# run 2ⁿᵈ script to install gradio

# In 3rd script, modify to your path and then start script

```python
#YOLOv5 Inference with Gradio
import torch
import gradio as gr
from PIL import Image
import cv2
import numpy as np

# Load the trained YOLOv5 model
model = torch.hub.load('ultralytics/yolov5', 'custom', path='/content/drive/MyDrive/ICP_wave/model/best.pt')  # Replace with your model path

# Define a function for inference
def detect_objects(image):
    # Convert Gradio's image to a format suitable for YOLOv5
    input_image = Image.fromarray(image)

    # Run inference
    results = model(input_image)

    # Render the results on the original image
    results.render()  # Render adds boxes and labels to the image

    # Convert to numpy for displaying in Gradio
    output_image = results.ims[0]

    return output_image

# Set up the Gradio interface
iface = gr.Interface(
    fn=detect_objects,
    inputs=gr.Image(type="numpy"),  # Input as numpy array
    outputs="image",  # Output as an image with bounding boxes
    title="YOLOv5 Object Detection",
    description="Upload an image and the YOLOv5 model will detect objects."
)
```
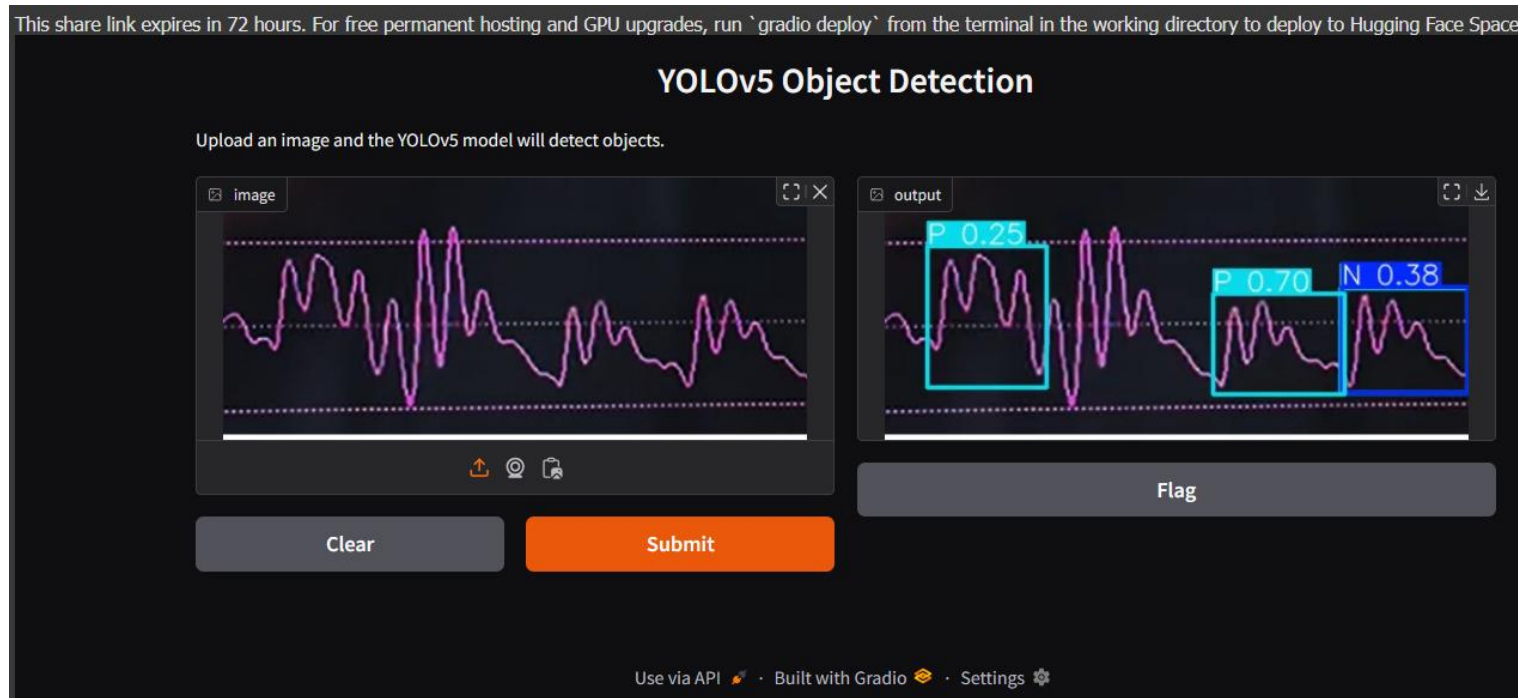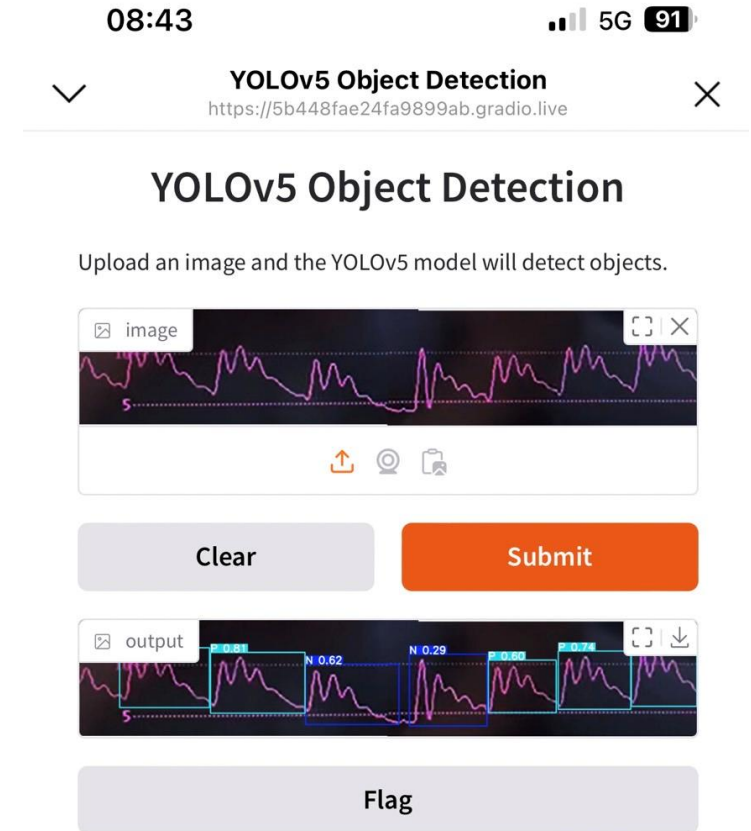
**edit to your path**

# Gradio application will be launched



On laptop



On mobile phone