# ROCK GENERATOR V1.0

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**INDEX**

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## INTRO

Welcome,

This is the documentation file of RockGen – A procedural low poly rock and crystal generator. Here you'll find a set-up guide as well as some copyright stuff and contact details for custom support.

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## QUICK SET-UP GUIDE

**SCRIPT SET UP**

The set-up process is extremely simple. After you've downloaded the asset. After downloading and importing, your project folder should look like this:



Now there are only 2 steps left.

1. Locate the *RockGenerator.cs* script under ROCKGEN and click-and drag it onto an empty game-object
2. Select the empty game object, play with the settings and click on the green '*Generate Rock*' button at the end of the script in the inspector

**SCRIPT SETTINGS**

**Rock Settings**



First you can set the seed settings. A seed is a random number that will be generated each time a rock gets created. Every generation has a unique seed. If you toggle the button 'Print Seed Value', you can see what seed was used for that rock creation and you can re-use that seed to get exactly the same rock!

Second you can choose the rock type. This is the base shape on what your rock will be based on, if you don't know what those shapes look like, you can click on the button 'Display Shapes'. Remember, this is how your rock will **slightly** look like, they won't be as sharp if you don't want them to. You can also set the name of your newly created rock.

When you selected a base shape, you have some settings for that shape. The base scale is the scale of the center part of the rock. Vertex protrusion is generally how much a pointy part of the shape sticks out and vertex smoothing/edge smoothing makes the vertices/edges smoother. Just try out some settings to check what they do.

**Quality Settings**



Here you can choose how low poly your rock will look. You can use one of the presets or you can enter a custom number of vertices.

**Material Settings**

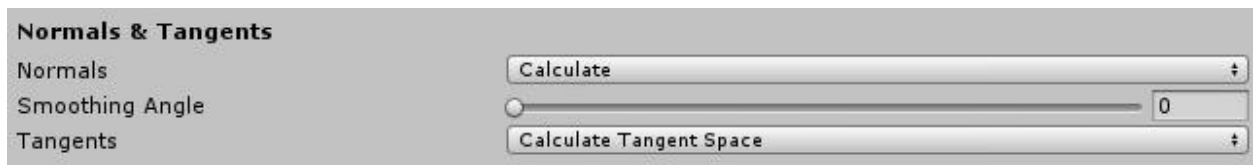| Material Settings | | |
|---|---|---|
| Material Selection | Random From Collection | ↕ |
| ▼ Materials | | |
| Size | 3 | |
| Element 0 | ◎ Blue1 | ⊙ |
| Element 1 | ◎ Blue2 | ⊙ |
| Element 2 | ◎ Blue3 | ⊙ |

When generating the rock, you might want to assign a material for it. The asset comes with 15 pre-defined materials so you can use those or materials you created yourself. You can set the material to be the same all the time or you can make the tool randomly choose out of a collection of materials. You can set the size of this collection of materials and you can assign materials to this collection by clicking and dragging them onto the slots.

**Export Settings**

| Export Settings | |
|---|---|
| Save As | Rock1 |
| Generate Rock | |
| Save Rock | |

When you're happy with the generated rock, you can export/save it as an .obj file. Choose the name of the rock you'll save and press the 'Save Rock' button. A file explorer will show up, locate the folder where you'd like to save and hit enter.

Then you'll have to click on another window than Unity and then click on Unity again to make Unity import the newly created .obj model and it'll show up where you chose to save it. When you see it in the project folder, click and drag on it and go to the import settings.

| Normals & Tangents | | |
|---|---|---|
| Normals | Calculate | ↕ |
| Smoothing Angle | ○———————————— | 0 |
| Tangents | Calculate Tangent Space | ↕ |

Set the Normals to 'Calculate', set the Smoothing Angle to 0 and click 'apply'. After that you can click and drag the model onto your scene and assign a material to it, your rock is ready!

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## COPYRIGHT

All the scripts are mine except for the convex hull library
([https://github.com/gusmanb/MIConvexHull](https://github.com/gusmanb/MIConvexHull)) and the ObjExporterScript
([http://wiki.unity3d.com/index.php?title=ExportOBJ](http://wiki.unity3d.com/index.php?title=ExportOBJ)).

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## CONTACT

For questions about the asset and support, email me at:

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