Vision Detector plan:

Start by scanning X-axis for points. Then locate the vertical bars of points.

Bars have height and widths. Have a narrow and a long edge.

Also scan the y-axis for points.

Use both scans to determine where the bars are on the image.

When the bars have been detected, use this to determine which case is present.

Find the center point of the narrow ends. Create a line through the center of the   
the narrow edges.

Can determine the tilt by checking the relationship between the two lines coming from the narrow edges of the bars. Slope is done in radian.

Also determine which bar is the lower bar. The lower bar is the bar that is a large group of pixels, follow by no more pictures in the image.

Based on the position of the of the lower bar on the screen, interpolate pixels to the distance of the bar from the robot.









