

1, **Perception**, AI will sense the enemies (players) and environment.

Vision perception AI perceived a certain Angle range in front of it.

Auditory perception AI perceived the sound make by player.

Attack perception AI should perceive when player attack it.

2, **State**, AI have different state, developer can use this state to let AI make different reaction.

Idle: AI does not move in a wide range, but stays in a small range and interacts with marked objects (project offer component for mark)

e.g.

Chair, AI may choose to sit on a chair.

AI may drop weapon.

Attack: The AI will decide different attack modes, using ranged attack at a distance and melee weapons at close range.

Chase: AI chase enemies that it can see, when it loses the vision it will move to the last position of enemy to investigate.

Alert: When AI first precepted player, AI will not directly chase or attack player, but into a Alert state, when player stay in AI's vision for some time, AI change the state to attack and chase.

Patrol: AI be assigning a mission to keep security of some region, they may walk around or stay idle, but when AI in this state they will not drop weapon.

3. **Camp**, both NPC and player have a camp, can only attack enemy camp.