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Pygame is a python library that can be used specifically to design and build games. Pygame supports only 2d games that are built using different sprites. Pygame is not particularly best for designing games as it is very complex to use and doesn't have a proper GUI like unity but it definitely builds logic for further complex projects.

Installation:

Before initializing pygame library we need to install it. To install it type the below command in the terminal.

```
pip install pygame
```

Color Breezing effect:

Pygame contains color coding in the format of a tuple that contains three values, these values indicate the intensities of the three core colors i.e. red, blue, green. The values of the individual colors can be changed in order to make another unique color. As the values of the tuple are mutable at the run time too, it gives us the flexibility to add some color effects to make our game/application more unique and beautiful.

one of the color effects is a breezing effect, a breezing effect is an effect in which the color changes from one shade to another smoothly without sudden or abrupt change. These effects can be seen in the RGB keyboard and mouse.

Example:

Python3

```
import pygame
import random
import sys
```

```
# initializing the constructor
pygame.init()

# setting up variable screen
screen = pygame.display.set_mode((720,720))

# three arguments of the color tuple
c1 = random.randint(0,255)
c2 = random.randint(0,255)
c3 = random.randint(0,255)

# setting up variable clock
clock = pygame.time.Clock()

while True:
    for ev in pygame.event.get():
        if ev.type == pygame.QUIT:
            pygame.quit()

    # increases the shade of
    # the current color
    if 0 < c1 < 255:
        c1 += 1

    # if value of c1 exceeds
    # 255 it resets it to 0
    elif c1 >= 255:
        c1 -= 255

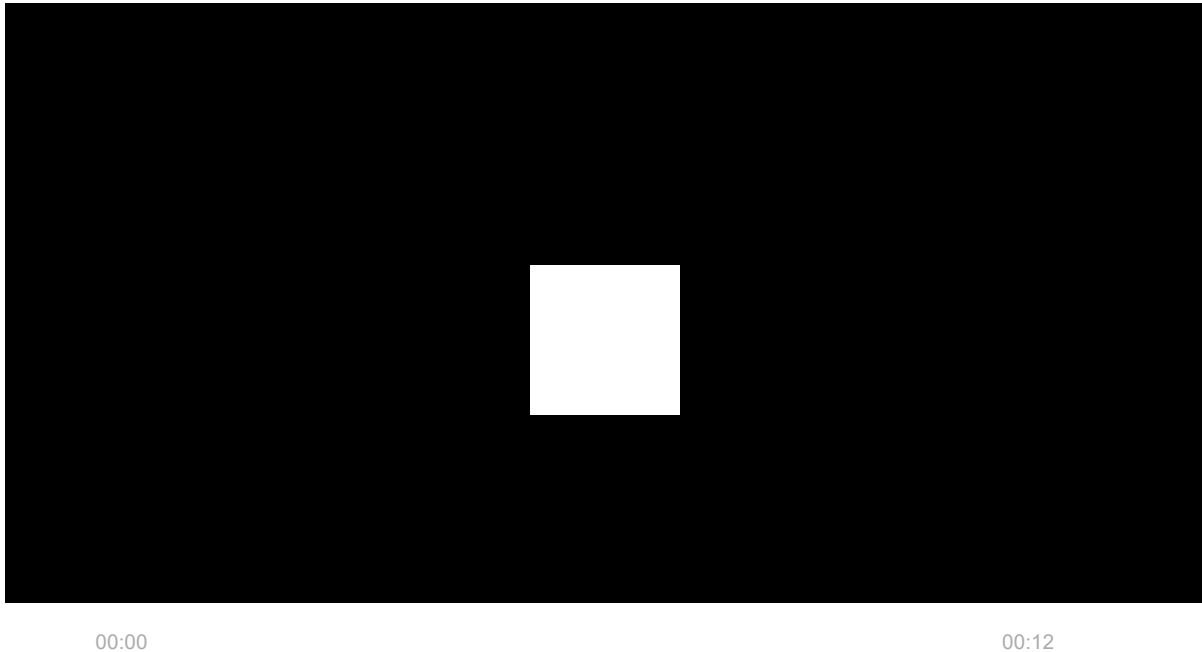
    # if value of c1 precedes 0
    # it is incremented by 3
    elif c1 <= 0:
        c1 += 3

    # sets game fps to 60
    clock.tick(60)

    # sets bg color to tuple
    # (c1,c2,c3)
    screen.fill((c1,c2,c3))

    # updates the frames of
    # the game
    pygame.display.update()
```

Output:



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