**Multiplayer Distributed Programming CA1 2017/18**

For this CA, you are required to write a 2D game that will support two players playing on the same machine. This game can be developed in teams of two or individually.

Your game should have the following:

* Keyboard and mouse and or Xbox controller input. If you decide to use Xbox controller input think about how it will work when you need to demo the game
* States and menus. The game should have discrete states such as a Titlestate, Menustate, Gameoverstate. These states should contain interactive menus.
* Sprites and animation. You are not required to build custom resources – feel free to use openly available graphical resources available online and mentioned in the slides
* Collision detection and physics. When players or objects collide with the edges of the world or solid objects you should deal with this appropriately.
* Shaders. You should improve the look and feel of your game by using shaders.
* Music and sound effects. You should have background music and in game sound effects.
* The game should be fun to play.

Each individual should produce a screencast. In the screencast:

* Demo the game
* Give an overview of all of the code with particular emphasis on the code that you were responsible for writing. The code should be clearly commented with a comment at the start of each file to say who was involved in writing it and a comment at the start of each function to say who wrote it. Use version control to track the development of the game and submit the link to your code repository.
* Discuss how you will make this a networked game.

This CA is worth 20% of your final mark.

Please submit all of the source code, .exe. documentation, code repo url and screencast url in one.zip file by **Friday Decemeber 22 at 23:55pm.**