**How This Code Works**

1. **Input Method Selection:**
   * A radio button lets the user choose between "Upload Image" and "Capture from Camera".
   * Depending on the selection, either an image uploader (st.file\_uploader) or a camera input (st.camera\_input) widget is displayed.
2. **Image Processing:**
   * The input image (whether uploaded or captured) is opened using Pillow and converted to a NumPy array.
   * Since OpenCV and YOLOv8 expect images in BGR format, the image is converted from RGB to BGR.
3. **YOLOv8 Inference:**
   * The YOLOv8 model is loaded using your custom weights file (bestweight.pt).
   * The model performs inference on the image, and the annotated image (with bounding boxes and labels) is generated using the .plot() method.
4. **Prediction Threshold:**
   * A threshold is set at 0.7.
   * For each detected object, the code checks if the confidence score is below the threshold.
   * If the score is below 0.7, it appends "Undefined" to the prediction list; otherwise, it appends the predicted class name along with its confidence score.
5. **Display Results:**
   * The annotated image is displayed alongside the list of predicted classes (or "Undefined" where applicable).