How AI behaviors influence player strategy and decision-making.

For my AI state a made a basic enemy that chases but the player but decided to have that enemy enter a new state once the catch the player, for that state I chose self destruction. Not only is this an interesting way to have enemies deal with the player but can be turned into a very interesting mechanic depending on what genre the game is. For and sandbox the explosion should damge stuchers this can apply to any game with destroyable terrain but minecraft is a great example of an explosive enemy in the sandbox genre, for a horror game we could use the explosive skulls from R.E.P.O what can kill the player break your stuff and might cause the player to panic giving awa there position. There are manyways to apply a simple selfdestruct state to game, platforms that disappear is a common one but jumping off an enemy thats about to explode could make something very interesting, maybe damaging them could switch the AI state back by stunning. The general idea of a bomb an create a lot of intresting behaviors, bombs also typically have timers which dempending on the task given it could create an interesting cenario requiring the player lead the bomb to destination.

How player actions dynamically alter AI states and responses.

Players from what I've seen typically get very silly with AI states find everyway to humiliate the poor bot, having a state like could let the players a lot more fun with the silliness the can be achieved whether that involves blowing up the fellow teammates or trying to have the enemy kill his allies or even have a chain reaction of events by creating and even larger explosion.

Challenges faced during implementation and their solutions.

Biggest challenge was first creating and AI state that felt do able in Unity I wanted to change the colors of enemy but the material need something to attach too, so I had to scrap that idea. After that the next challenge was to creating the code itself even now its still not fully working a the time or writing "hopfully it wil change"