## I. How AI behaviors influence player strategy and decision-making.

The AI's Behavior influences the players behavior in a number of ways. For starters the AI has certain points and pathways that they will follow, this will cause the player to want to avoid these certain pathways or have to think about how they have to complete their objective without interfering with these certain pathways. The speed of the AI as they continue to move also dictates what the player does because it allows the player only a certain window to move to certain spots. The AI has a very specific radius that the player is unable to enter as the AI moves from point to point.

## II. How player actions dynamically alter AI states and responses.

Whenever the player comes within a certain distance of the AI, the AI will chase the player in an attempt to catch them. They will turn towards the player and move towards their position until they either catch the player or if the player runs out of range from the enemy AI. In which case the AI will go back to patrolling around the area. If the player also makes too much noise around the enemy AI then the player will be chased by the AI. The player will have to surpass the hearing threshold in order to do this. The player will also escape the enemy AI if they manage to hide out of their field of vision, at which point the AI will stop chasing them and go back into their patrol state.

## III. Challenges faced during implementation and their solutions.

One challenge that I faced was finding a good scenario in order to create a fitting environment for the AI. I was thinking of doing a scenario in a castle where you played as a hero saving a princess and you had to avoid these big monsters. But after playing with the Unity Probuilder for a little bit I thought that a pirate ship was more fitting since the AI was designed so you had to sneak around it. And since you played as a pirate I thought it matched with the AI because you were stealing something. So having you play as a pirate and sneak past enemies was the perfect scenario for my AI design. Another aspect that was a challenge was getting the AI to chase the player correctly. After having some help and clarification from the professor,  I was able to get this working again.