

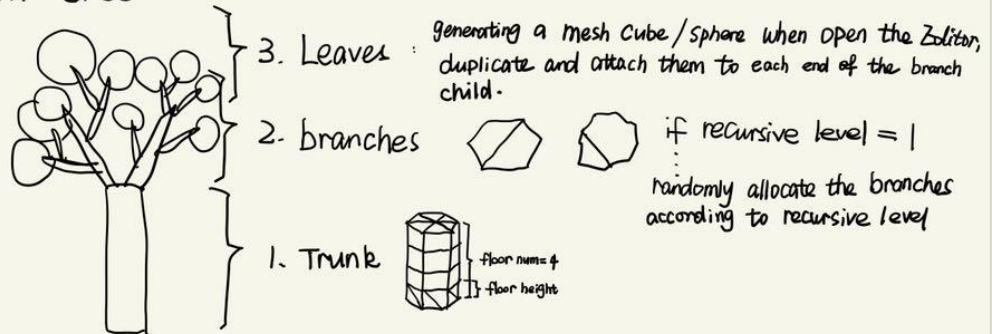
PROCEDURE TREE GENERATOR

Design work flow

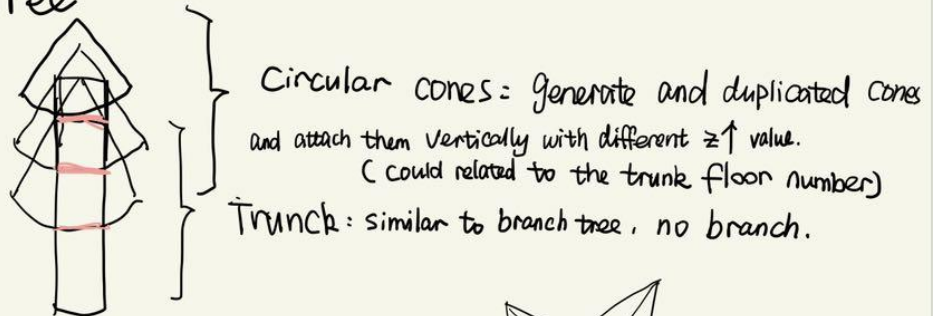
Source Code: [mzhai-UofC/Unity_Procedure_Tree_Generator \(github.com\)](https://github.com/mzhai-UofC/Unity_Procedure_Tree_Generator)

Initial idea: an editor tool that can separately generate random branch tree, pine tree, and coconut trees for different scenes.

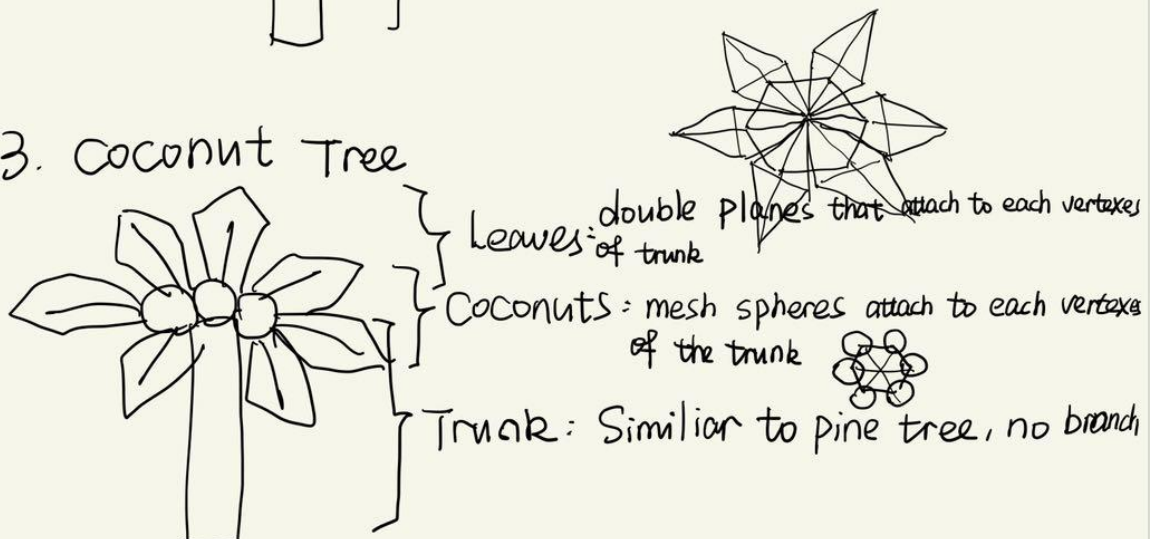
1. branch tree

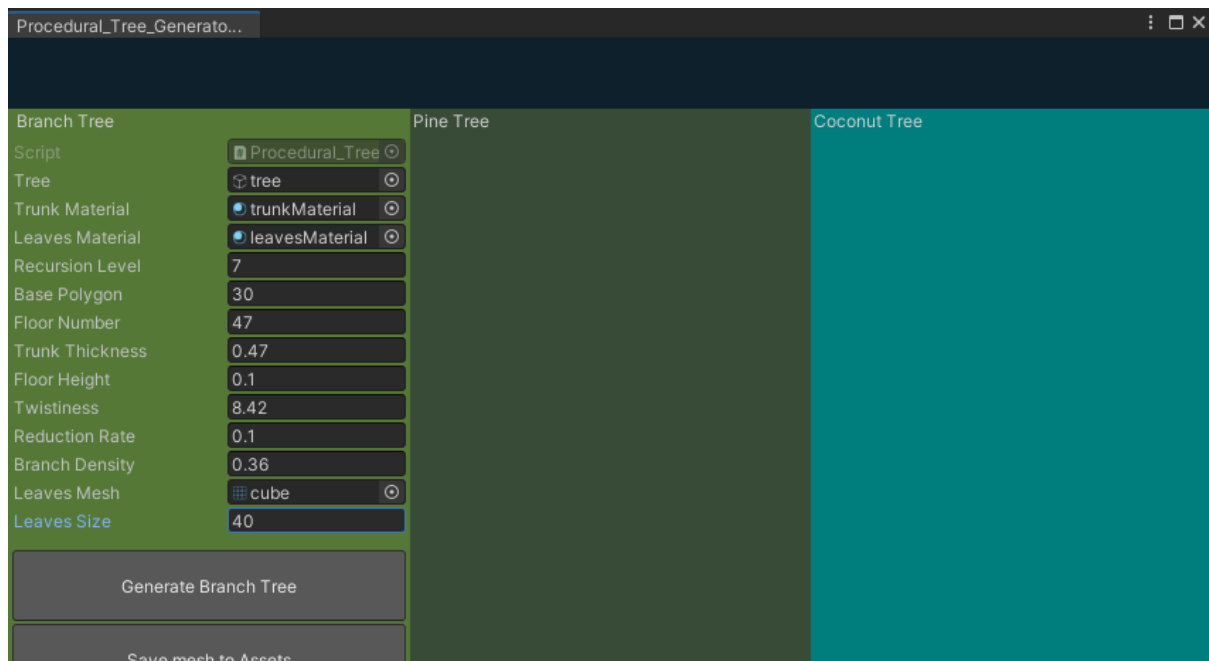


2. pine Tree



3. coconut Tree





Due to the time limit, only the branch tree generator worked.

Because I cannot use any external meshes from fbx, obj or any file formats, and primitives either. So all the mat materials, and the mesh cube used for generating leaves are created by scripts.

When open the window, an asset called cube will be generated and saved in the asset folder. Just make sure to select that cube.asset for the `_leavesMesh` param in UI, Then click the “generate tree” button should work.

References:

- create a cube in mesh: https://blog.csdn.net/sinat_28962939/article/details/103128790
- Tree Procedural Generation - How does it work ? Unity3D - YouTube
https://www.youtube.com/watch?v=cHxR_wtG5cw