IST Assessment 3 – Software Development

My application will be a game in which the player is a special forces operator.They must clear out an area of hostiles. Maps could range from compounds, to houses, to buildings. There are different classes of combatants. The task force could have access to rifleman and snipers whereas OPFOR could have access to rifleman. These different classes will have different weaponry and armour, affecting speed, damage and accuracy. Some classes may also have access to grenades or stun grenades, to flush out or incapacitate enemies.

The player will lose the game if their team is killed, whereas, they could win the game if they successfully capture a point or kill or enemies. Controls will be intuitive by using the mouse to aim and WASD to move, however depending on the weight of the character, rotation speed could be slowed to reduce manoeuvrability. One core mechanic I am planning to add, is to restrict the vision of the player except for the area in front of them. Enemies hidden behind walls and blocks will also be hidden from the players view. This means that the player is forced to play more tactically and carefully to ensure that they are not ambushed. To further increase the difficulty, I may try to implement more complex AI which can path find across the map and attempt to outsmart the player. The AI could cooperate with each other to pincer the player, or they could wait in corners and wait for the player. To help combat this, control over team-mates could be implemented, giving the player tools and commands such as calling team mates to go to a certain area, watch it or defend a certain position.

The purpose of this project is to entertain users however, its target audience are players of strategy games and first-person shooters. This is through combining elements of shooter games with the more tactical experience that strategy games may offer.

* Player movement in an open camera-based space
* Shooting and health mechanics
* Enemies which shoot back
* Numerous levels (3 levels)
* Different classes and weapons
* Win and Lose state from an objective

Extras

* Vision system where you can only see what the character sees.
* AI with pathfinding