API

For class Fisher, there are methods, lookingaround, getaxe, useaxe, getbook, usebook, getsusage, usesausage, getegg, setHP, getwoodstick, usewoodstick, getwool, getKnife, useKnife,

For class CabinInTheWoods there are no method created in this class only inheritance from the Fish class. When our character Fisher look around, get any tools, go North/South/East/West direction and use any tools, this class will inherit the relevant methods from Fisher class to save some space. All the method call expects to exceed truth or false return type and the Boolean factor will determine the future conditions.

A description of the overall program control flow

When user enter start in the input screen, program start.

When user HP is 0 for the third time then game ends. If user escape the first room, the forest with random events and the last security house then the game ends.

The progress is linear but the random event is the core of this program, every step user input to move result 1-10th event listed in Fisher class, then the HP of the user may vary depends on that. After finish the random event, user can use method Move into the next step in the Forest Map.

10 Random event:

1. Avocado: Fisher get 5PH by eating it
2. Fisher find an old coin: give it to Elder Toad get one more revive
3. Obsidian Knife: Fisher attacks now can deal 2 damage towards monster
4. Fisher find a Jacker that decrease the damage Fisher receive by 1point
5. Young girl: ask for apple in exchange of
6. Old man: Do you have wool?
   * 1. If yes, wool coat will decrease 2 points of damage that Fisher receives
   1. Else,
      1. take his stick (Battle) if win have a magic stick
      2. feel sorry for him and give him your clothes
7. Little chubby boy so hungry that Fisher decided to give him something to eat
   1. Have the sausage
      1. Uneaten: boy is happy to help Fisher in the future
      2. Sausage has been eaten: boy is unhappy and run away
   2. No sausage: boy starve to death. Fisher left away
8. Knight:
9. Sheep: see the monster sheep battle begin.
10. Cat: see the lovely little cat, Fisher want to look closer
    1. Yes: then Fisher got hurt HP-2
    2. No: Battle begin If obtain the stick Fisher able to skip the battle
11. Snake: see the monster snake battle begin
12. Wolf: see the monster wolf, battle begin.
13. Ghost: can only attacked by wood stick and knife
14. Fisher goes in to a lack: HP +10
15. Fisher goes in to a desert: HP-2 for further two actions
16. Fisher goes into a swamp: randomly lost one item in the inventory

Every object user collected will put into the pocket array that program set default for users with set size. Mainly the object will buff or debuff the HP of the user’s character and help user beat the monster in random event faster.

Once Fisher’s HP is 0 a wise Elder Toad with Black frame glasses shows up and asks fisher do you want to live one more second:

* First Time: Excited! Do you want to live one more second?
  + Yes-discard one item continue game
  + No-died
* Second Time: Naive! Do you want to live one more second?
  + Yes-discard one item continue game
  + No-died
* Third Time: I am angry! Fisher died

What is the role of each object in the execution of the program?

Axe is use to break the door;

Book can cast four spell with 2 buff and 2 debuff;

Sausage can give user HP when user choose to use it, limit into 3 times;

Old coin can give Fisher one more revive

Jacket can help reduce 1 point of damage from monster

Avocado use to give Fisher 5HP

Knife use to attack the monster;

Wood stick can cast magic to attack monsters;

Wool can be get by defeating the monster sheep

Wool coat can help user lower the damage taken form monsters;

How the program runs from start to finish

Users start with the choice of Game Mode: easy mode Fisher stars with 30HP, hard mode Fisher starts with 20HP.

Fisher starts from the Room1, look around, interact with the object book, then get the item axe, sausage, book that user can pick all of them or none of them.

By using axe Fisher is able to escape from the Room1 and move into the Forest set up with 2D array, with size 4\*4. Starts in (1,1) Fisher goes every possible directions in the map that one step will trigger one random event from the list above, each event can only happens once. By move into location (3,3) or experience all the random event, Fisher is able to move into the last Room2.

In Room2, Fisher meets the final Boss of the game

* + 1. If Fisher gave made friends with little boy then he can help Fisher beat the boss
       1. Result is she live happily with little boy
    2. If Fisher didn’t make friend with little boy then he will fight with boss alone and escape from the room