



T1A3 - Terminal Application

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Overview of My Terminal Application

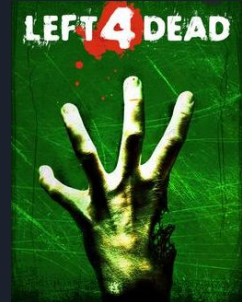
```
Please select your character, 'male' or 'female'?  
Please write down your character's name: 
```

```
Do you want to go the next level? 'yes' or 'no' 
```

```
Do you want to start a new game? 'yes' or 'no' 
```

```
congrat, you win and you earn 1 points.  
Please choose (1-5) to get your reward box. 
```

- Idea from Left 4 Dead (L4D)
 - Bosses name from L4D
 - In-text Turn-Based Zombie Survival Game
- Choose Character (Gender + Name)
- If Won the game (Yes - continue / No - exit)
- If Lose the game (Yes - restart / No - exit)
- Choose Item (1-5)



Main.py - Execute Code

```
import Choose
import battle
import zombie

def main():
    # define all the boss
    lv1_boss = zombie.Character('Boomer', health=200, attack=6)
    lv2_boss = zombie.Character('Hunter', health=150, attack=20)
    lv3_boss = zombie.Character('Witch', health=250, attack=25)
    lv4_boss = zombie.Character('Tank', health=350, attack=30)

    # execute the character chose, save
    user = Choose.choose_character()

    if user.score >= 0:
        battle.game(lv1_boss, user)

    if user.score >= 1:
        battle.game(lv2_boss, user)

    if user.score >= 2:
        battle.game(lv3_boss, user)

    if user.score >= 3:
        battle.game(lv4_boss, user)

if __name__ == '__main__':
    main()
```

- Import(Choose.py, Battle.py, Zombie.py)
- Very Dry
- Define each bosses (Zombie.py)
 - Name, Health, Attack
- Getting the data from (Choose.py)
 - Data of the user chose
- If statement (for battle with each boss)
 - Score will +1 when won one boss
- If `__name__ == '__main__':`

main()
- Making Sure all the import can execute

Class File - Zombie.py

```
class Character:
    def __init__(self, name, health=100, attack=10, score=0, max_health=100, max_attack=10):
        self.name = name
        self.health = health
        self.attack = attack
        self.score = score
        self.max_health = max_health
        self.max_attack = max_attack
```

- Class the Character
 - Most Important
- Define what traits the Character have
 - Health
 - Attack
 - Score
 - Max_health
 - Max_attack

Choose Character - Choose.py

```
1 import zombie
2 from great_text import great_text
3
```

```
4 Please select your character, 'male' or 'female'? male
5
6 Please write down your character's name: Raymond
7
8 Hi, Raymond, your health is 130 and attack is 10.
```

```
9
10 ### ### #####          ## ##### ###
11
12 ## ## ## ## ## ## ## ## # ##
13
14 ## ## ## ## ## ## ## ## ##
15
16 ##### ## ## ## ## ## ## ##
17
18 ## ## #####          ## ## ## ##
19
20 ## ## ##          ## ## ## ## ## #
21
22 ### ## ##          ## ##### ##### ###
```

```
23
24
25 ##### ## ## #####          ## ##
26
27 ## ## ## ## ## ## ## ## ## # ##
28
29 ## ## ##### ## ## ## ## ## ##
30
31 ## ## ##### ## ## ## ## ## ##
32
33 ## ## ## # ## ## ## ## ## ## ##
34
35 ## ## ## ## ## ## ## ## ## ## #
36
37 ##### ## ## #####          ## ##### ##
```

- Import (Zombie, 3rd party mod - great_text)
- Input (Gender - Male / Female)
- Input (Name - up to Users)
- Output (Sentence + Character's traits)
- Output (3rd party module, Character's traits)
- Loop
 - Prevent Invalid Input

Choose Item - Item.py

```
import zombie
def item(user: zombie.Character):
    while True:
        number = input("Please choose (1-5) to get your reward box. ")
        if not number.isnumeric():
            print("Please type the integer (1-5). ")
        else:
            number = int(number)
            if number == 1:
                number = user.max_attack
                user.max_attack += 15
                user.attack = user.max_attack
                print(f"Congrat, you picked a shotgun and your total dmg is {user.attack} now. ")
                break
            if number == 2:
                number = user.max_health
                user.max_health += 10
                user.health = user.max_health
                print(f"Congrat, you found a helmet and your gain your health to {user.health} now. ")
                break
            if number == 3:
                print("Sorry, you got an empty box, inventories have been taken by someone. ")
                break
            if number == 4:
                number = user.max_attack
                user.max_attack += 20
                user.attack = user.max_attack
                print(f"Congrat, you picked a AK-47 and your total dmg is {user.attack} now. ")
                break
            if number == 5:
                number = user.max_health
                user.max_health += 20
                user.health = user.max_health
                print(f"Congrat, you found bullet-proof vest and you gain your health to {user.health} now. ")
                break
        else:
            print("Please type the correct number (1-5). ")
            continue
```

- Import (Zombie.py)
 - For increase the traits of Character
- Input (Integer 1-5)
- Each number = different items
 - For increase the traits
 - Health / Attack
- Data < Increase the traits after chose
- Output (New traits of the character)
- Loop
 - Prevent invalid input
 - String / Out of Range

Game - Battle.py

```
def game(boss: zombie.Character, user: zombie.Character):
    print(f"The boss name is {boss.name} who has {boss.health} hp and {boss.attack} dmg, GOOD LUCK and LET's FIGHT!!! ")

    while True:
        if user.health > 0 and boss.health > 0:
            user.health -= random.randint(0, boss.attack)
            print(f'You got hit and only have {user.health} hp left. ')
            boss.health -= random.randint(5, user.attack)
            print(f'You successfully hit the Boss and only {boss.health} hp left. ')
            continue

        elif user.health <= 0:
            end_game()

        elif user.score >= 3:
            final_game()

        elif boss.health <= 0:
            win_game(user)
            break
```

- Import (zombie, random)
- No Input Needed
- Output the data of battle details
 - How many hp left of the character
 - How many hp left of the boss
- Loop
 - Making sure the battle can execute to other features

Won Game - Battle.py

```
def win_game(user: zombie.Character):
    great_text("YOU WON", "cyan", "chunky")
    print(f"Congrat, you win and you earn {user.score+1} points. ")
    item.item(user)
    user.max_health += 10
    user.max_attack += 8
    user.attack = user.max_attack
    user.health = user.max_health
    print(f'And now you are leveled up, your health is {user.health} and your attack is {user.attack} ')
    great_text(f"HP:{user.health}    DMG: {user.attack}", "magenta", "letterw3")
    while True:
        user_input= input("Do you want to go the next level? 'yes' or 'no' ")
        if(user_input == "yes"):
            user.score += 1
            break
        elif (user_input == "no"):
            print("Thanks for playing, see you next time :)")
            great_text("BYEBYE", "yellow", "smslant")
            exit()
        else:
            print("Please type the correct answer, 'yes' or 'no' ? ")
            continue
```

- Import (Zombie, Item, 3rd party mod - great_text)
- Output(YOU WON < 3rd party text)
- Output(Score) < (For define which boss is next)
- Item (another feature < Reward for character)
- Data (Increase the traits)
- Loop
 - Input (Yes - next level / No - exit)
 - Output(Sentence + 3rd party text)
 - Prevent any invalid input



Lose Game - Battle.py

```
def end_game():
    great_text("Game Over", "red", "colossal")

    print("Your health reach 0, Game Over!!! ")
    while True:
        user_input = input("Do you want to start a new game? 'yes' or 'no' ")
        if (user_input == "yes"):
            main.main()
        elif (user_input == "no"):
            print("Thanks for playing, see you next time :)")
            great_text("BYEBYE", "yellow", "smlant")
            exit()
        else:
            print("Please type the correct answer, 'yes' or 'no' ? ")
            continue
```

```
.d8888b.      .d88888b.
d88P  Y88b    d88P"  "Y88b
888   888     888   888
888   88888b. 88888b.d88b. .d88b. 888   888888 888 .d88b. 888d888
888 888888  "88b888 "888 "88bd8P Y8b 888   888888 888d8P Y8b888P"
888 888.d888888888 888 88888888888 888   888Y88 88P888888888888
Y88b d88P888 888888 888 888Y8b. Y88b. .d88P Y8bd8P Y8b. 888
"Y8888P88"Y888888888 888 888 "Y8888 "Y88888P" Y88P "Y8888 888
```

- Import (Main.py , 3rd party mod - great_text)
- Output(GameOver < 3rd party text)
- Loop
 - Input (Yes - restart / No - exit)
 - NO: Output(Sentence + 3rd party text)
 - YES: main.py (restart the game)
 - Prevent any invalid input



Final Game - Battle.py

```
elif user.score >= 3:  
    final_game()  
elif boss.health < 0:
```

```
def final_game():  
    great_text("WOOHOO", "red", "chunky")  
    print("Congrat, you won the final boss and saved the world. ")  
    print("Thanks for playing and hopefully you are having fun :)")  
    great_text("BYEBYE", "yellow", "smslant")  
    exit()
```

- Import (3rd party module - Great_text)
- Based on the game()
 - Score >=3 (Final Boss)
 - No need to repeat the loop
- Output (Great_text and sentences)
- Exit() < end program

```
| | | | | |  
| | | | | |  
| | | | | |  
| | | | | |
```

Congrat, you won the final boss and saved the world.
Thanks for playing and hopefully you are having fun :)

```
/ _ ) \ / _ ) \ / _  
/ _ \ / _ \ / _ \ / _  
/ _ \ / _ \ / _ \ / _
```



Challenges

- Main.py (def the bosses)
 - Stucked in the first boss (At the beginning)
- Turn-based battle > game()
 - Link with other features (error to show the character/boss)
 - Putting more function inside
- Win_game feature
 - Reward > level up/ earn items etc.



Important Part of My Code

```
def game(boss: zombie.Character, user: zombie.Character):  
    print(f"the boss name is {boss.name} who has {boss.health} hp and {boss.attack} dmg, GOOD LUCK and LET's FIGHT!!! ")  
    while True:  
        if user.health > 0 and boss.health > 0:  
            user.health -= random.randint(0, boss.attack)  
            print(f'You got hit and only have {user.health} hp left. ')  
            boss.health -= random.randint(5, user.attack)  
            print(f'You successfully hit the Boss and only {boss.health} hp left. ')  
            continue  
        elif user.health <= 0:  
            end_game()  
            break  
        elif boss.health <= 0:  
            win_game(user)  
            break
```

Important Part of My Code

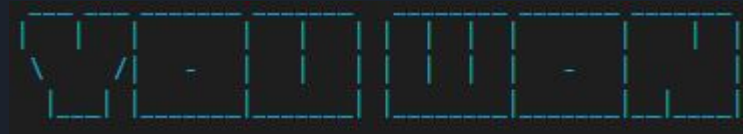
```
def win_game(user: zombie.Character):
    great_text("YOU WON","cyan","chunky")
    print(f"Congrat, you win and you earn {user.score+1} points. ")
    item.item(user)
    user.max_health += 10
    user.max_attack += 8
    user.attack = user.max_attack
    user.health = user.max_health
    print(f'And you now are level up, your health is {user.health} and your attack is {user.attack} ')
    great_text(f"HP:{user.health}      DMG: {user.attack}", "magenta", "letterw3")
    while True:
        user_input= input("Do you want to go the next level? 'yes' or 'no' ")
        if(user_input == "yes"):
            user.score += 1
            break
        elif (user_input == "no"):
            print("Thanks for playing, see you next time :)")
            great_text("BYEBYE","yellow","smslant")
            exit()
        else:
            print("Please type the correct answer, 'yes' or 'no' ? ")
            continue
```

FAV: 3rd Party Modules - Great_text

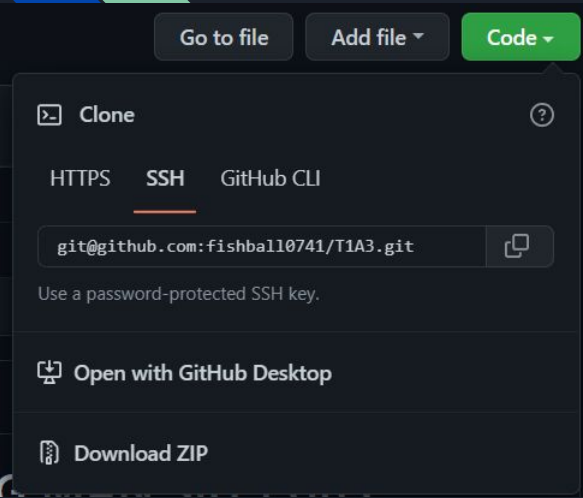
```
### ## #####          ##   ##   ##  
##  ## ##  ##  ##  ##  #####  #  ##  
##  ## ##  ##  ##  ##  ## ##  ##  ##  
##### ##  ##  ##  ##  ##  ##  ##  
##  ## #####          ## ##### ##  ##  
##  ## ##          ##  ##  ##  ##  #  
### ## ##          ## #####  ##  ##  
  
##### ##  ##  #####          ##  #####  
##  ##  ##  ##  ##  ##  ##  ##  ##  #  
##  ##  #####  ##          ##  ##  ##  #  
##  ##  #####  ##  ##          ##  #####  
##  ##  #  ##  ##  ##          ##  #  #####  
##  ##  ##  ##  ##  ##  ##          ##  ##  #  ##  
#####  ##  ##  #####  ##  #####  #####
```



```
.d8888b.  
d88P  Y88b  
888   888  
888      88888b. 88888b.d88b. .d88b.  
888 88888 "88b888 "888 "88bd8P Y8b  
888 888.d88888888 888 88888888888  
Y88b d88P888 888888 888 888Y8b.  
"Y8888P88"Y888888888 888 888 "Y8888  
  
.d88888b.  
d88P" "Y88b  
888   888  
888   888888 888 .d88b. 888d888  
888   888888 888d8P Y8b888P"  
888   888Y88 88P8888888888888  
Y88b. .d88P Y8bd8P Y8b. 888  
"Y88888P" Y88P "Y8888 888
```



How to Install and Execute



```
JR:~$ git clone git@github.com:fishball0741/T1A3.git
```

```
$ cd T1A3
```

```
$ cd src
```

```
c$ ./game.sh
```

- GitHub: <https://github.com/fishball0741/T1A3>

- Terminal:

- `git clone`

- `git@github.com:fishball0741/T1A3.git`

- `cd T1A3`

- `cd src`

- `./game.sh`

- Bash Args

- `./game.sh --gender=m`

- `./game.sh --gender=f`

```
c$ ./game.sh --gender=m
```

```
c$ ./game.sh --gender=f
```