

```
!pip install pygame
```

```
Requirement already satisfied: pygame in c:\users\jaswa\anaconda3\envs\yolov4-
```

```
import pygame
```

```
# Initialize Pygame
```

```
pygame.init()
```

```
# Create a window
```

```
screen = pygame.display.set_mode((800, 600))
```

```
pygame.display.set_caption("VR Experience")
```

```
# Main loop
```

```
running = True
```

```
while running:
```

```
    for event in pygame.event.get():
```

```
        if event.type == pygame.QUIT:
```

```
            running = False
```

```
# Quit Pygame
```

```
pygame.quit()
```

```
import cv2
```

```
from cv2 import aruco
```

```
# Load the predefined dictionary
```

```
dictionary = aruco.getPredefinedDictionary(aruco.DICT_6X6_250)
```

```
# Generate an augmented reality marker
```

```
marker = aruco.drawMarker(dictionary, 23, 200)
```

```
# Display the marker
```

```
cv2.imshow('Marker', marker)
```

```
cv2.waitKey(0)
```

```
cv2.destroyAllWindows()
```

```
import cv2
```

```
import numpy as np
```

```
import pygame
```

```
from pygame.locals import *
```

```
def main():
```

```
    cap = cv2.VideoCapture(1)
```

```
    pygame.init()
```

```
    screen = pygame.display.set_mode((640, 480), pygame.DOUBLEBUF | pygame.HWSURF1
```

```
    pygame.display.set_caption("AR with ArUco and Pygame")
```

```
    while True:
```

```
        ret, frame = cap.read()
```

```
        if not ret:
```

```

        break

    gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)
    aruco_dict = cv2.aruco.Dictionary_get(cv2.aruco.DICT_6X6_250)
    parameters = cv2.aruco.DetectorParameters_create()
    corners, ids, _ = cv2.aruco.detectMarkers(gray, aruco_dict, parameters=pa

    if ids is not None:
        cv2.aruco.drawDetectedMarkers(frame, corners, ids)

    for event in pygame.event.get():
        if event.type == QUIT:
            pygame.quit()
            return

    frame = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB)
    frame = np.rot90(frame)
    frame = pygame.surfarray.make_surface(frame)
    screen.blit(frame, (0, 0))
    pygame.display.flip()

    cap.release()
    cv2.destroyAllWindows()

if __name__ == "__main__":
    main()

import pygame
from pygame.locals import *

def main():
    pygame.init()
    screen = pygame.display.set_mode((800, 600), pygame.DOUBLEBUF | pygame.HWSURFAC
    pygame.display.set_caption("Simple VR with Pygame")

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

        screen.fill((0, 0, 0))
        pygame.draw.circle(screen, (0, 0, 0), (200, 300), 50)
        pygame.display.flip()

    pygame.quit()

if __name__ == "__main__":
    main()

```

