

# **SOFTWARE TASK 1**

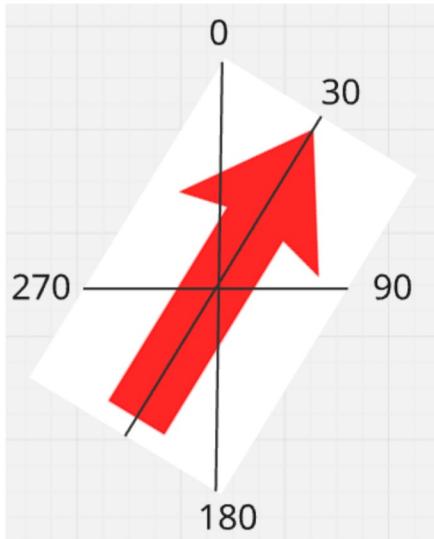
## **Goal**

Your task is to detect three different types or designs of red arrows, each printed on a white A4 sheet, in real time using a webcam.

The arrows can be of any size, regardless your code should be able to reliably detect and label each of the different types of arrow when presented in front of the webcam without minimal false detections (i.e. ghost bounding boxes,etc.) also should be able to distinctify the different types of arrows when two or more presented at the same time.

Place an appropriate green coloured bounding box around each detected arrow and detect and display the heading (direction) and the label (see below) of the arrow with respect to the webcam.

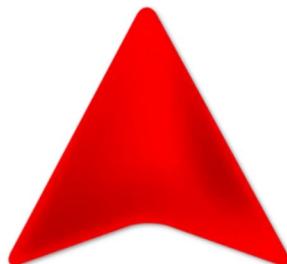
Use OpenCV and NumPy only; no deep learning tools or libraries



ARROW\_TYPE 1



ARROW\_TYPE 2



ARROW\_TYPE 3