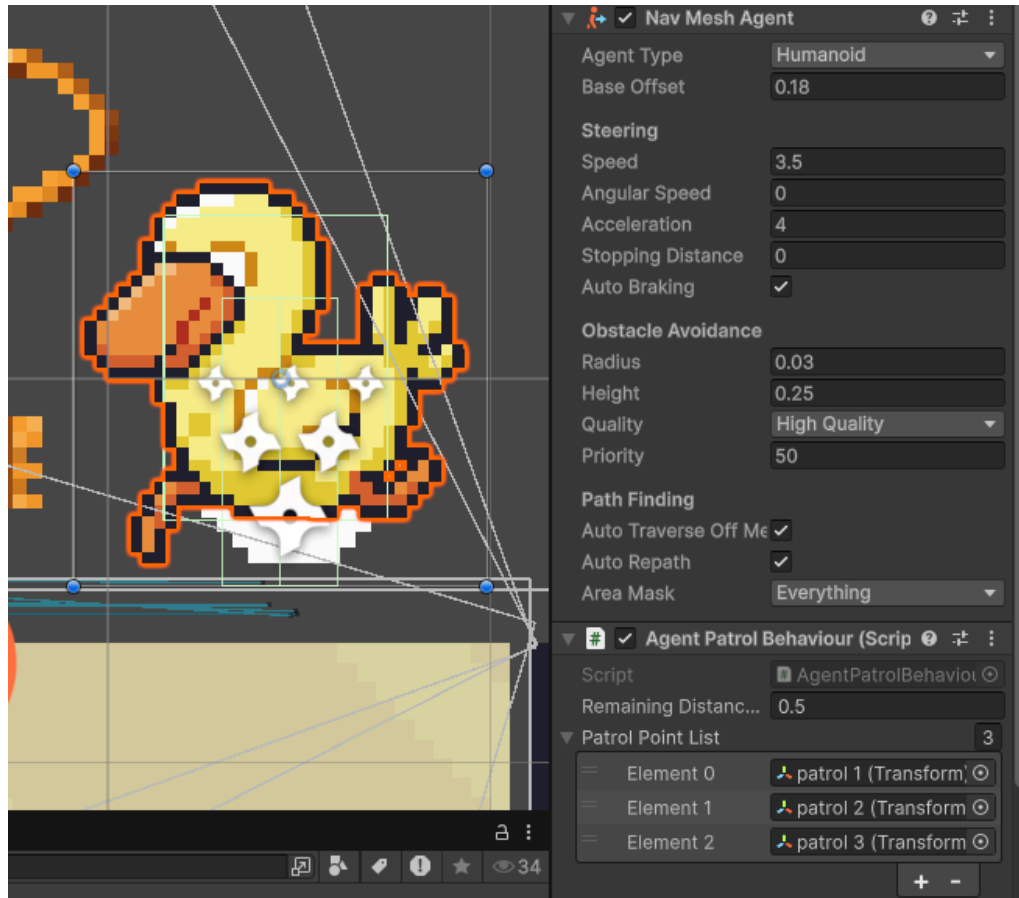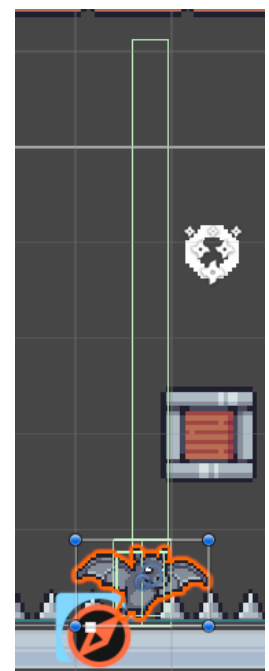I really struggled with the navmesh at first, but I think I actually did something I think is pretty decent this time around. The first enemy added is an angry goose. This enemy is simply just a patrolling enemy that wanders with checkpoints back and forth. I also managed to get a nice delay somehow between reaching a checkpoint and heading for the next one, and I'm honestly not sure how.
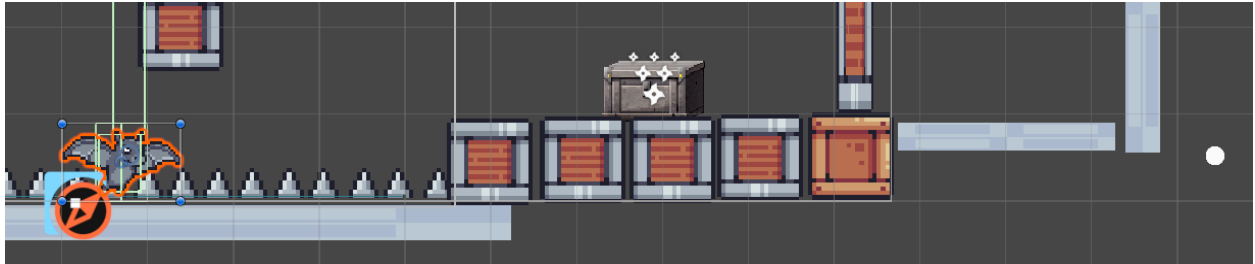

I wanted this enemy to jump to a box and back during its patrol, and my solution to this with the available tools at the time was to simply give it a navmesh path in a simple arc to and from the box.
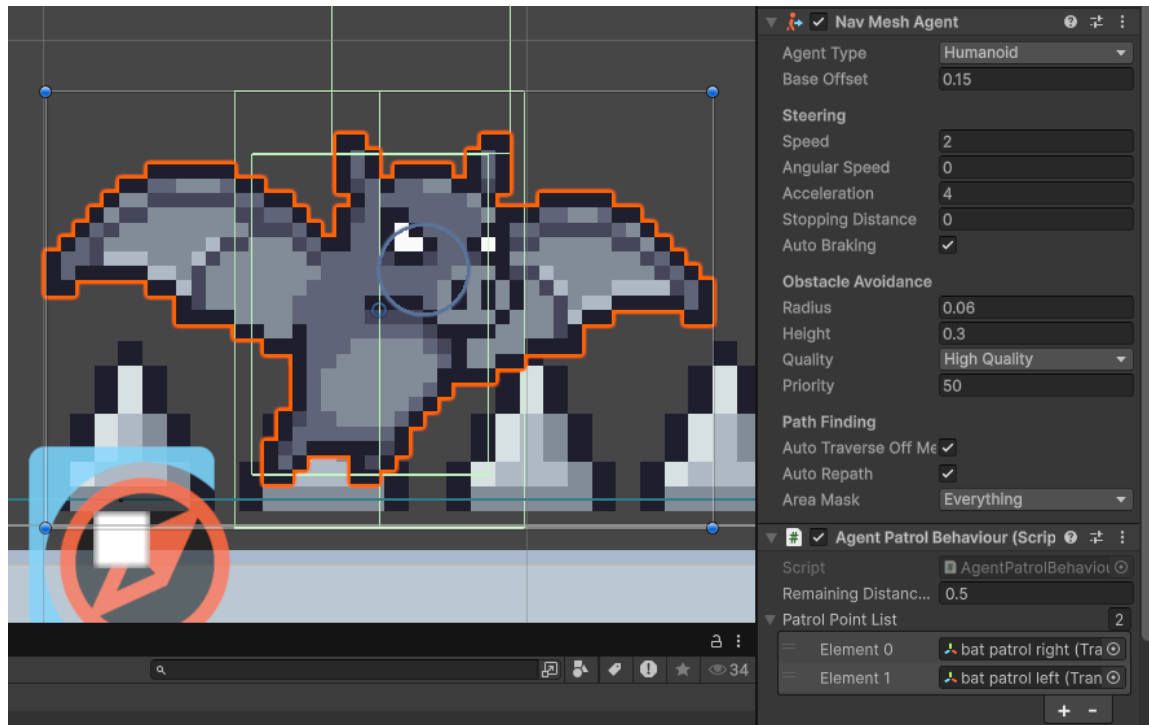
Next I made a bat, but wanted to do something a bit more special this time around, so I had the idea to make an enemy that patrols below, and then jumps to attack the player when the player passes overhead. The way I ended up achieving this is again with a patrol pattern back and forth in the spikes below, with a large hitbox that trails behind the bat above his head. When the player interacts with this hitbox the bat will stop patrolling for a moment and jump up towards the player, before landing in the spikes and resuming its patrol. I used a translation animation to get the jump to work, but I discovered the animator and nav agent conflicted. So whenever the bat is in its jump state, it temporarily disables the nav agent and activates the animator. When landing the process is reversed so the bat is able to patrol again.
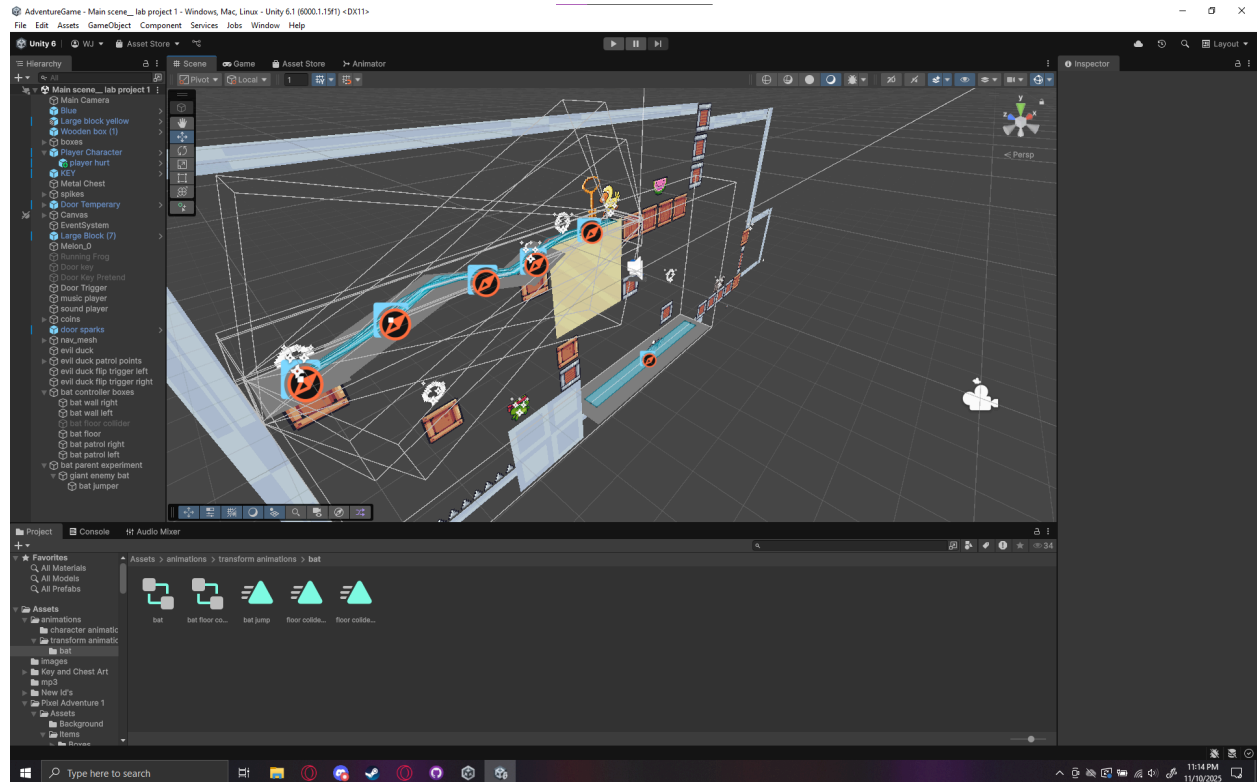
I also ran into an error with the translation animation, since I was assuming I was allowed to only keyframe one translation axis, but it requires all three. So to allow the bat to jump up at any point side to side in its patrol, I ended up parenting the bat to an object just out of bounds that uses translation animation to go up and down, since it will never translate side to side.

This way the bat is allowed to swap to jump mode and move only up and down at any point during its patrol without snapping back to its original position.
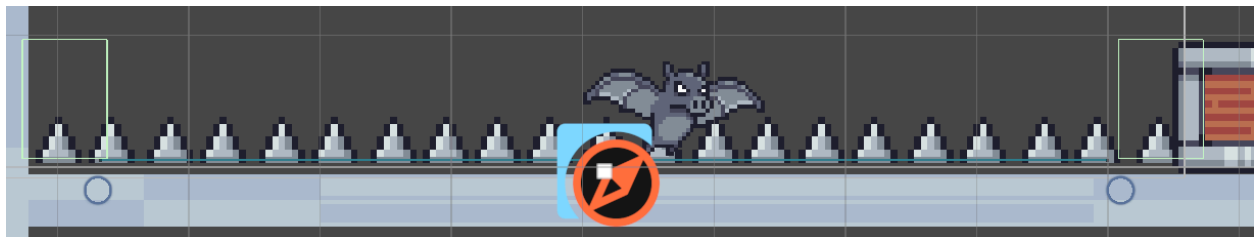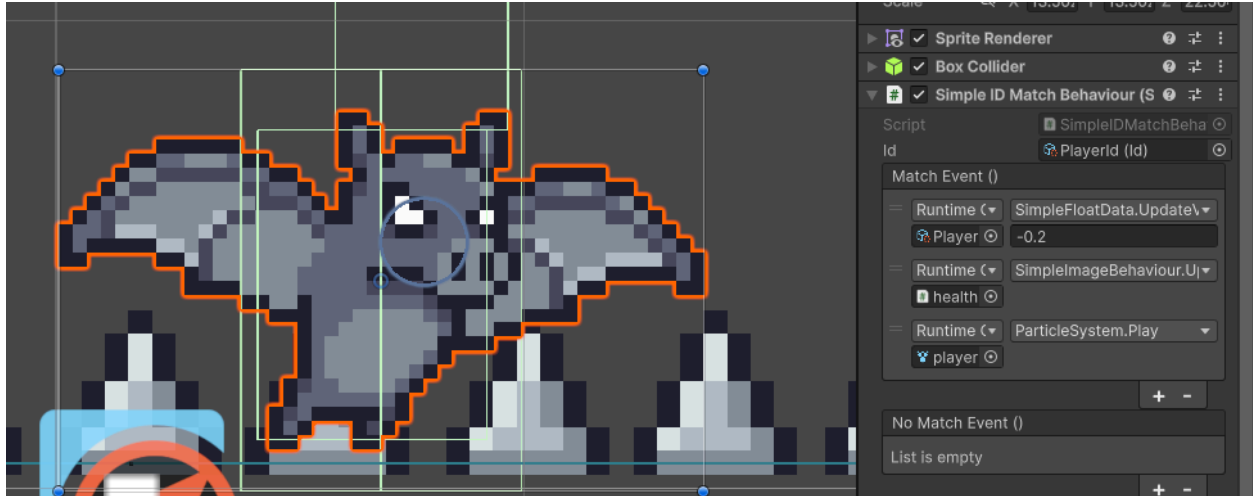
Here is an image of the bat jumping to meet the player

Here is an angled view of all the navmesh baked and working.

For both of the enemies to turn around at the end of their patrols, I simply used hitboxes at either end to turn them around when they reach them.

Both enemies are also set up to damage and update player health.

I was originally planning on making a sprite for the spikes monster, but both ran out of time and didn't realise the software I wanted to use wasn't free.

Here is my Github Link: https://github.com/Squishitron/Essentials

(also I have no idea why the goose tips over during runtime, but I'm too afraid to touch it)