408420001 final-project

- Project Description

  1.mechanism:

  Form a map and some objects, playing the 2-D game as the ’p’ setup on the map.

  2.new function:

  void setup_gun();void setup_trap();int village_do();struct MTX fight_monster(); void go_adventure();int ranum(); and some few change of old function

- Playing Method

  Enter the size of map→set up object positon in the map(village,monster, gun,trap,”no player yet”)→option for map(form map until you want it)→setup player position→starting game with initial blood:10,strength:2→option for player→moving to interact with objects.

- Function Description

  struct MTX create_map();

  input size to the map;

  void print_map();

  print out the map and all objects in it

  void setup_village();

  give and setup a village at the assigned position as ’v’

  void setup_monster();

  give and setup a monster/s at the assigned position as ‘m(number) ’, monsters have strength as its number;

  void setup_gun();

  give and setup a gun at the assigned positionas ‘g’

  void setup_trap();

  give and setup a trap at the assigned position as ‘t’

  struct MTX setup_player();

  give and setup a player at the assigned position as ‘p’

  int check_boundary();

  check if the assigned position is in the map

  int check_availability();

  check if the assigned position has no object

  struct MTX check_move();

  determine the interaction of object whch the player met with

  struct MTX go_up();

  let the player’s position move up 1 block

  struct MTX go_down();

let the player’s position move down 1 block

struct MTX go_left();

let the player’s position move left 1 block

struct MTX go_right();

let the player’s position move right 1 block

struct MTX move_option();

print the option that player can do on the map

struct MTX map_option();

to check if the player wants to form a new map in other size

void free_memory();

free memory used by the map

struct MTX village_do();

print options can do in the village

struct MTX fight_monster();

the mechanism to fight with monster

void go_adventure();

print option for the player to choose after fighting a monster

int ranum();

form a random number;

int main(void)

mechanism of the game

- Varialble Description

COMMON

I,j, counter for loop

x, value of input row ; y, value of input column

MAP

m,mtx, structure of map

m.map, map 2-D array

m.r, map row size ; m.c,map column size

m.b, player blood ; m.s, player strength

m.f, flag to check if the sword in village was buyed ; m.vd, option in village

m.pr, player row ; m.pc, player column

VILLAGE

vx, village row ; vy, column ; v, go to village or not

MONSTER

mx, monster row ; my, monster column ; mn, monster numbe ;

g, if you want to continue or not ; eva_prob, evasion probability for monster

GUN

gx, gun row ; gy, gun column

TRAP

tx, trap row ; ty, trap column

PLAYER

px, player row ; py, player column

OPTION

slct_pen, for player option on map ; slct_eth for map option

RANDOM NUMBER

r, keep random number

Version History

0.Addition of program example

1.change into function

2.add gun,trap function

3.add fighting function

4.add evasion(final version)