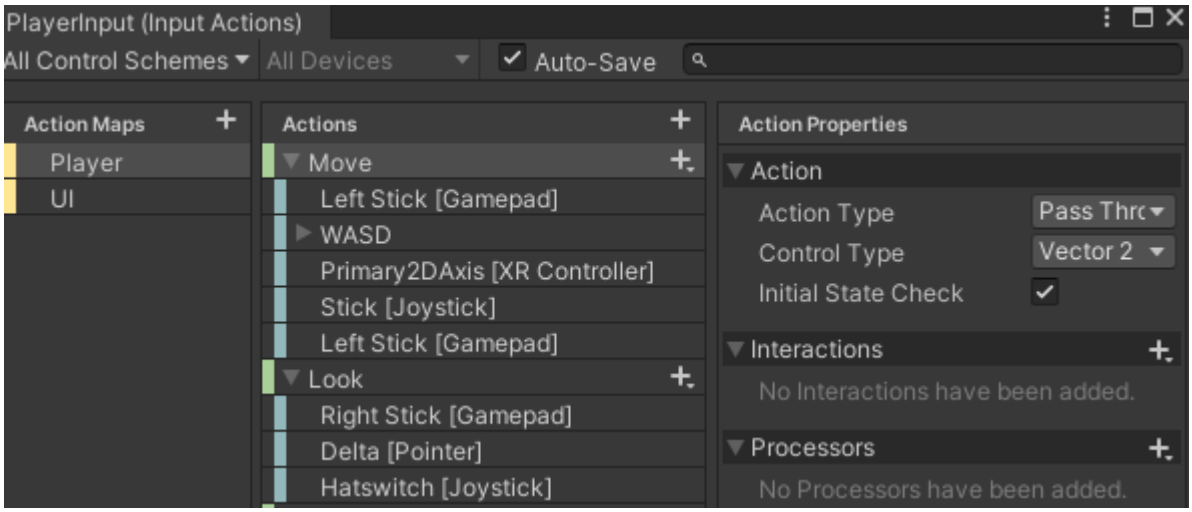
Sprint Three

Sprint Two Recap:

Sprint two was our time to both prepare for the upcoming insomnia expedition and finalise our game loops. During that sprint I made a number of additions such as destructible environmental objects and a new ranged character in response to play test feedback. The inclusion of motion capture-based animations and cutscenes were also a big highlight which came in towards the end and helped me develop my skillsets.

Lead up to Insomnia:

During this sprint, the biggest event we had happen was the insomnia gaming festival in Birmingham. The most important task I had leading up to this point was to get controller support into the game which I accomplished with Unity's New Input System. Having very rarely touched this before I knew my biggest challenge would be adapting my code to the new inputs which took the form of "Actions".



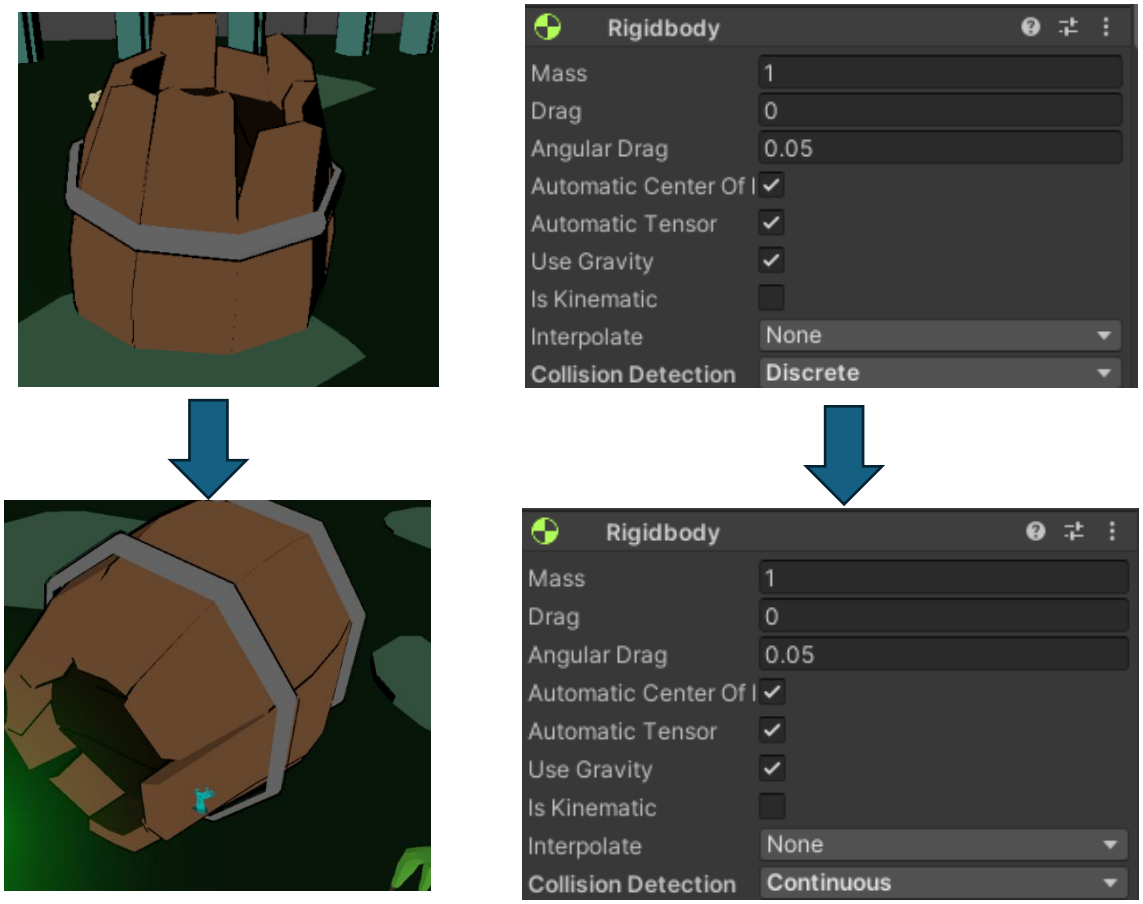
My best solution was to make use of the hundreds of tutorials online to see the basics of the New Input System and then, through experimentation, see which worked best for me. This change came in the form of testing as many different methods and seeing what would stick which led to two simple functions that helped me gain a foundation of how to get controller support to work.

```
private void Awake()
{
    PlayerControls = new PlayerInput();
}
Unity Message | 0 references
private void OnEnable()
{
    PlayerControls.Player.Fire.performed += ctx => Pickup();
    PlayerControls.Player.Fire.Enable();
    PlayerControls.Player.Cancel.performed += ctx => Dropbutton();
    PlayerControls.Player.Cancel.Enable();
}
```

During Insomnia:

During Insomnia we had a very large pool of feedback from those who played the game. Due to the variety of feedback and the forms it took, we had to make sure we cherry picked the ways in which we responded to it and would discuss as a team how we could tackle issues raised.

The first and most major concern was in relation to the physics of objects and how they interacted with the player. Players found that they could “push” objects through walls which became the first problem to tackle and, luckily, was easily solved by adjusting colliders of objects



Moving on, the next issue raised for me was the enemy AI having issues with being picked up when not fully killed by the player, this led to both graphical and gameplay issues and was my next biggest concern. In response to this, I shortened down the time the enemy is “stunned” and removed their ability to be picked up during the stun.

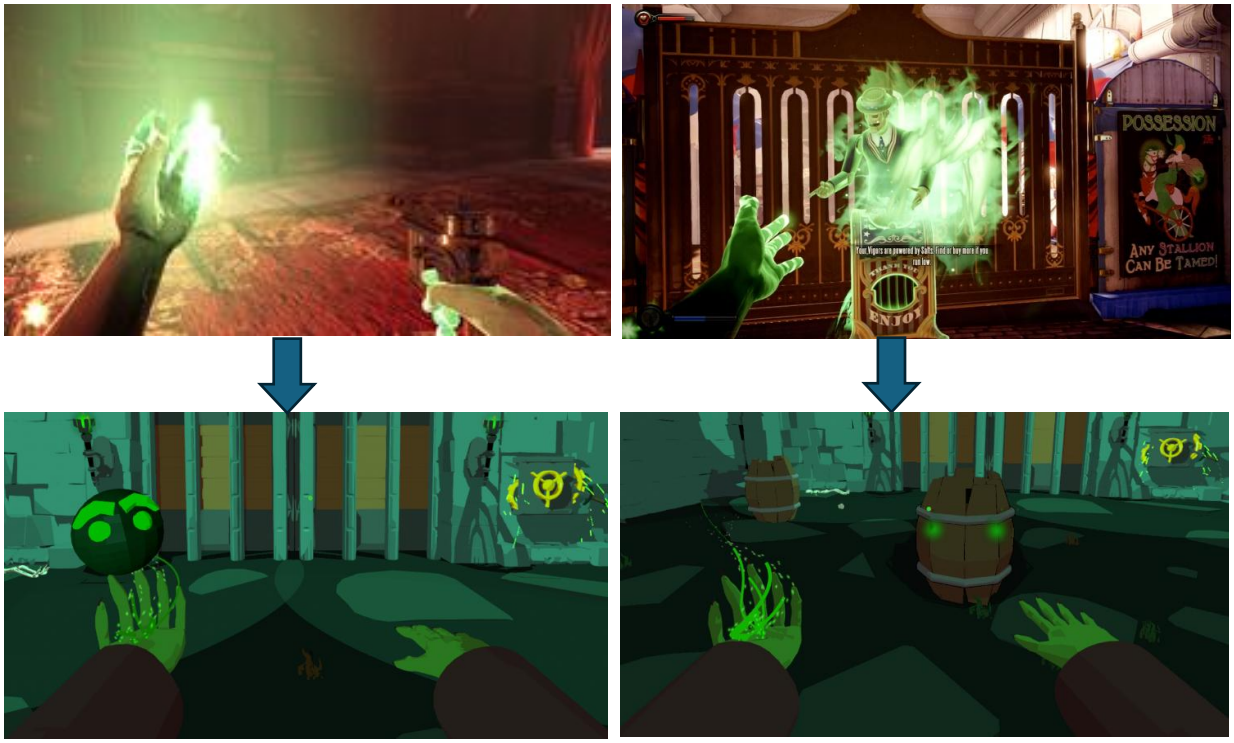
```
public float RagdollTimer = 4f;
public bool canbePicked = true;
```

```
public float RagdollTimer = 1.5f;
public bool canbePicked = false;
```

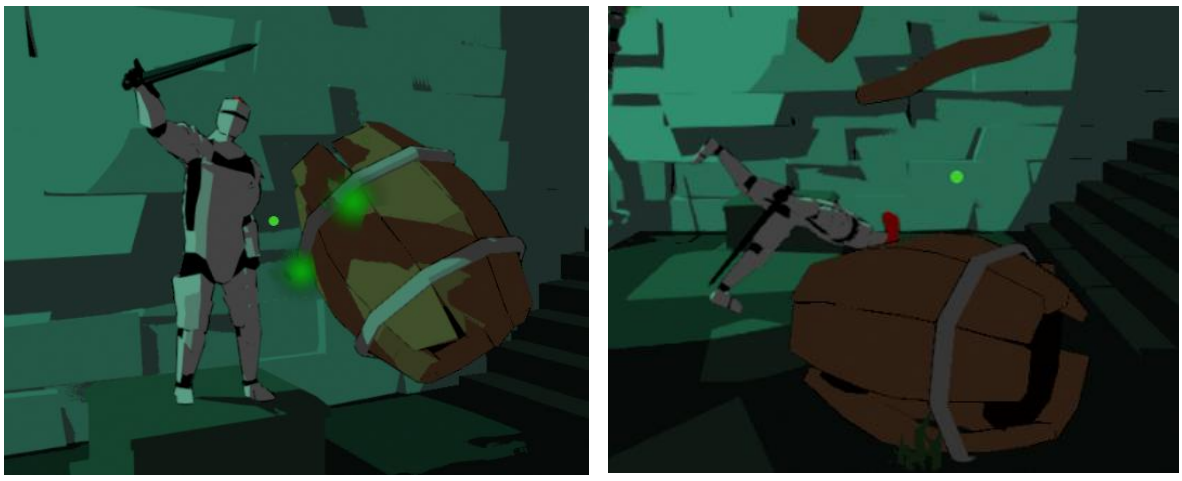
Initially, our goal was to allow enemies to be used as throwable objects whilst still alive as shown in other games like Star Wars: The Force Unleashed. However, this became an issue and after a team discussion we removed that feature until it was viable.

Post Insomnia:

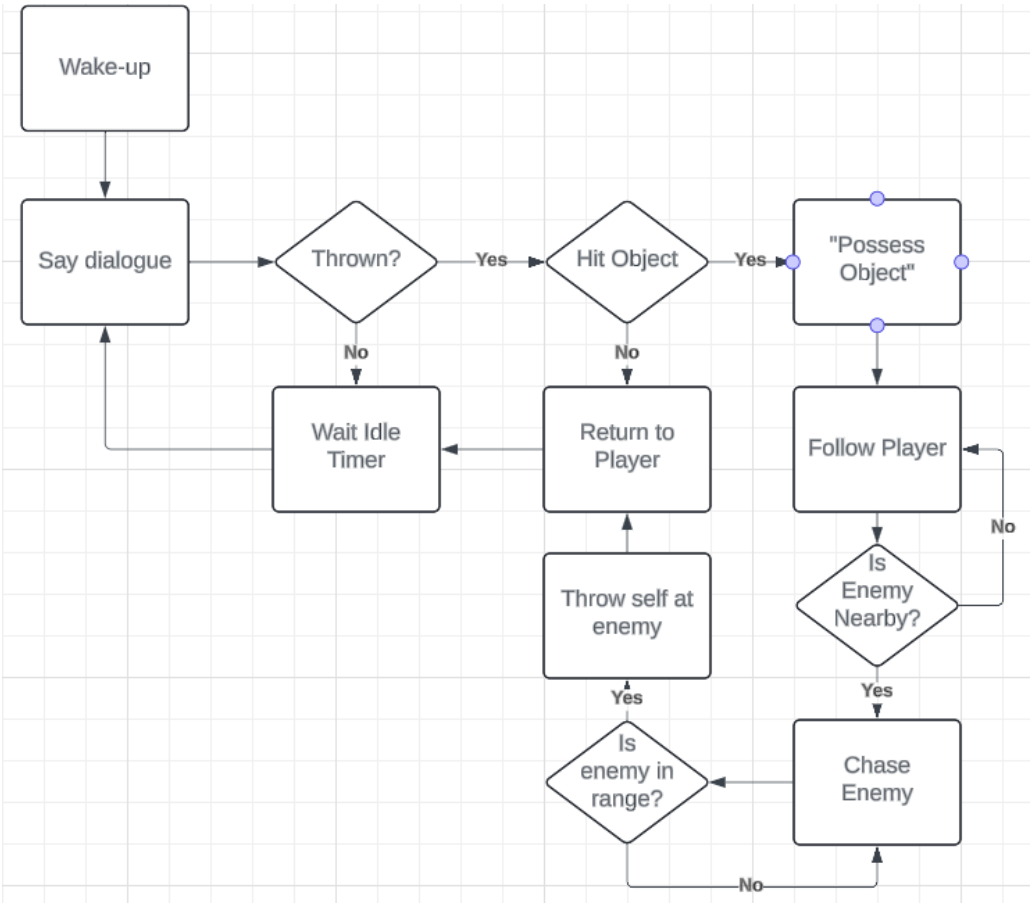
Following on from Insomnia, my next step was to take the feedback we gained and improve the experience based on it. To this extent, the biggest challenge was deciding what to do with “Resurrection” as it had been shown to be barely used and prone to breaking. In response to this, I designed a suitable and fun replacement ability dubbed “Possession”. This took heavy inspiration from Bioshock Infinites own “Possession” ability but with a twist.



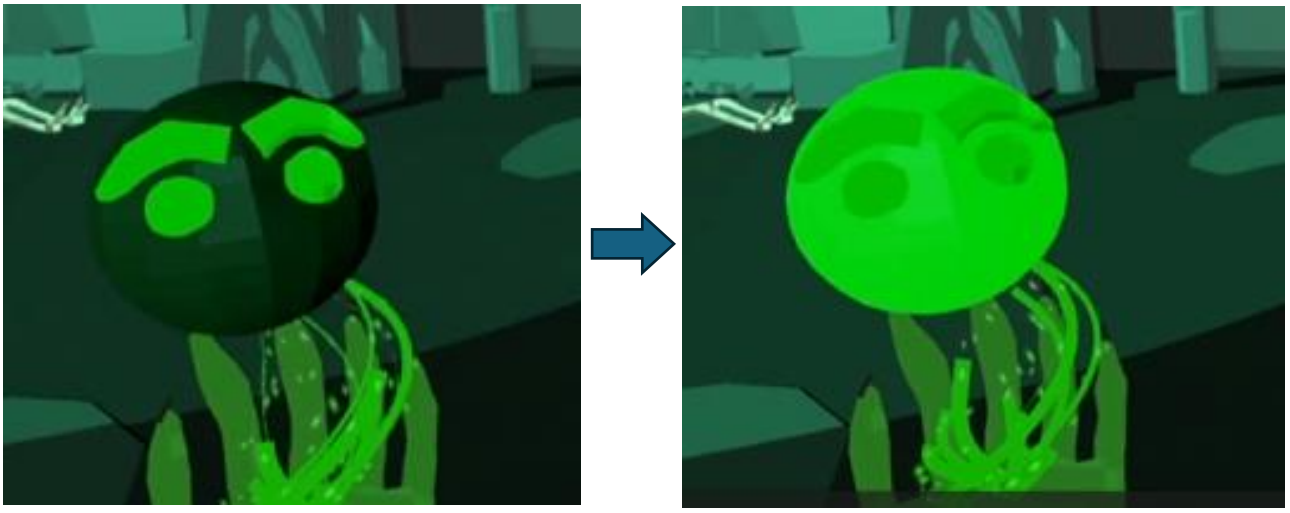
Henceforth known as “Pierre”, the little orb is now designed as a player companion who offers advice alongside combat assistance in the form of throwing himself at a foe to deal damage.



In order to best visualise Pierre as an ability, I created a flowchart diagram to determine how he should act depending on the situation.



This became even more useful as it could be expanded upon if needed and provided me with a basic idea as to how his AI would function. Adding on to this, as Pierre needed to serve as both an ability and side character, I decided to give him a glowing aura as he spoke for accessibility.



Final Touch Ups

Leading up to the end of the sprint, one of my last challenges to tackle was improving upon our games existing shader. The main issue we had was a lack of outlining for objects of importance which played into our comic book theme and as such I used Hellboy Web of Wyrd as a reference point.

After this, I used various calculations such as finding the “normal” of each face on an object and then created some customizable variables to define colour and size of the outline.