Task 5 Spike: GridWorld

CORE

Context

Games are commonly driven by some form of game loop.

Knowledge/Skill Gap:

The developer is not familiar with basic game loops.

Goals

You need to create the GridWorld game, as described in a simple specification document available on the unit website. The game will demonstrate the use of a simple game loop, separation of update/render code, and use of game data (both for the world map and players current location).

Your spike should demonstrate the following:

1. A simple plan (sketch or structure design) for your code design. (Yes, a simple functional design is fine – just as long as you can demonstrate that you did actually plan first before coding!)
2. Create a simple console program, using C++, that implements the GridWorld game using a simple game loop. The game must demonstrate the separation of:
    a. processing of input (text commands from the player),
    b. updating of a game model (where the player is and their options),
    c. display (output current location and options) of the game to the user.

Expected Output

Repository

1. Plan
2. Code
3. Spike Report

Canvas

1. Spike Report

Notes

Actually make a plan
Read the "GridWorld" game details and do a quick sketch/design of how you will organise your code. (No formal design standard specified… just use something that would work to help you explain your design to another programmer.)

Begin small, test often
Use simple print-outs to check values (or the debugger if you already know that and are comfortable). Consider a DEBUG macro condition if extra code is needed for testing purposes.

Use resources – but attribute them!
If you find some useful resources that helped you to get your code working, then remember to note them down and include them in your spike outcome report. Google, books, blogs, classmates, etc. all go in the spike report.

DO NOT

- Make things any more complicated than you need – just get it working.
- Create complex data-structures. A simple 2D array is fine (and expected).
- Add all the fancy features you can think of! Save ideas for later and perhaps develop them as a portfolio item. (You should still document/note them down though.)
- Load the map data from a file. Simply hard code the map data.