Simple Maze: Escape the Box

Objective:

- Create a simple maze where the goal is to escape.

Design:

I wanted to create a maze wherein the main enemies are sentries that patrol the maze. I thought it would be more interesting not to use direct combat mechanics. Rather, the player is forced to stealthily move through the maze by avoiding getting caught by the enemies. The maze is designed similar to many mazes in RPGs. For this one, I was specifically inspired by the doll maze in Mad Father.

Features:

1. Player movement
   The player is able to move using the WASD keys, jump using the SPACE key, and interact with objects using the E key. This was implemented using an Input Mapping Context. Thus, it is easy to add support for controller as well.
2. Enemy AI
   Sentries move along a designated path, dictated by a Spline object. This allows us to change the path at any point during the design process. However, when the player is caught within the Sentry's sight range, indicated by a red beam, the Sentry's behavior will change. Instead of following its path, it will switch to following the player until they collide. If a player collides with a Sentry, the level restarts.
3. Interactive Objects
   Interactive objects are made using a blueprint that indicates that this object is interactable. This blueprint can be used for every interactable object, regardless of its function. For this project, a Button is created as a child of the Interactable blueprint, and this button implements its function internally. When pressed, the button calls a Moveable object. Moveable objects are also a blueprint that can be reused for every object that has a designated path. This also reuses code from the Enemy AI.