

GAME250: Technical Game Development (Spring 2023)

Lab 05

Objectives

By the end of this exercise, you'll be able to:

- Procedurally generate actors
- Use loops
- Use gates

Background

We'll be making a game where bushes are randomly created throughout the level that the player must walk over and cut down.

Instructions

Create a new project using the Third Person template with Scalable 3D or 2D and With Starter Content.

We will be creating two new blueprints: bush and bush generator. We will also be modifying the Third Person Character blueprint.

Bush Blueprint

Create a new blueprint and add the following components:

- Bush (Static Mesh)
- Hint Text (Text Render)
- Interact Collision (Collision Box)

Set the Hint Text's text (found in the Details tab) to tell the player to press E to cut down the bushes.

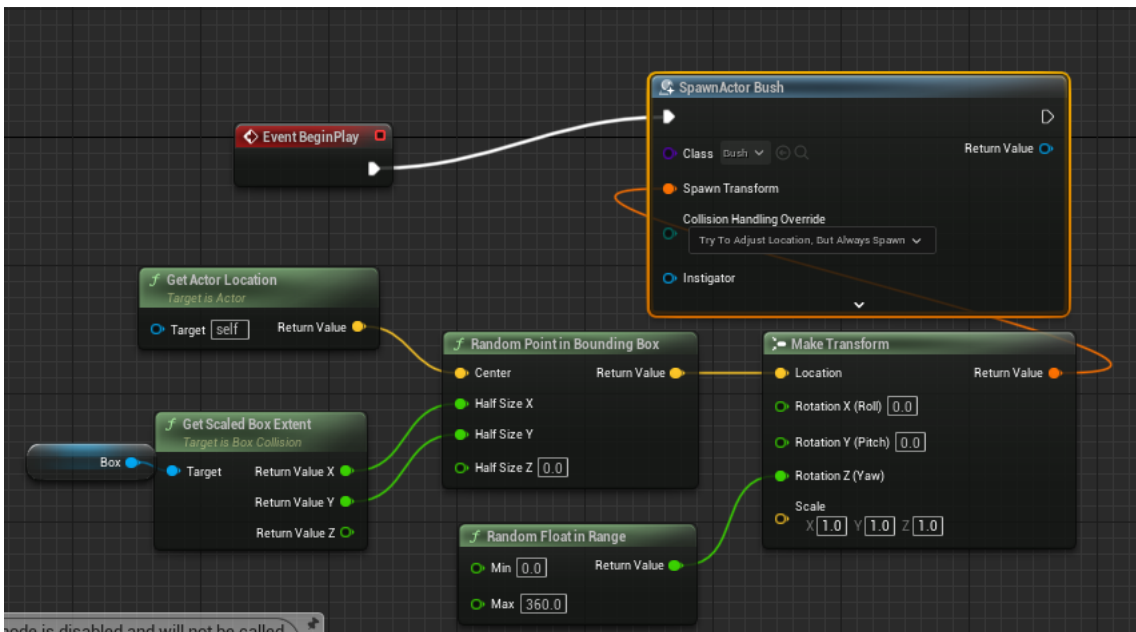
You will be creating the blueprint for the bush in the last section. For now, it can be empty.

Bush Generator Blueprint

Create a new blueprint and set the root component to be a Collision Box. This will be the region in which bushes are randomly generated.

Create an integer variable named NumBushes to choose how many bushes to generate.

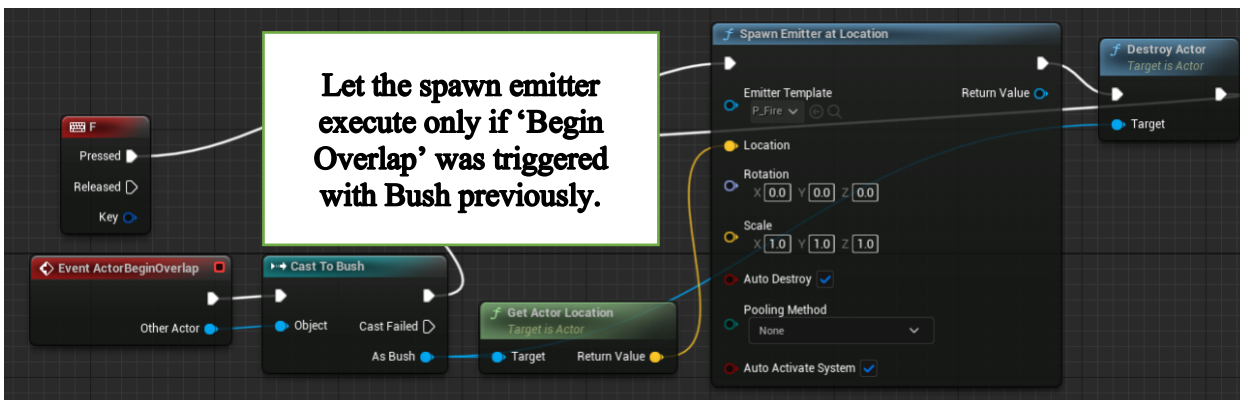
Use the following blueprint as a starting point:



The Get Scaled Box Extent and Random Point in Bounding Box nodes are used to choose a random location within the region to spawn each bush.

Third Person Character Blueprint

The following blueprint is used to allow the player to press E to cut down a bush. Identify which control execution block will accomplish the idea specified in the box.



Now It's Your Turn!

Generate as many bushes as the NumBushes variable at random locations in the Interact Collision box.

Figure out the block that goes in the Third Person Character Blueprint.

Submission

Take a screenshot of the Bush and Third Person Character blueprint. Submit the screenshot(s) to Canvas before the deadline.