Quick Start Guide

H3B7 edited this page now · 13 revisions

View latest online version

Anatomy of a Recipe

<u>Recipes</u> and their components (<u>Instructions</u>, <u>Requirements</u>, etc) are derived from ScriptableObjects.

A recipe runs a set of <u>Instructions</u>. Some instructions are general others require a target GameObject via an Instruction such as <u>Process Prefabs</u>.

Elements are color coded to indicate their function:

- Recipes
- Requirements
- General Instructions
- GameObject Instructions
- Mesh Instructions
- Texture Operations

All these elements are created via Unity's Create menu.

All Elements share some common features:

- **Lock:** An icon in the top right of the inspector window. Use this to enable of disable editing on the Element. There is a label to indicate the locked status.
- **Notes:** Use the Notes field to record any design decisions or the reasoning behind some settings.
- **Lists:** These have row numbers and are usually reorderable (When unlocked). Drag the row number to reorder.
- **Tools** Some Elements have tools at the bottom of their Inspector window. These are usually only available when the Element is unlocked.

A Simple Recipe

This Recipe will separate the Leaves and Trunk from a tree Model. The result will be saved with a new prefab.

- 1. This Recipe will use the Free asset <u>POLYGON Starter Pack</u> by Synty Studios. Start by ensuring it is installed.
- 2. Create a folder called A Simple Recipe
- 3. Create a Recipe via the Create menu Recipes/Recipe
- 4. Create a Requirement via the Create menu Recipes/Requirements/Asset
- 5. Create a <u>Process Prefab Instruction</u> via the Create menu Recipes/Instructions/Process Prefabs
- 6. Create a <u>Process Meshes Instruction</u> via the Create menu Recipes/GameObjects/Process Meshes
- 7. Create a Save Prefab Instruction via the Create menu Recipes/GameObjects/SaveAs
- 8. Create a <u>Spatial SubMesh Extractor</u> via the Create menu Recipes/Meshes/ Spatial Extractor.
- 9. Create a Merge Set via the Create menu Recipes/Meshes/Merge Set.
- 10. Open the Recipe from step 3.
- 11. Set the Title to: A Simple Recipe
- 12. Set Description to: Separate Leaves and Trunk
- 13. Set the Output Path to Assets/Output/A Simple Recipe
- 14. Add a Requirement slot. Drag and Drop the Requirement from 4. This must be satisfied before the Recipe will build.
- 15. Add an Instruction slot. Drag and Drop the Instruction from 5.
- 16. Open the Requirement from step 4. This requirement will check if the Test Path exists.
- 17. Set the Description as: POLYGON Starter Pack
- 18. Set the Test Path as: Assets/PolygonStarter
- 19. Set the URL as: https://assetstore.unity.com/packages/3d/props/polygon-starter-pack-156819 This provides a way of resolving the requirement if not met.
- 20. Open the <u>Process Prefab Instruction</u> from step 4. This Instruction will instantiate the referenced prefab into the scene and run the Instructions.
- 21. Add a Prefab slot. Drag and Drop the prefab Assets/PolygonStarter/Prefabs/SM_Generic_Tree_01
- 22. Add 2 Instruction Slots. Drag and Drop the Instructions from steps 6 and 7 in that order.
- 23. Open the <u>Process Meshes Instruction</u> from step 6. This will process all meshes rendered by the instantiated GameObject.
- 24. Set Default Sub Mesh Mode to: Extract Mesh.
- 25. Add 2 Instruction slots. Drag and Drop the Mesh Instructions from steps 8 and 9 in that order.
- 26. Open the Process Prefab Instruction from step 6.
- 27. Open the <u>Spatial Submesh Extractor</u> from step 8. This will split the mesh based on the spatial separation of its vertices. Triangle vertices within the distance threshold are

- grouped together. The effect here is to separate the Leaves from the Trunk. No Changes are needed.
- 28. Open the Merge Set from step 9.
- 29. Add 2 Merges. These will effectively rename the sub mesh 000 to Leaves and 001 to Trunk. The Match Name field supports <u>regular expressions</u> when prefixed with #.
- 30. Set the Merge 000 to Name: Leaves Match Name: 000.
- 31. Set the Merge 000 to Name: Trunk Match Name: 001.
- 32. Open the <u>Save Prefab As Instruction</u> from step 7. This will save the modified GameObject as a new Prefab. No Changes are needed.
- 33. Open the <u>Launcher</u> via the menu Tools/Recipes/Launcher
- 34. Find and expand your new A Simple Recipe
- 35. Build the Recipe.