## Game Development 2.2 Interactive Demo Version 2.1

## Description

The goal of the Game Development 2.2 Al project is to implement an interactive demo which incorporates the elements learned in Game Development 2.2. These include:

- Vector math
- Light-of-sight chasing
- Finite State Machines
- Pattern Movement

## Submission

The project will be assessed by interview during week beginning 30<sup>th</sup> March 2020. All code must be submitted to Github. Challenge 5 should be contained in a Unity scene called 'Challenge 5'. The report should be present in a 'Readme.md' in the root folder of your Github repository.

Note: If you are not present for the interview you will not be allocated marks. You will also be required to push your (well documented) code to Github.

## **Project Matrix**

Animation Project	Well achieved	Achieved	Not Achieved
Interactive demo	Demo has a clear	Demo has clear objective	Demo has no obvious
	objective that relates to	that relate to elements	objective.
	elements learned in	learned in Game	
	Game Development 2.2.	Development 2.2 and	
	and provides users with	provides users with	
	rewards/feedback. The	rewards/feedback.	
	demo also evolves at the		
	user progresses i.e.		
	power-ups, skills etc.		
Gameplay	Demo contains more	Demo has a strong	Demo has a very
	than two game play	gameplay element.	simple/no game play
	elements.		element.
Pattern Movement	Multiple NPC's have	NPC has customised	NPC's have no pattern
	customised control data	control data and pattern	movement element or
	and pattern processing	processing system.	reuses distributed
	system.		examples from class.
Finite State Machines	Multiple NPC's have	NPC has customised	NPC's contain FSMs
	customised FSMs which	FSMs which contain at	similar to those provided
	contain at least four	least three states.	in class examples.
	states. Transitions	Transitions between	Transition between
	between states makes	states makes NPC appear	states are simple.
	NPC's appear game	game aware.	
	aware.		
Vector Math	Multiple use of vector	Vector math used for	Vector math only used
	math used for NPCs e.g. a	NPCs e.g. a bullets sprite.	for line-of-sight chasing.
	bullets sprite. Not	Not including line-of-	
	including line-of-sight	sight chasing.	
	chasing.		
Line-Of-Sight chasing.	Multiple NPC's perform	NPC's perform line-of-	Basic chase/evade

	line-of-sight chasing.	sight chasing.	implemented.
Interception	Customised interception implemented.	Interception implemented as per examples in class.	No interception implemented.
Report	Report outlines the elements of AI implemented in the demo with diagrams/screenshots and link to video.	Report outlines the elements of AI implemented in the demo with diagrams (FSM etc.)	No/Poor report provided.