Robotic Vision:
Closest Parts

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Background

To have a basic understanding of Sherlock UI and its implemented algorithms

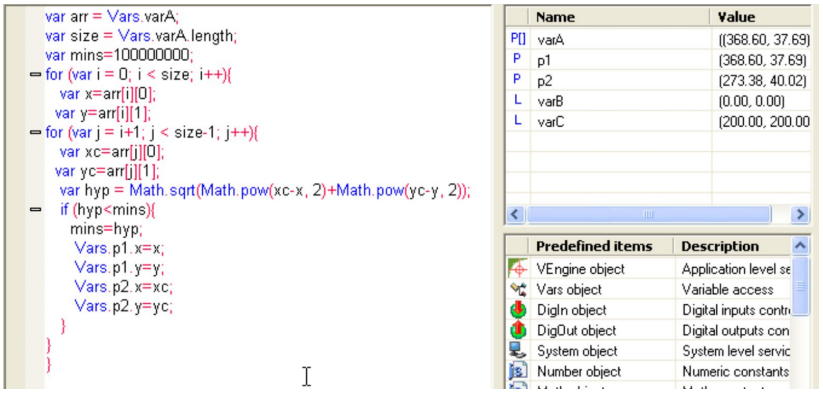
Objective:

Find the two closest elements in the image

Implementation

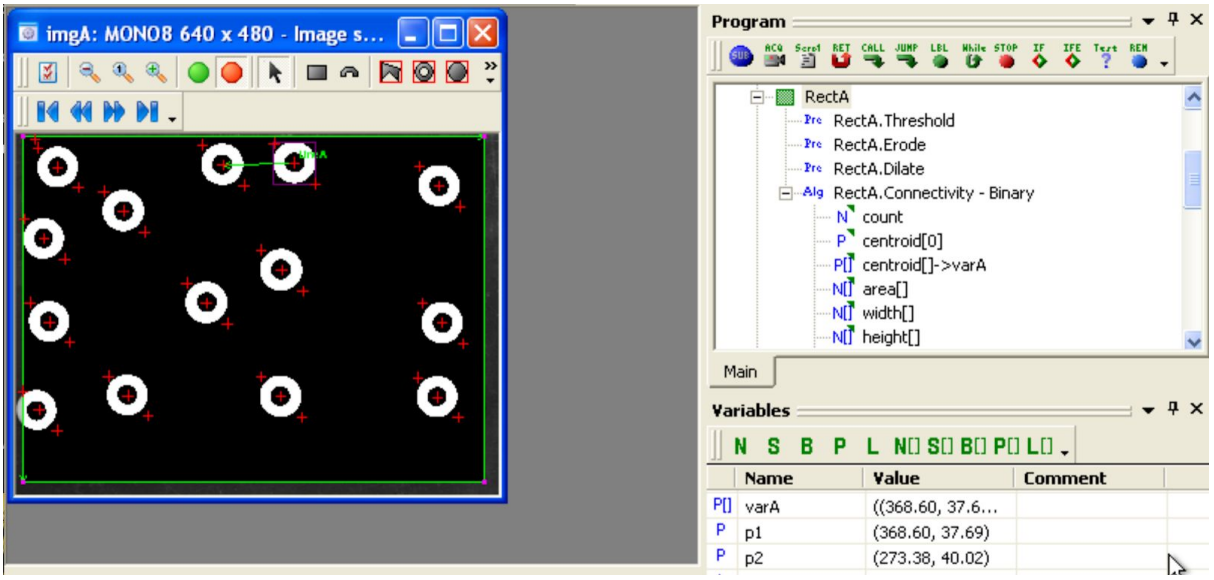
- Once we have opened the image set, we have to pre-processing it.
  - Set region of Interest
  - Use threshold to change the image to complete binary image
  - Dilate-Erode in order to delete any imperfection of the image
- Using the script:
  - Iterate over the centroids
  - Using Pythagoras Theorem, find the distance between the elements
  - Store the minimum distance and the points involved
- Draw a line to match an compare those two points

Results:



Script

Result:


imgA: MONO8 640 x 480 - Image s...
varA
Program
RectA
RectA.Threshold
RectA.Erode
RectA.Dilate
RectA.Connectivity - Binary
count
centroid[0]
centroid[]->varA
area[]
width[]
height[]
Main
Variables
Name
Value
Comment
varA
((368.60, 37.6...
p1
(368.60, 37.69)
p2
(273.38, 40.02)