**LAB ACTIVITY**

**PENGOLAHAN CITRA DIGITAL**

**Pertemuan 6 – Operasi Dasar Pengolahan Citra**

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**Alat dan Bahan:**

1. Text Editor
2. Python
3. Library Python numpy, opencv
4. Google Colab (Opsional)
5. **Operasi Gambar Menggunakan Python**

Source Code:

**import cv2 as cv**

**img1 = cv.imread("Gambar/Pertemuan 6/Manchester\_United\_FC\_Logo.png")**

**img2 = cv.imread("Gambar/Pertemuan 6/Real\_Madrid\_CF\_Logo.png")**

**circle = cv.imread("Gambar/Pertemuan 6/circle.png")**

**star = cv.imread("Gambar/Pertemuan 6/star.png")**

**ruins = cv.imread("Gambar/Pertemuan 6/ruins.png")**

**stars = cv.imread("Gambar/Pertemuan 6/stars.png")**

***# add\_image =  cv.add(img1, img2)***

***# blend\_image = cv.addWeighted(img1, .5, img2, 1, 0)***

***# substracted = cv.subtract(star, circle)***

**multiply = cv.multiply(ruins, stars)**

**cv.imshow("Menambahkan Gambar", multiply)**

**cv.waitKey(0)**

**cv.destroyAllWindows()**

Hasil:

A screen shot of a computer

Description automatically generated

1. **Penyesuaian Dimensi Gambar Menggunakan Python**

Source Code:

**A screenshot of a computer program

Description automatically generated**

**A screen shot of a computer program

Description automatically generated**

Hasil:

A computer screen with a logo

Description automatically generated

1. **Mengubah Dimensi dan Disimpan Menggunakan Python**

Source Code:

**from PIL import Image**

**def resize\_image(*file\_path*, *target\_size*):**

**with Image.open(*file\_path*) as img:**

**img\_resized = img.resize(*target\_size*)**

**img\_resized.save(*file\_path*)**

**print(f"Gambar berhasil diubah ukurannya menjadi {*target\_size*} dan disimpan kembali di {*file\_path*}")**

**file\_path = 'Gambar\Pertemuan 6\Manchester\_United\_FC\_Logo.png'**

**target\_size = (800, 816)**

**resize\_image(file\_path, target\_size)**

Hasil:

A computer screen shot of a logo

Description automatically generated