MeshBuilder

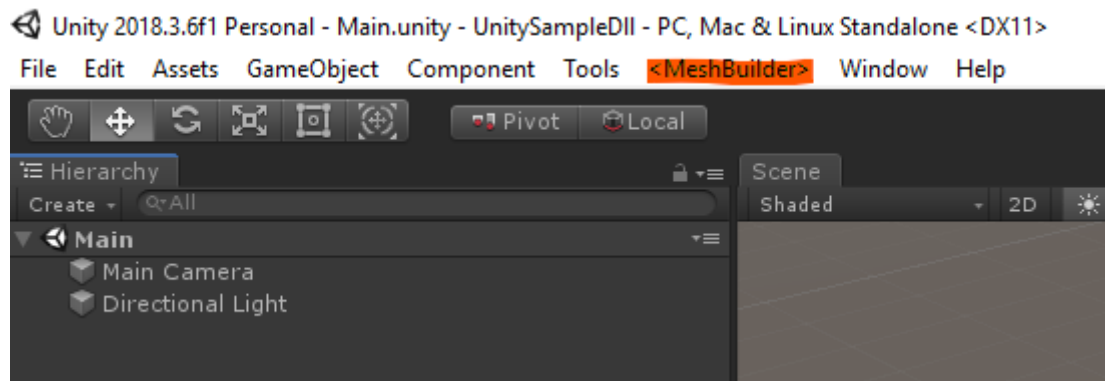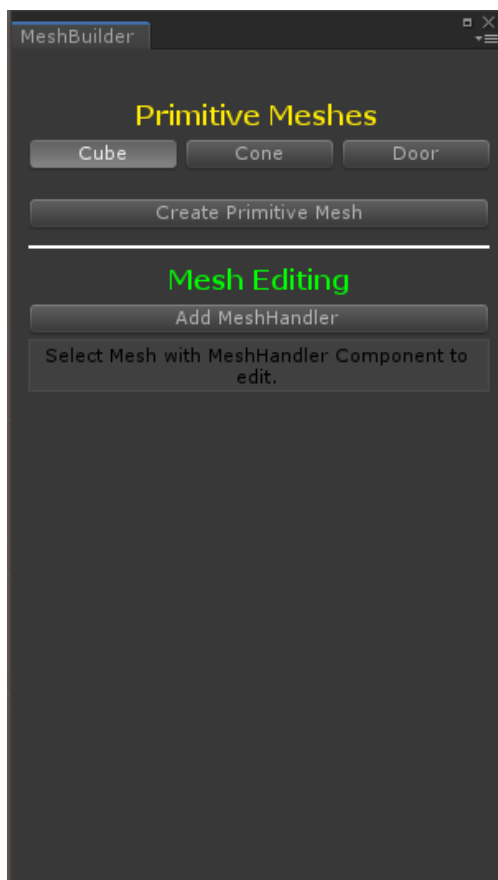
User Guide

- ## 1. Open MeshBuilder tool

Select the highlighted button and press on Mesh Editor.
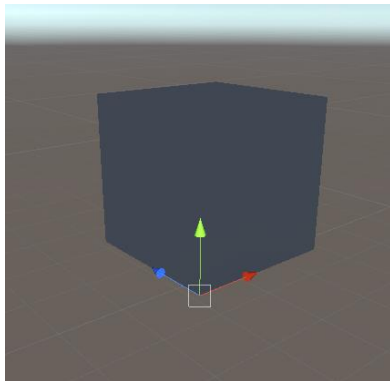

- ## 2. MeshBuilder Window Overview

You will be presented with a window with two sections.

Primitives Meshes is a section in which the user can select and create a primitive available mesh.

Mesh Editing is a section in which the user can add a MeshHandler component in order to edit meshes.

- ## 3. Primitive Meshes

Let's select cube and press Create Primitive Mesh.

A cube has been created in front of our Scene Camera, this cube has already a MeshHandler component. We can also create other primitives as Cones or Doors but we'll go with the current one as an example. (Primitives have by default vertex color shaders.)

- ## 4. Mesh Editing Overview

After creating our cube, it instantly selects it, allowing the tool to display further information.
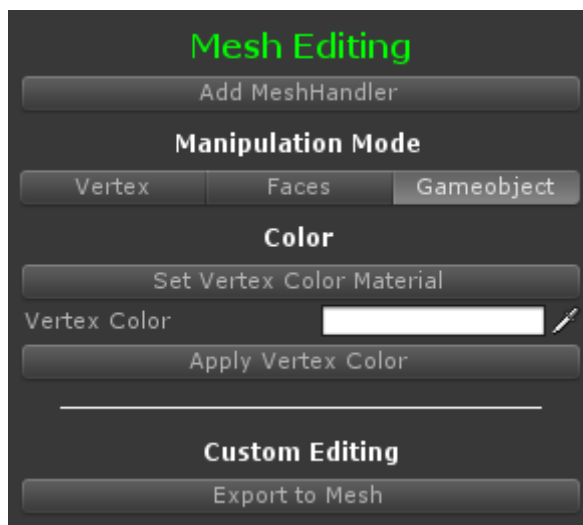

Three different manipulation modes are available to the user which we will explain further ahead.

Color section in which the user will be able to color vertices depending on which selection mode is on.
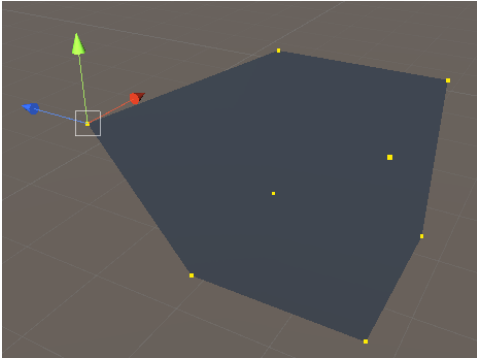
Finally, a custom editing section that also depends on the selection mode.
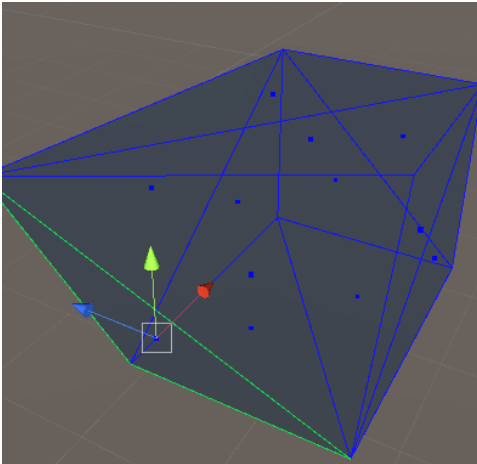
- ## 5. Manipulation Mode

The default mode is Gameobject, the user will be only able to transform the Gameobject.
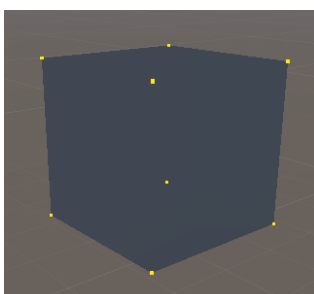
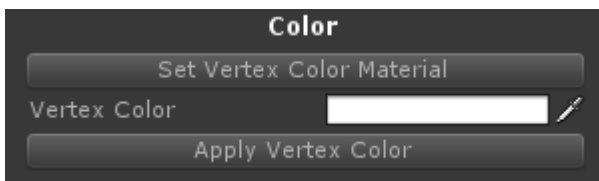The Vertex mode is able to display every vertex of the selected Mesh.

The user can move vertices along the different axis modifying the mesh structure.

The face mode is able to display every edge and face of the mesh along with small handles that the user is able to select and move which results in moving the entire selected face of the mesh.

- 6. Color mode

The user is able to apply a vertex color material into the Mesh Renderer which enables vertex coloring.

As primitive meshes already come with that material, we can go straight ahead and start coloring it. We can select a color and apply it to the selected element, if it's a vertex then it will be colored, if it's a face then the entire face will be colored and if it's a gameobject then every vertex will be of that color.
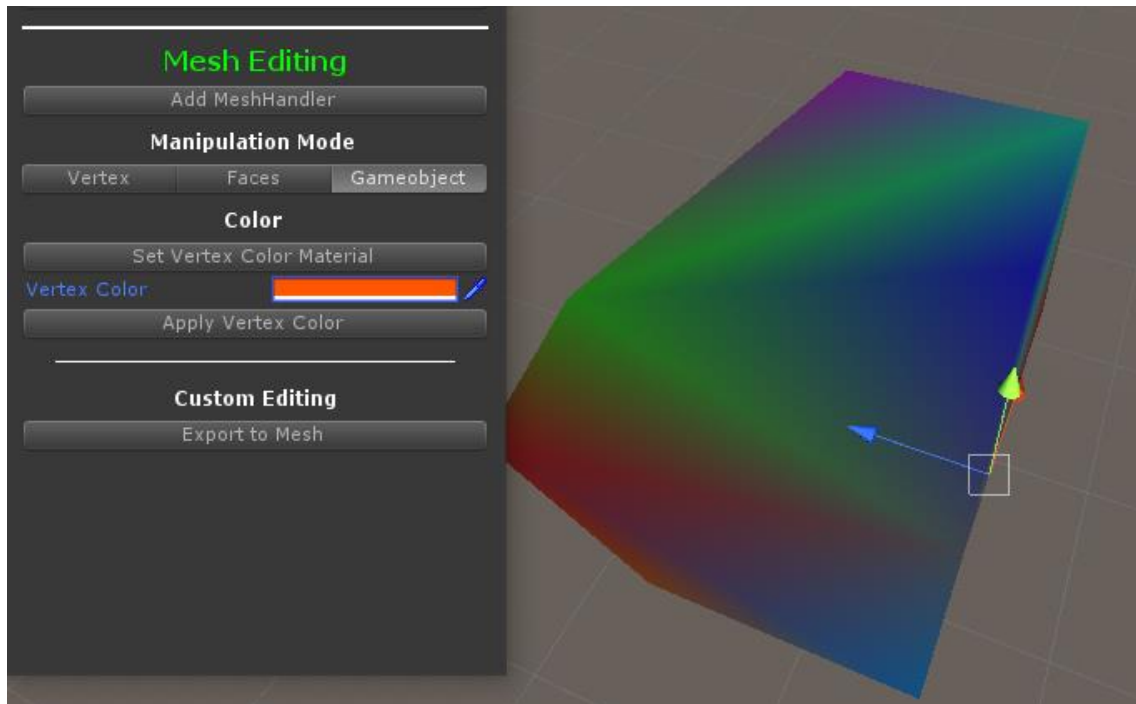
- 7. Extruding Faces
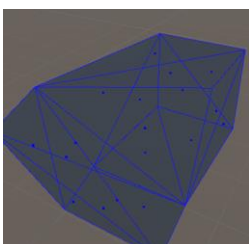
We are able to select a face and press Extrude to create more geometry and push the selected face into it's normal. This is the only advanced editing action available.

- ## 8. Exporting Mesh

After editing we can select the Gameobject mode and be presented with an Export button.


This will create a Mesh object which will be saved on the Assets folder. This mesh can be used later for whatever purposes the user has. If the mesh is dragged into the scene it will be of purple color, but that only means it needs a material, after applying the Vertex color material it will display the correct colors.
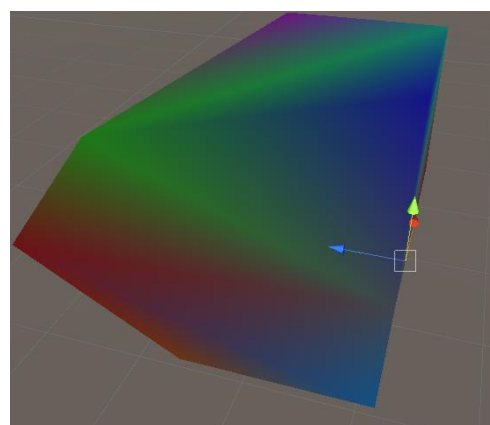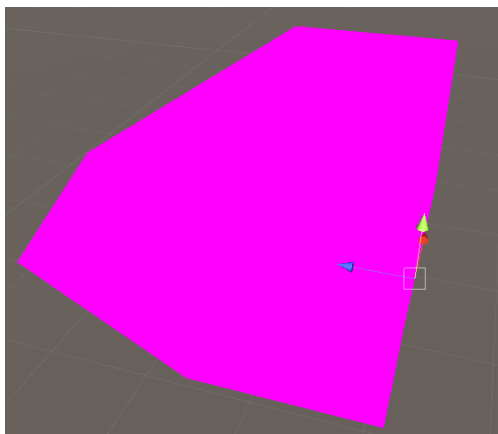
- <u>9. Editing different Meshes</u>

We can also edit other Meshes using the button AddMeshHandler which is able to add the needed component into the selected Gameobject.
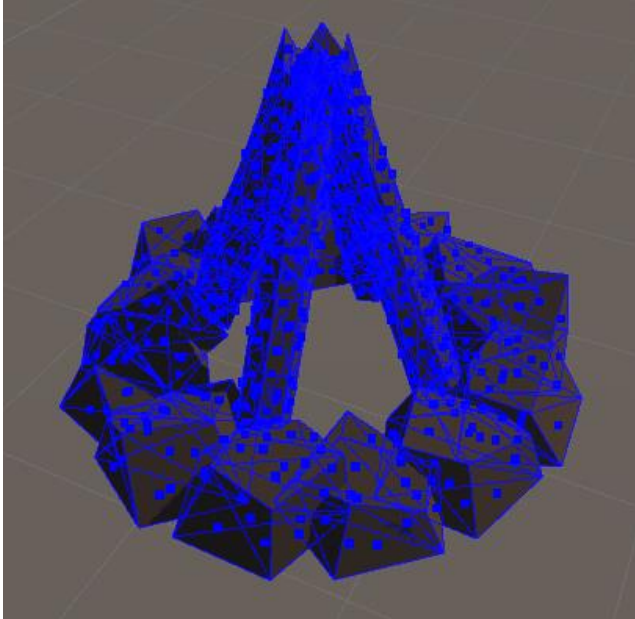
This allows the user to edit every possible mesh. You can try modifying unity's default meshes.

Although the more complexity the worse it performs since it has to draw every vertex or face of the selected mesh.

Thanks for reading