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In [3]: import cv2
import matplotlib.pyplot as plt
import numpy as np
cap = cv2.VideoCapture(0)

# Call Back Function Rectangle :

def draw_rectangle(event,x,y,flags,param):
    global pt1,pt2,topLeft_clicked, botRight_clicked
    if event == cv2.EVENT_LBUTTONDOWN:
        # Rest the Rectangle :
        if topLeft_clicked == True & botRight_clicked == True:
            pt1 = (0,0)
            pt2 = (0,0)
            topLeft_clicked = False
            botRight_clicked = False

        if topLeft_clicked == False:
            pt1 = (x,y)
            topLeft_clicked = True

        elif botRight_clicked == False:
            pt2 = (x,y)
            botRight_clicked = True

    pass

# Global Variables :
pt1 = (0,0)
pt2 = (0,0)

topLeft_clicked = False
botRight_clicked = False

# Connect to the Call Back :

cap = cv2.VideoCapture(0)
cv2.namedWindow('Test')
cv2.setMouseCallback('Test',draw_rectangle)

while True:
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ret, frame = cap.read()

# DRAWING ON THE FRAME BASED OF THE GLOBAL VARIABLE :

if topLeft_clicked:
    cv2.circle(frame, center = pt1, radius = 5, color = (0,0,255), thickness = -1)

if topLeft_clicked and botRight_clicked:
    cv2.rectangle(frame, pt1, pt2, (0,0,255), 3)
cv2.imshow('frame', frame)

if cv2.waitKey(1) & 0xFF == ord('q'):
    break

cap.release()
cv2.destroyAllWindows()
```

In [ ]: