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#Team 65

from Cimpl import \*

from test\_grayscale import check\_equal

PICTURE = load\_image('p2-original.jpg')

def green\_channel(image: object) -> object:

"""Returns image with a green filter applied by changing every red and

blue RGB value to 0 in each pixel

"""

GREEN\_PIC = copy(image)

for pixel in GREEN\_PIC:

x, y, (r, g, b) = pixel

green\_color = create\_color(0, g, 0)

set\_color(GREEN\_PIC, x, y, green\_color)

return GREEN\_PIC

def test\_green\_channel() -> None:

'''Returns 'PASSED' if pixels from green\_channel

change the original pixels to the expected pixels

'''

original = create\_image(4, 1)

set\_color(original, 0, 0, create\_color(0, 0, 0))

set\_color(original, 1, 0, create\_color(0, 0, 1))

set\_color(original, 2, 0, create\_color(127, 127, 127))

set\_color(original, 3, 0, create\_color(125, 140, 224))

expected = create\_image(4, 1)

set\_color(expected, 0, 0, create\_color(0, 0, 0))

set\_color(expected, 1, 0, create\_color(0, 0, 0))

set\_color(expected, 2, 0, create\_color(0, 127, 0))

set\_color(expected, 3, 0, create\_color(0, 140, 0))

green\_image = green\_channel(original)

for x, y, col in green\_image:

check\_equal('Checking pixel @(' + str(x) + ', ' + str(y) + ')',

col, get\_color(expected, x, y))

green\_result = green\_channel(load\_image('p2-original.jpg'))

show(green\_result)

test\_green\_channel()