Stealth games have been one of the most popular genres of video games since the turn of the millennium. Games such as Metal Gear Solid(Hideo Kojima, 1998), Tom Clancy`s Splinter Cell: Blacklist(Ubisoft Toronto, 2013) and Hitman(IO Interactive, 2016) defined the genre. An overwhelming majority of these games are in the third person, the only notable recent exception is Arkane Studios` Dishonoured 2(Arcane Studios, 2016). There have many attempts by FPS games to include a stealth level or two within their action-packed games, but these often feel shoehorned in. For my project, I want to make a prototype first-person stealth game that sets out to achieve what the majority of FPS stealth games/levels are missing compared to their third-person counterparts. In this literature review, I will be comparing and contrasting five different themes, including AI, UI, Stealth Mechanics, Traversal and Balance in third-person stealth games and first-person stealth games/levels. This will hopefully allow me to find gaps in current FPS stealth levels that my prototype can fill.

Artificial Intelligence:

A stealth-based AI is one of the key components of a stealth game. An AI that the user perceives to be unintelligent will make the game less intense and provide less of a challenge for the player. One key part of a comprehensive AI is how the AI detects a player. In Splinter Cell: Blacklist(Ubisoft Toronto, 2013), the team used vision cones and different vision zones(Walsh, M. 2014) to allow the player to be slowly detected over time based on the player`s location within the enemy’s vision cone. This is an example of great architecture for stealth AI and provides a realistic interpretation of how someone would spot a foreign entity in real life. In contrast, Metal Gear Solid[Hideo Kojima (1998)] has a binary detection system. This means whenever the player is within the enemy’s vision cone, they are instantly detected. This could be very frustrating to the player as even if the player`s arm was barely visible for a split second the enemy would go into an attack state. This makes the AI seem unrealistic and unfair. However, this is still a better system compared to Marvel`s Spider-Man(Insomniac Games, 2018). In this game, if the player is detected at any point, it would result in failure. Although the detection system in Spider-Man(Insomniac Games, 2018). is not binary, once the player is detected, they will fail the level, whereas, in Metal Gear Solid(Hideo Kojima, 1998) and the majority of better stealth games/levels, the player is allowed to escape and find a way to hide and return to the stealth aspect of the game. This is due to these games having a much more in-depth implementation of a behaviour tree or finite-state machine(FSM) for the AI(Millington, I. 2019). To sum up, the AI needs to have a non-binary detection system and a behaviour tree or FSM that allows the player to escape after being spotted.

User Interface:

It is essential that stealth games have an intuitive UI design. A good UI can help the player understand what state the enemies are in, if the player is hidden and how close the enemies are to spotting the player. Dishonoured 2(Arcane Studios, 2016) has an excellent UI that uses markers above the enemy’s head to depict the enemy`s current state. If we compare this to Call of Duty: Modern Warfare(Infinity Ward, 2019), we find that during the mission ‘Going Dark’, the UI gives the player no indication of what state the enemy is currently in. This doesn’t give the player the same confidence as a good UI would and can make the player play safer and not explore the level to its fullest. On the other hand, Modern Warfare(Infinity Ward, 2019) does a good job with another part of its UI. During the level ‘Going Dark’, there is a light meter displayed to the player to show their visibility. This is a great mechanic and it’s backed up by a great representation in the UI. It gives the player clear knowledge of when they are hidden and when they are visible. This is something that is quite difficult to do in an FPS stealth level as the player cannot see their own body to verify if they are hidden or not. Overall, it is crucial to have UI that helps the player understand what state the enemy is in and how close the player is to being spotted.

Stealth Mechanics:

A game won’t be fun if its mechanics are boring and unbalanced(Adams, E. and Joris Dormans, 2012). Games are made by how good their mechanics are and stealth games are no different. We can see this most clearly during the Battlefield 1 mission ‘Fall from Grace’(DICE, 2016). During this mission, there are only 2 stealth mechanics, both of which are overused and unbalanced. The first is throwing an item to take the guard’s attention and the second is destroying a communication box to stop reinforcements. Not only are both mechanics overused in stealth games, but they are also extremely unbalanced. The player can find things to throw to distract the guards all over the level and disabling the communications boxes provide no real challenge for the player. For these reasons, mechanics in stealth games must be original and also balanced in a way that prevents the player from abusing the mechanic.

Traversal:

Traversal is a key component of any good game. The ability to use verticality as well as unique ways of moving through the level provides more replayability for a game/level. Stealth games have been using unique forms of traversal for a long time. In Splinter Cell: Chaos Theory(Ubisoft, 2005), the player can use a split jump to climb above the guards and avoid being spotted. Similarly, in Batman: Arkham Asylum(Rocksteady Studios, 2009) the player can use a grappling hook to climb above the guard’s line of sight or use ventilation shafts/grates to traverse the level below the enemy’s feet. This kind of traversal is largely missing in first-person stealth games/levels. An example is Battlefield 1`s level ‘Fog of War’(DICE, 2016). In this level, the player has no unique ways to traverse the map. There is no way to change the verticality and no way to manoeuvre around enemies in a fun way. This leaves this level feeling a little flat. Ultimately, traversal is very necessary for all games but the lack of unique traversal in stealth games can leave the player with no opportunities to tackle a level in an original way.

Balance:

A balance between the player and enemies is even more vital in stealth games than it is in regular games. In stealth games, if the player feels like they can win a shootout against a large number of enemies then it defeats the point of the player trying to be stealthy. In The Last of Us(Naughty Dog, 2013)) the designers made a single enemy lethal. This forced the player to play in a stealthy manner however this alone would not be very balanced when the player was fighting a large group of enemies in a non-stealthy environment. To counterbalance this, when the player was fighting a large group, only one or maybe two of the enemies would shoot at the player at a single time(McIntosh, T. 2014). This meant the player was still cautious of the enemy but at least it gave them a fighting chance. Getting the balance right in a game is a tedious and long process. Getting it right in a stealth game is just as hard. But doing it correctly means the player plays the game in the way intended for them by the developer, thus resulting in a much more fun experience.

To conclude, there is a multitude of things that FPS stealth games/levels can learn from their third-person counterparts. In fact, a lot of FPS stealth levels incorporate one or maybe two good practices seen by third-person stealth games but the only first-person game that encapsulates all these practices seems to be Dishonoured 2(Arcane Studios, 2016). With the knowledge from this literature review, I can focus my prototype on the specific areas that FPS stealth games/levels are in dire need of.

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