Exercise 1 - InputManager

The goal of the first exercise is to create an InputManager class which replaces input reading implemented at the moment in PlayerUnit class.

InputManager can read input from keyboard or from gamepad depending on which controller player has chosen to use. The project has no GUI for selecting input device implemented yet so at this stage of the project we can hardcode the input device straight into our code. Input can be read from keyboard and from Xbox360 gamepad or from similar xinput compatible gamepad. One input device controls one player unit.

Writing an InputManager class is not enough to complete this exercise successfully. When reading input from Vertical and Horizontal axes the input is actually read from all input devices (gamepads and keyboards) by default. Since we want to move only one unit with one input device, this structure has to be changed so that every input device has their own axes defined.

Minimum requirements

The exercise is returned on time and input can be read from one controller (either keyboard or gamepad) and one unit can be moved by that input.

Bonus 1

The input can be read from two input devices at the same time (from gamepad and from keyboard) and two PlayerUnits and be moved according to the input.

Bonus 2

The input can be read for three or more units and those units can be moved at the same time. Keyboard controls two of the units (wasd keys control one unit and arrow keys control the other) and all the rest of the units are controlled by gamepads.

Deadline

Sunday 19.2.2017 at 23:59
Submit a link to your implementation or use a pull request

Grading

0: Exercise is not returned on time or it does not meet the minimum requirements
1-2: Exercise meets minimum requirements but it doesn't work properly or it doesn't follow practices we have studied during lessons.

3: Exercise meets minimum requirements, it works properly and it is well done.

+1 point: bonus 1 implemented
+2 points: both bonus tasks implemented