Project_Game

1.Project name: Secret Room Adventure

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3.Description: Our project is a command-line game with a 2D-map. The goal of this game is to reach the end point. User is asked for input to choose an option. Options may relate to direction of moving, state of character, or others which can impact the development in this game. The outputs will be the 2D-map which provides useful information to help the user adjust strategy, and each input may update the state of the 2D-map.

4.

import matplotlib.image as mpimg
from matplotlib import pyplot as plt
import numpy as np
import random

You are also expected to upload pictures named blank, character, darkness, floor, hw, vw, pic_flag, pic_goodie, and pic_monster in the same folder where the code is located. All the pictures should be in jpg form and have a size 200*200.

5.

The codebase of our game can be divided into three parts: class definition and initialization, map and item generation, and game interface. The player is expected to run each bulk of code just once, following the order above.

After running the game interface, the player is expected to see a map with a character, an endpoint, some monsters, some blocks, and some empty spaces. The player will see the status of the character at the bottom of the map. The play will choose the direction to move by typing in (W/S/A/D). The player will exit the game once E is entered.

Please enter a movement W,A,S,D,E:
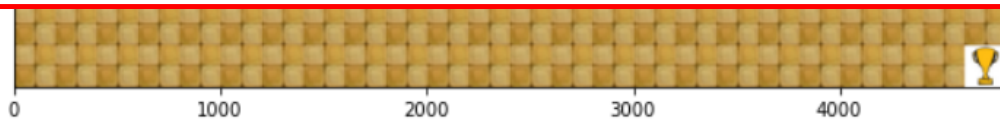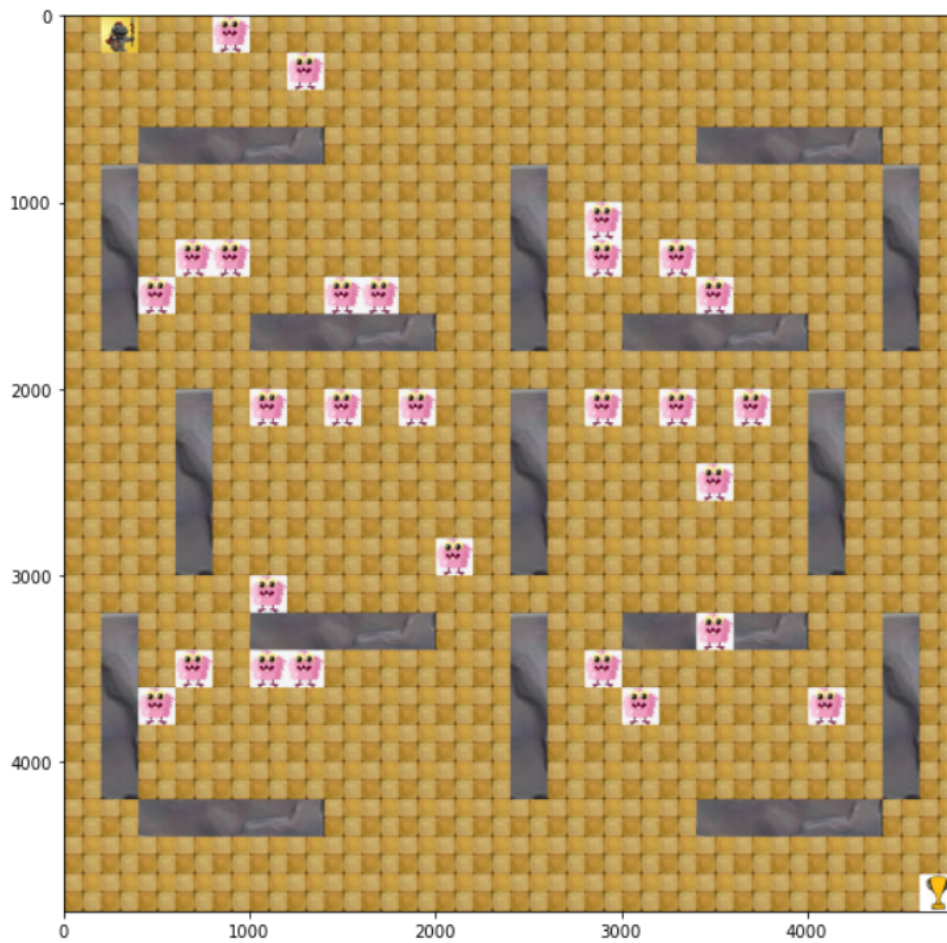
Your Status
Attack = 5
HP = 100

If the player chooses a direction that would result in walking into the wall, the program will kindly remind the player that he/she/they has hit the wall.

```
Your Status
Attack =  5
HP =  100
Please enter a movement W,A,S,D,E: W
You are out of range.
```

As an exciting adventure game, the player is certainly expected to encounter terrifying monsters. When the player encounters the monster, a series of exciting texts would appear:

```
You encountered a monster! Now let's fight!
Monster attacked you! You now have 96 hit points!
You attacked the monster! It now has 61 hit points!
Monster attacked you! You now have 92 hit points!
You attacked the monster! It now has 56 hit points!
Monster attacked you! You now have 88 hit points!
You attacked the monster! It now has 51 hit points!
Monster attacked you! You now have 84 hit points!
You attacked the monster! It now has 46 hit points!
Monster attacked you! You now have 80 hit points!
You attacked the monster! It now has 41 hit points!
Monster attacked you! You now have 76 hit points!
You attacked the monster! It now has 36 hit points!
Monster attacked you! You now have 72 hit points!
You attacked the monster! It now has 31 hit points!
Monster attacked you! You now have 68 hit points!
You attacked the monster! It now has 26 hit points!
Monster attacked you! You now have 64 hit points!
You attacked the monster! It now has 21 hit points!
Monster attacked you! You now have 60 hit points!
You attacked the monster! It now has 16 hit points!
Monster attacked you! You now have 56 hit points!
You attacked the monster! It now has 11 hit points!
Monster attacked you! You now have 52 hit points!
You attacked the monster! It now has 6 hit points!
Monster attacked you! You now have 48 hit points!
You attacked the monster! It now has 1 hit points!
Monster attacked you! You now have 44 hit points!
You attacked the monster! It now has -4 hit points!
```

This text will record your health status as well as the monster's each time you have attacked each other. At the end, if you successfully killed the monster (by having higher combination of Health and Attack), you will select a goodie as a heritage from the Monster.

```
You found a Goodie! Select from 1) Torch, 2) Arch, 3) Armor.[                    ]
```

If you choose Arch or Armor, you will gain corresponding stats. If you choose Torch, nothing will happen, but you will look fancier.

```
You found a Goodie! Select from 1) Torch, 2) Arch, 3) Armor.1
Now you have a torch in your hand, congratulations!
Currently its a useless tool, but you looks fancier!
```

```
You found a Goodie! Select from 1) Torch, 2) Arch, 3) Armor.2
Now you have a arch in your hand, congratulations!
Your Attacks increased by 10!
```

```
You found a Goodie! Select from 1) Torch, 2) Arch, 3) Armor.3
Now you have a armor in your hand, congratulations!
Your Hitpoints increased by 50!
```

Each time you fight a monster or select a goodie, you will see your stats changes correspondingly.

```
Your Status
Attack =  5
HP  =  94
```

After you combat the monsters and eventually arrived the endpoint, you will see the following text appears:

```
congraduation! You win the game! Cheers!
☆ *  .    ☆
    . ^_^  ∩  * ☆
 * ☆ ( ·∀·)/ .
   . ⊂     ノ* ☆
 ☆ * (つ ノ .☆
       (ノ
```

So say hi to puppycat and feel proud of your amazing journey in our game!

6. If we have more time to develop this program, we can expect this program to have a more diverse map, type of monsters, and goodies for selection. We also expect to improve incorporating animation in the character;s movement among the map, which would require some coding techniques that are more advanced than numpy arrays.

7. License: MIT license

8. Special thanks to professor Harlin, our TA Shruti, and LA Rachel!