

## Assignment 0 Project Report

**Gameplay Video:** [https://youtu.be/-200zRRu9\\_o](https://youtu.be/-200zRRu9_o)

### Overview

Sneak Snout is a 2D stealth platformer game where the player plays as a sneaky green pig avoiding guards and stealing diamonds. The player must avoid the guards' line of sight as they patrol the level. The player wins the level by reaching the door. The functionality of the guard patrol routes are done using Godot's Path2D and PathFollow2D nodes (shown in image reference 1). The guard sight functionality is done by drawing a triangle collision polygon over the red opaque sight sprite (shown in image reference 2). The functionality of the hiding in box mechanics was done simply through player state changes and collision detection to see if they were in range to hide inside a box (shown in image reference 3). There are no unresolved issues in the game. The total scene structure of the entire game starts with the MainMenu Scene containing the game scene and play again scene, the game scene contains the main level and the user interface which contains the diamond counter, the main level contains all the "sceneified" level assets (player, guards, diamonds, boxes, etc.). One of my favorite features of the game is that when the pig is detected then the guard hits them out of the screen. This is done by giving the player a rigidbody2D node that only activates when the player is detected and immediately applies a physics impulse to boot him off the screen.

### Controls

W - Jump

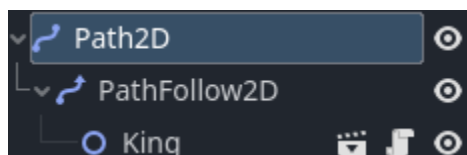
A - Move Left

D - Move Right

Space - Hide in Box

### Image References

1.



2.



3.

```
// called every frame. 'delta' is the elapsed time since the previous frame.
public override void _Process(double delta)
{
    if(GameManager.GlobalGameManager.touching_box && !contains_player)
    {
        if(Input.IsActionJustPressed("interact") && GetInstanceId() == GameManager.GlobalGameManager.box_id)
        {
            Player.Visible = false;
            _animationPlayer.Play("box_peeking");
            audioStreamPlayer2D.Play();
            GetNode<Node2D>("Node2D").Position = new Vector2(0, 0);
            contains_player = true;
            can_leave_box = false;
        }
    }
}
```

### Extra Credit

- Animations - Almost every game object has some sort of animation in the level besides the tileset
- Sound effects - There are sounds for when the pig is hit, when the pig interacts with a box, and when the pig interacts with the door.
- NPC's - There are two non playable guards that patrol the level on a set path moving back and forth. They will hit the player causing them to lose the level if they are caught.

### Credit

Art - Attribution not required under the license but the link to the art pack is:

<https://pixelfrog-assets.itch.io/kings-and-pigs>

Sounds - Most the effects are randomly created using Bfxr but the winning sound was taken from a sound pack by Coffee Bat:

<https://benjaminno.itch.io/sweet-sounds-sfx-pack>