How to create an empty PyGame window?

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Pygame window is a simple window like any other window, in which we display our game screen. It is the first task we do so that we can display our output onto something. Our main goal here is to create a window and keep it running unless the user wants to quit. To perform these tasks first we need to install pygame package and import some pre-defined functions inside it.

Installation

To install this module type the below command in the terminal.

```
pip install pygame
```

Stepwise Implementation:

Step 1: First we import and initialize all imported modules. We use import pygame to import all modules and .init() function to initialize those modules.

```
import pygame
pygame.init()
```

Step 2: Initialize a window to display. We use .set_mode() function to create a window. We pass the width and height of our window as parameters to set_mode() function.

```
pygame.display.set_mode((width_of_window,height_of_window))
```

Step 3: Keep that window running until the user presses the exit button. We use a variable that is true unless the user presses the quit button. To keep the game running we use a while loop and check our variable if it is true or not.

```
running  = True
```

```
    while running:

        for event in pygame.event.get():
            if event.type == pygame.QUIT:
                running = False
```

Complete Code:

Python3

```python
# import pygame package
import pygame

# initializing imported module
pygame.init()

# displaying a window of height
# 500 and width 400
pygame.display.set_mode((400, 500))

# creating a bool value which checks
# if game is running
running = True

# keep game running till running is true
while running:

    # Check for event if user has pushed
    # any event in queue
    for event in pygame.event.get():

        # if event is of type quit then
        # set running bool to false
        if event.type == pygame.QUIT:
            running = False
```
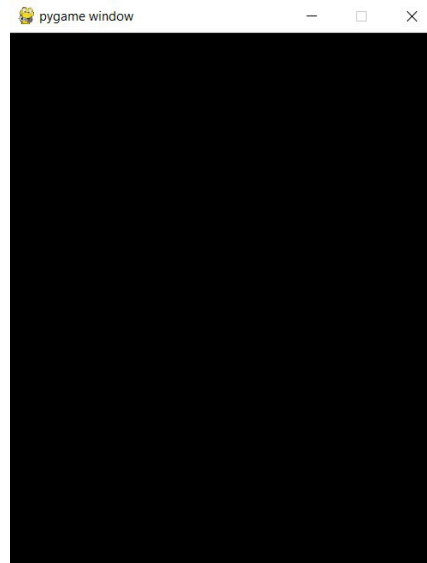
Output:

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