Basic rules of the Sentry enemies:

1. They will follow a set path with a 0.5 second delay between the movement between each node.
2. If they spot the players avatar, they will cease movement.
3. If the player is within their sights, they will constantly turn towards and fire at the player.
4. Currently there is a 0.5 second reload time between each shot, the current damage of each shot is 10.
5. Once the player is out of sight, the Sentry resumes its original patrol route.
6. I do plan for there to be a third state, where the sentry searches for the player in their last known location in they lose sight of the player, if they cannot find them, they return to their original routine.

Setup:

1. NavMesh & AI:
   1. Ensure the entire level is encased inside a NavMeshBoundsVolume, this is what allows the Ai to navigate surfaces. You can press ‘P’ (with nothing selected) to check if the NavMesh has built correctly.
   2. When placing an AiSentry in the scene, they need to be place quite high above the ground, otherwise the Sentries collider will cause no NavMesh will be created underneath them… it’s stupid, but that’s just how Unreal works…
   3. The Sentries Instance Editable Patrol Manager Variable will be used later.
2. Path Managers:
   1. Place patrol nodes at each section of the patrol route you want the Sentry to take, try to ensure the Sentry is always calculating how to take straight lines instead of leaving it to decide how best to navigate a wall. Make sure the nodes are place directly upon the ground (they have no collider so the previous issue does not apply here).
   2. Place a Patrol manager within the scene above the nodes you want to link to it.
   3. Add an Instance reference of every PatrolNode you want to be used into the Patrol Path Array on the Manager (instance editable). Ensure you add them in the correct order you wish for them to be used.
   4. Set the Patrol Type linked to that manager, this can either be to loop, or reverse the path after each complete patrol.
   5. Set the Patrol Manager variable on the AiSentry to be a reference of the Manager you just setup, it will then follow the path on that manager.
3. Sentry Manager:
   1. Add a Sentry Manager above the room and add a reference of each sentry to the ‘Sentries in Room’ Array
4. Gateways:
   1. Please ensure that all Gateways within the room have:
   2. ‘Sentries’ as their Room Info Tag.
   3. The room’s ‘Sentry Manager’ as the Linked Manager.
   4. and that all exit Gateways have the Score Trigger boolean is set to true.