

# DEVBLOG – 13/11/2025

## Custom Enemy Creation and Animation Integration

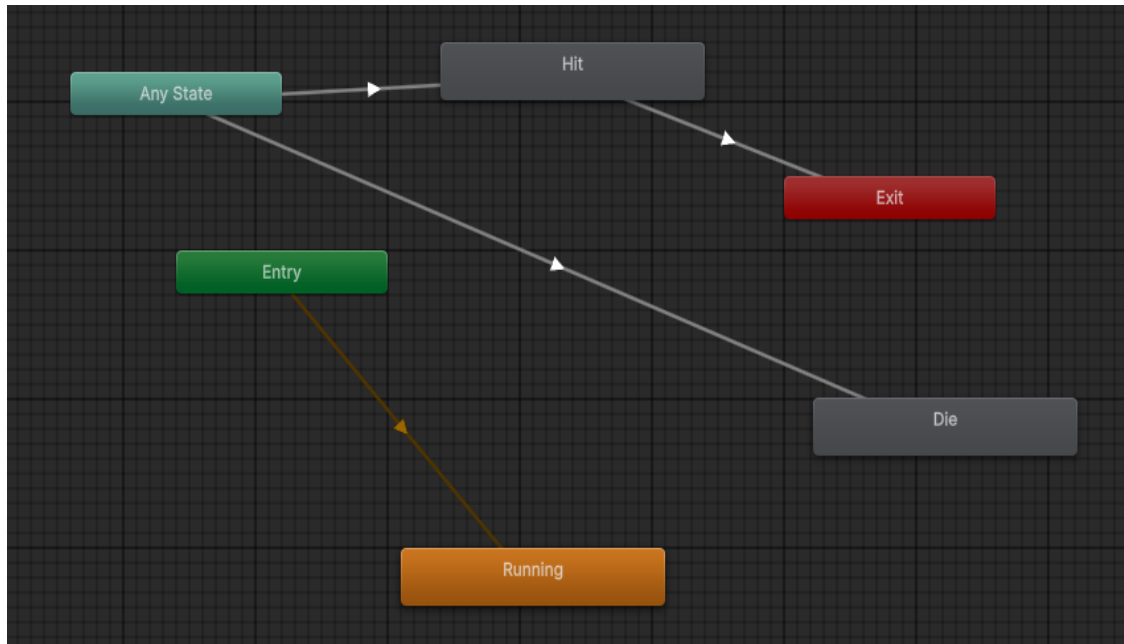
This week marked a major advancement as we introduced our first custom enemy model produced using Meshy.ai. The generation pipeline provided us with a fully textured 3D model, complete with an autorigged skeleton suitable for animation. Using this asset significantly accelerated development, eliminating the need for manual rigging and saving hours of preparation time.

Below is the generated model prior to Unity import:



## Animator Controller Development

After preparing the animations (run, hit, and death), we imported them into Unity and constructed a full animator state machine. We refined state transitions using exit time conditions, triggers, and blend parameters to ensure responsiveness. Debugging the animator using Unity's live inspector allowed us to verify state propagation, prevent looping errors, and confirm that the animator behaved deterministically under load conditions.



### Audio Integration and Behaviour Corrections

The gun was equipped with firing sound effects, and each round now begins with an audio cue to signal wave initiation. While testing, we identified that the zombie would sometimes step onto the player's head due to an incorrect stopping distance. Using debug spheres and movement vector visualization, we recalculated navmesh radii and adjusted the attack threshold, resulting in consistent enemy attack behaviour.