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 1: #include <BearLibTerminal.h>
 2: #include <cmath>
 3: #include <iostream>
 4: #include <cstdlib>
 5: #include <ctime>
 6: using namespace std;
 7: #include "gooseEscapeUtil.hpp"
 8: #include "gooseEscapeActors.hpp"
 9: #include "gooseEscapeConsole.hpp"
10: #include "gooseEscapeGamePlay.hpp"
11:
12: //set up the console.   Don't modify this line!
13: Console out;
14:
15:
16: const int RANDOM=10;
17: const int MONSTER_X=70;
18: const int MONSTER_Y=20;
19: const int COL=12;
20: const int COL2=24;
21:
22: int main()
23: {
24:     int x=0,y=0;
25:     //Set up the window.  Don't edit these two lines
26:     terminal_open();
27:     terminal_set(SETUP_MESSAGE);
28:
29: /*
30: The code below provides a skeleton of the game play.  You will need
31: write code for setting up the game board, and playing the game itsel
32: You can modify the code given as needed.
33:
34: Call the functions that you have written in the game play file, and
35: you have added to the Actor class.
36: */
37:
38:     //make the player
39:     srand(time(0));
40:     x=(rand () % RANDOM)+1;
41:     y=(rand () % RANDOM)+1;
42:     Actor player(PLAYER_CHAR, x,y);
43: /* random function called to assign different starting
44: positions each time the game is played.*/
45:
46:     //make the monster
47:     Actor monster(MONSTER_CHAR, MONSTER_X,MONSTER_Y);
48:
49:     // Declare the array that will hold the game board "map"
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50:     int game_world[NUM_BOARD_X][NUM_BOARD_Y]={0};
51: /*
52: Initiallize locations in the game board to have game features.  What
53: have man things to add to the game board?  Should you use a loop?  D
54: make sense to store this information in a file?  Should this code be
55: function as well?
56: */
57:     /* game map location */
58:     for(int wall=COL;wall<=COL2;wall++)
59:     {
60:         game_world[wall][COL] = SHALL_NOT_PASS;
61:     }
62:     /* game map location */
63:     game_world[WIN][WIN] = WINNER;
64:
65:     // Call the function to print the game board
66:     print_board();
67:     // Printing the instructions
68:     out.writeLine("Escape the Goose! " + monster.get_location_string());
69:     out.writeLine("Use the arrow keys to move");
70:     out.writeLine("If the goose catches you, you lose!");
71:     out.writeLine("Be careful! Sometimes the goose can jump walls!");
72:
73: /*
74: This is the main game loop.  It continues to let the player give inp
75: as long as they do not press escape or close, they are not captured
76: the goose, and they didn't reach the win tile
77: */
78: /*
79: All key presses start with "TK_" then the character.  So "TK_A" is t
80: key being pressed.
81: */
82:     int keyEntered = TK_A;
83:     // can be any valid value that is not ESCAPE or CLOSE
84:
85:     while(keyEntered != TK_ESCAPE && keyEntered != TK_CLOSE
86:     && !captured(player,monster) &&
87:     game_world[player.get_x()][player.get_y()]!=WINNER)
88:     {
89:         // get player key press
90:         keyEntered = terminal_read();
91:
92:         if (keyEntered != TK_ESCAPE && keyEntered != TK_CLOSE)
93:         {
94:             // move the player, you can modify this function
95:             movePlayer(keyEntered,player,game_world);
96:
97:             // call the goose's chase function
98:             move_the_Goose(player,monster,game_world);
```

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 99:             // call other functions to do stuff?
100:         }
101:     }
102:
103:     if (keyEntered != TK_ESCAPE)
104:     {
105:         //once we're out of the loop, the game is over
106:         out.writeLine("Game Ended");
107:         //out.writeLine("Game has ended");
108:          while (terminal_read() != TK_CLOSE);
109: // output why:  did the goose get us, or did we get to the win locat
110:     }   // Wait until user closes the window
111:
112:
113:
114:     //game is done, close it
115:     terminal_close();
116: }
```