Low Poly Mesh Generator API is accessible:

- (c#) `using VacuumShaders.LowPolyMeshGenerator;`
- (java) `import VacuumShaders.LowPolyMeshGenerator;`

Simple and Skinned mesh conversion

```
static public Mesh GenerateLowPolyMesh(Renderer _renderer, out CONVERTION_INFO[] _buildInfo,
                                       out string[] _buildInfoFull, LowPolyMeshOptions _data)
```

_renderer – active gameobject renderer (must contain mesh and material components).

_buildInfo – this variable will contain conversion info.

_buildInfoFull – this variable will contain conversion info with detail explanation.

_data – `LowPolyMeshOptions` class object contain info for generating faceted mesh.

Note:

Textures and Models need to be readable.
Unity readable texture formats are - ARGB32, RGBA32, BGRA32, RGB24, Alpha8 and DXT.

If conversion fails, returned mesh will be null, _buildInfo and _buildInfoFull will contain detail info.

Simple Mesh combiner

```
static public COMBINE_INFO CombineMeshes(Transform _parent, out Mesh _combinedMesh)
```

Combines child meshes in _parent and returns result in _combineMesh.

`COMBINE_INFO` contains info about combine (success or fail).

```
static public COMBINE_INFO CanBeMeshesCombined(Transform _parent)
```

Checks if meshes in _parent can be combined.

```
static public Mesh GenerateLowPolyMeshesAndThenCombine(Transform _parent, out CONVERTION_INFO[]
                                                       _buildInfo, out string[] _buildInfoFull,
                                                       LowPolyMeshOptions _data)
```

Same function as `GenerateLowPolyMesh()` but with combining meshes of _paranet.

Terrain Conversion

```
static public Mesh[] GenerateLowPolyTerrain(Terrain _terrain, out CONVERTION_INFO[] _buildInfo,
                                            out string[] _buildInfoFull, LowPolyTerrainOptions _data)
```

Function returns converted terrain as mesh array.

_terrain – active terrain object.

_buildInfo – this variable will contain conversion info.

_buildInfoFull – this variable will contain conversion info with detail explanation.

_data – `LowPolyTerrainOptions` class object contain info for generating facetd mesh.

```
public class LowPolyMeshOptions
        {
            //Enum//////////////////////////////////////////////////////////////////
            public enum SAMPLING_TYPE { Hard, Smooth }
            public enum ALPHA { MainTextureAlpha, MainTextureAlphaInvert, One, Zero,
                                SeconTextureAlpha, SeconTextureAlphaInvert, BlendAdd,
                                BlendMultiply, BlendDecal, VertexAlpha, VertexAlphaInvert
                              }
            public enum BLEND_TYPE { Add, Multiply, Decal, Detail, MainTextureAlpha,
                                     MainTextureAlphaInvert, SecondTextureAlpha,
                                     SecondTextureAlphaInvert, VertexColorAlpha,
                                     VertexColorAlphaInvert
                                   }

            //Variables/////////////////////////////////////////////////////////////
            public SAMPLING_TYPE samplingType;

            public string texture_1_Name;
            public bool texture_1_useMipmap;
            [Range(0.0f, 1.0f)]
            public float texture_1_mipmapBias;
            public bool texture_1_useBlur;
            [Range(1, 64)]
            public int texture_1_blurAmount;
            [Range(0, 5)]
            public int texture_1_blurDownSample;

            public string texture_2_Name;
            public BLEND_TYPE texture_2_blendType;
            public bool texture_2_useMipmap;
            [Range(0.0f, 1.0f)]
            public float texture_2_mipmapBias;
            public bool texture_2_useBlur;
            [Range(1, 64)]
            public int texture_2_blurAmount;
            [Range(0, 5)]
            public int texture_2_blurDownSample;

            public string colorName;

            public bool includeVertexColor;
            public ALPHA alpha;
            public bool mergeSubMaterials;
            public bool combineMeshes;
        }
```

```
public class LowPolyTerrainOptions
        {
            //Enum////////////////////////////////////////////////////////////
            public enum SAMPLING_TYPE { Hard, Smooth }
            public enum ALPHA { TextureAlpha, TextureAlphaInvert, One, Zero }

            //Variables///////////////////////////////////////////////////////
            public int chunkCountHorizontal;
            public int chunkCountVertical;
            public int vertexCountHorizontal;
            public int vertexCountVertical;

            public SAMPLING_TYPE samplingType;

            public bool useMipmap;
            [Range(0.0f, 1.0f)]
            public float mipmapBias;
            public bool useBlur;
            [Range(1, 64)]
            public int blurAmount;
            [Range(0, 5)]
            public int blurDownSample;

            public ALPHA alpha;
        }
```

Check run-time example scenes.