

## Game Development - Final Examination - January 16th 2019

YOUR FULL NAME:

- You have 2 hours to complete the assignment.
- Only valid text will be the one inside each box, everything else will be ignored by the teacher

1. **(2 points)** Describe your approach to **draw** an isometric map. Use pseudocode to describe its core loop. Be specific about the math formula needed to find final screen coordinates.

2. **(2 points)** Make a step by step description on how to move from A to C using a BFS algorithm. Write down the content of all data structures at each step. Take in account that B and H are blocked.

A	<b>B</b>	C
D	E	F
G	<b>H</b>	I

3. **(2 points)** Explain the concept of Profiling in the context of video game programming. Why we need to do it, who should do it and what kind of areas of the code we apply it.

4. **(2 points)** Explain the concept of **double buffering** applied to computer graphics.

5. **(2 points)** Explain the key concepts behind a Quake-style console. Explain the main steps that need to be taken in order to implement it (assuming we have a functional GUI system in place).

*Use this page for your own notes. You cannot use any other page. Do not remove this page from the set.*