

```
1 using System;
2 using UnityEngine;
3
4 /// <summary>
5 /// MeshSerializer serves as a wrapper class for containing all relevant
6 /// mesh and transform values for serialization and deserialization of wires.
7 /// </summary>
8 [Serializable]
9 public class MeshSerializer
10 {
11     [SerializeField]
12     int[] triangles;
13
14     [SerializeField]
15     Vector2[] uv;
16
17     [SerializeField]
18     Vector3 position, rotation, scale;
19
20     [SerializeField]
21     Vector3[] normals, vertices;
22
23     /// <summary>
24     /// Extracts mesh and transform values pertaining to a wire.
25     /// </summary>
26     /// <param name="mesh">The mesh to extract relevant values from.</
27     param>
28     /// <param name="parentTransform">The parent transform of the
29     GameObject containing the mesh (could be itself).</param>
30     public MeshSerializer(Mesh mesh, Transform parentTransform)
31     {
32         triangles = mesh.triangles;
33         uv = mesh.uv;
34         position = parentTransform.position;
35         rotation = parentTransform.eulerAngles;
36         scale = parentTransform.localScale;
37         normals = mesh.normals;
38         vertices = mesh.vertices;
39     }
40
41     // Getter methods
42     public int[] Triangles { get { return triangles; } }
43
44     public Vector2[] UV { get { return uv; } }
45
46     public Vector3 Position { get { return position; } }
47
48     public Vector3 Rotation { get { return rotation; } }
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47     public Vector3 Scale { get { return scale; } }
48
49     public Vector3[] Normals { get { return normals; } }
50
51     public Vector3[] Vertices { get { return vertices; } }
52 }
```