
```
/**GOOSE ESCAPE GAME PLAY CPP FILE BEGINNING!!***/
```

```
#include <iostream>
#include <cmath>
using namespace std;
#include "BearLibTerminal_0.15.7\Include\C\BearLibTerminal.h"
#include "gooseEscapeUtil.hpp"
#include "gooseEscapeActors.hpp"
#include "gooseEscapeConsole.hpp"
#include "gooseEscapeGamePlay.hpp"

extern Console out;
/*
With graphics, screens are given an x,y coordinate system with the origin
in the upper left corner. So it means the coordinate axes are:
-----> x direction
|
|
|
|
|
V

y direction
*/

/*
Print the game world

The functions should draw characters to present features of the game
board, e.g. win location, obstacles, power ups
*/

// print the game board function
void printGameBoard(int xChar, int yChar, int charToPut)
{
    int x_location_on_board = xChar;
    int y_location_on_board = yChar;
    terminal_put(x_location_on_board,y_location_on_board, charToPut);
}

/*
Do something when the goose captures the player

If you want to attack or something else, this is the function you
need to change. For example, maybe the two touch each other and
then fight. You could add a health to the Actor class that is
updated. Run, use weapons, it's up to you!
```

```
*/

bool captured(Actor const & player, Actor const & monster)
{
    return (player.get_x() == monster.get_x()
            && player.get_y() == monster.get_y());
}

/*
Move the player to a new location based on the user input. You may want
to modify this if there are extra controls you want to add.

All key presses start with "TK_" then the character. So "TK_A" is the a
key being pressed.

A look-up table might be useful.
You could decide to learn about switch statements and use them here.
*/

void movePlayer(int key, Actor & player, int gameBoard[NUM_BOARD_Y][NUM_BOARD_X])
{
    int yMove = 0, xMove = 0;
    if (key == TK_UP)
        yMove = -1;
    else if (key == TK_DOWN)
        yMove = 1;
    else if (key == TK_LEFT)
        xMove = -1;
    else if (key == TK_RIGHT)
        xMove = 1;

    int playerX = player.get_x();
    int playerY = player.get_y();

    if (player.can_move(xMove, yMove)
        && gameBoard[playerY+yMove][playerX+xMove] != SHALL_NOT_PASS)
    {
        player.update_location(xMove, yMove);
        terminal_put(playerX,playerY, BLANK_CHAR);
        //terminal_put(player.get_x(),player.get_y(), BLANK_CHAR);
    }
}

bool won(Actor &player, int gameBoard[NUM_SCREEN_Y][NUM_SCREEN_X])
{
    int playerX = player.get_x();
    int playerY = player.get_y();
}
```

```
    return (gameBoard[playerY][playerX] == WINNER);  
}
```

```
/*  
    What other functions do you need to make the game work?  What can you  
    add to the basic functionality to make it more fun to play?  
*/
```