```
import cv2
import pandas as pd
img_path = r'color.jpg'
img = cv2.imread(img_path)
#declaring global variables
clicked = False
r = g = b = x_pos = y_pos = 0
\mbox{\tt \#reading} csv files with pandas and giving names to each column
index = ["color", "color_name","hex", "R", "G", "B"]
csv = pd.read_csv('colors.csv', names=index, header=None)
#function to calculate the minimum distance from all colors and get the most matching color
def get_color_name(R, G, B):
    minimum = 10000
    for i in range(len(csv)):
        d = abs(R - int(csv.loc[i, "R"])) + abs(G - int(csv.loc[i, "G"])) + abs(B - int(csv.loc[i, "B"]))
        if d <= minimum:</pre>
            minimum = d
            cname = csv.loc[i, "color_name"]
#function to get x and y coordinates of mouse on double click
def draw_function(event, x, y, flags, param):
    if event == cv2.EVENT_LBUTTONDBLCLK:
        global b, g, r, x_pos, y_pos, clicked
        clicked = True
        x_pos = x
        y_pos = y
        b, g, r = img[y, x]
        b = int(b)
        g = int(g)
        r = int(r)
cv2.namedWindow('image')
cv2.setMouseCallback('image', draw_function)
while True:
    cv2.imshow("image", img)
    if clicked:
        #cv2.rectangle(image, start point, endpoint, color, thickness= -1 fills entire rectangle)
        cv2.rectangle(img, (20, 20), (750, 60), (b, g, r), -1)
        #Creating text string to display color name and RGB values)
        text = get_color_name(r, g, b) + 'R=' + str(r) + 'G=' + str(g) + 'B=' + str(b)
        #cv2.putText(img, text, start, fony(0-7), fontScale, color, thickness, LineType)
        cv2.putText(img, text, (50, 50), 2, 0.8, (255, 255, 255), 2, cv2.LINE_AA)
        #For very light colours we will display text in black colour
        if r + g + b >= 600:
            cv2.putText(img, text,(50,50), 2, 0.8, (0, 0, 0), 2, cv2.LINE_AA)
        clicked = False
    #Break the loop when user hits 'esc' key
    if cv2.waitKey(20) & 0xFF == 27:
        break
```

cv2.destroyAllWindows()

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