Today we will update our Arcanoid where all your game pausing will save some data.

add to file

```
with open('data.txt', 'a') as file:
```

Also I used this method to save the time when data was collected

```
from datetime import datetime
```

```
date = datetime.now()
d = date.strftime("%Y-%m-%d %H:%M:%S")
```

```
def save_data():
        date = datetime.now()
        d = date.strftime("%Y-%m-%d %H:%M:%S")
        left = len(block_list) - 4

        with open('data.txt', 'a') as file:
            file.write(f"Time: {d} \n")
            file.write(f"Score: {game_score}\n")
            file.write(f"Blocks left: {left}\n")
            file.write(f"\n")
```

```
pause_to_save = False
```

Creating a flag to know if we have saved the data due to not adding information all the time when we in pause

```
while run:
    for event in pygame.event.get():
        if event.type == pygame.QUIT:
            run = False
        if event.type == pygame.KEYDOWN:
            if event.key == pygame.K_SPACE:
                game_paused = not game_paused
                if game_paused and not pause_to_save:
                    save_data()
                    pause_to_save = True
```

```
if not game_paused:
    update()
    pause_to_save = False
```

So, now we can save the data more then once

I also created a function which will show at what time a get finished the game and with which score

```
def game_over():
    date = datetime.now()
    d = date.strftime("%Y-%m-%d %H:%M:%S")
    with open('data.txt', 'a') as file:
            file.write(f"game finished at {d} \n")
            file.write(f"Game Score: {game_score}\n")
            file.write(f"\n")
```

```
if quit_button.draw(screen):
    game_over()
    run = False
```

```
if ball.bottom > H:
    screen.fill((0, 0, 0),
    screen.blit(losetext, losetextRect)
    pygame.display.update()
    time.sleep(3)
    game_over()
    pygame.quit()
    exit()
```

```
while run:
    for event in pygame.event.get():
        if event.type == pygame.QUIT:
            game_over()
            run = False
```

Now, let’s clean the file every time we start a new game

```
def new_game():
    date = datetime.now()
    d = date.strftime("%Y-%m-%d %H:%M:%S")
    with open('data.txt', 'w') as file:
            file.write(f"Game started: {d} \n")
            file.write(f"\n")
```

clean the file and write

```
new_game_started = False
```

Creating a flag to know if we have already started the game

```
if not game_paused and not new_game_started:
        new_game()
        new_game_started = True
```

And use the function in the main loop

Thank you for your attention!