ShapE - AiKodex

Documentation

NOTE:

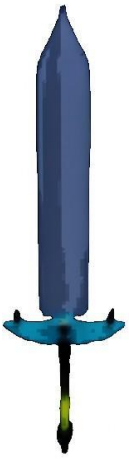
Please allow Unity up to 4 hours to generate an Invoice Number from the time of your purchase. Once it is available, you can enter this number in the invoice field on top to access the model generator.

Shap-E, a conditional generative model for 3D assets, is developed by OpenAI.
Shap-E-Text to 3D for Unity makes this technology easily accessible to the Unity community.

Examples

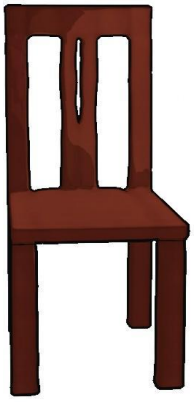
A pick ax

A red barrel



Futuristic Sword

Wooden Crate



A chair

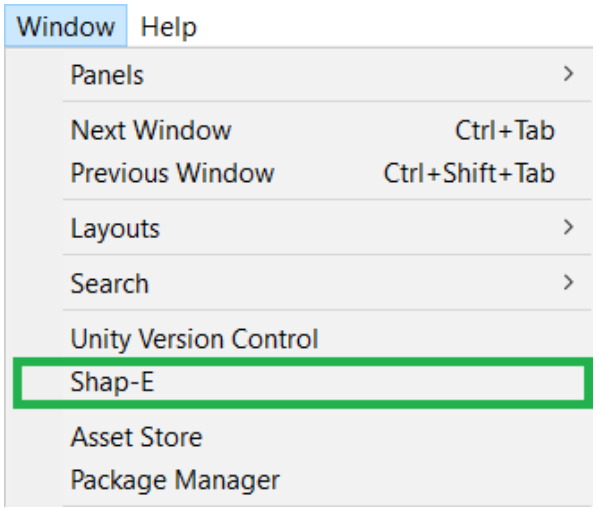
Dependencies

This asset requires the external package Editor Coroutines 1.0.0 which can be found in Window > Package Manager > Editor Coroutines. Note that Editor Coroutines

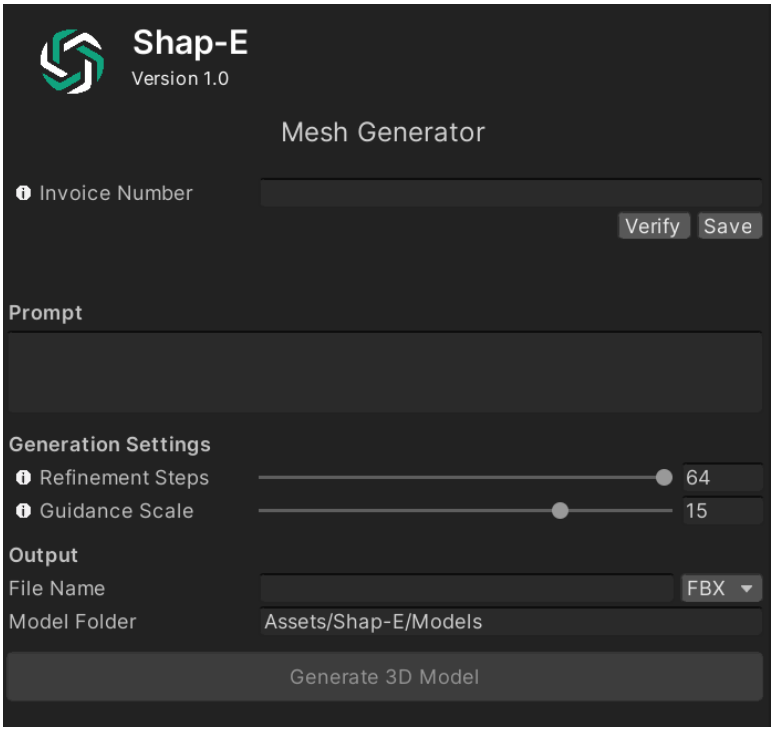
comes pre-installed in Unity Versions 2021.2 and above.

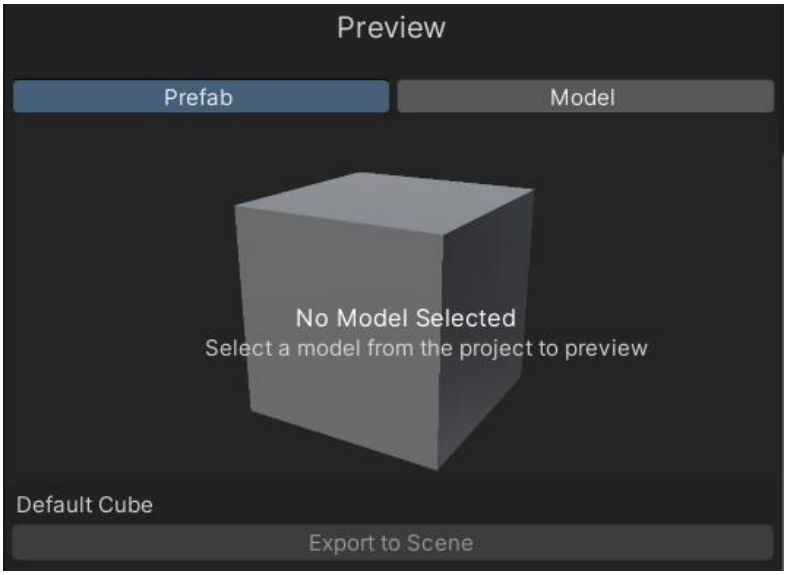
Usage

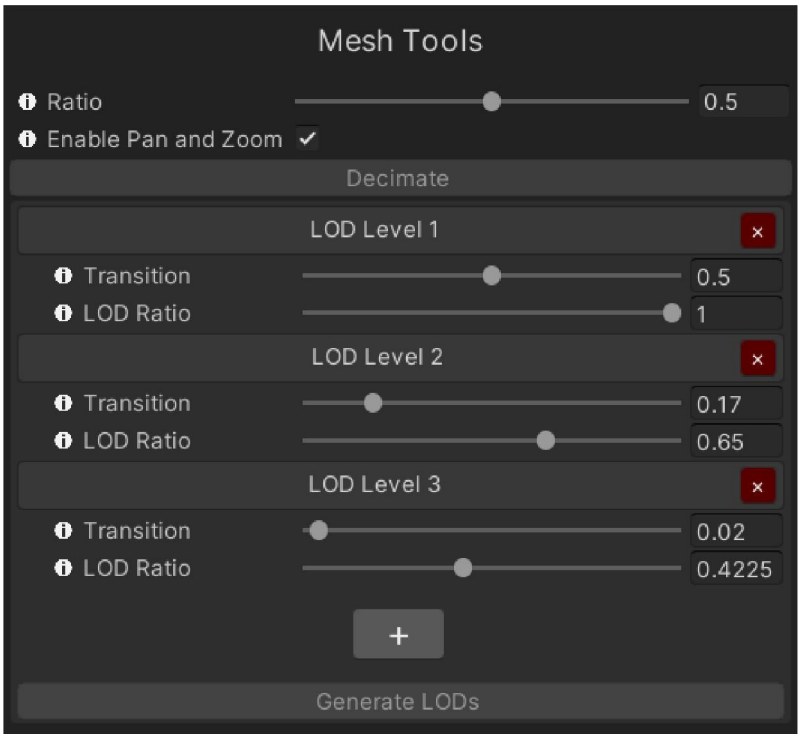
To use the Editor's Extension please go to Window > Shap-E



Editor Graphical Interface:



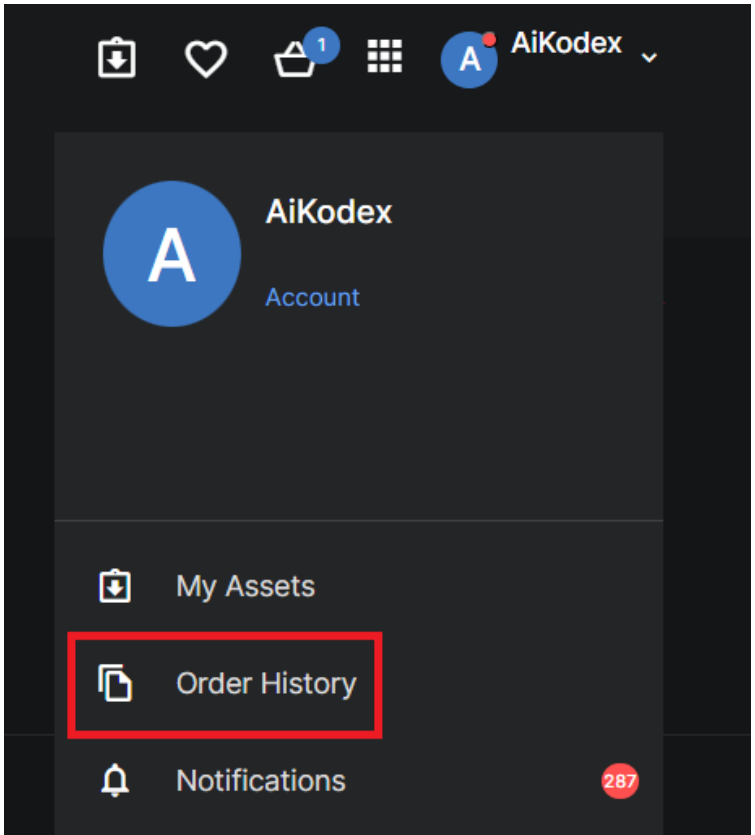


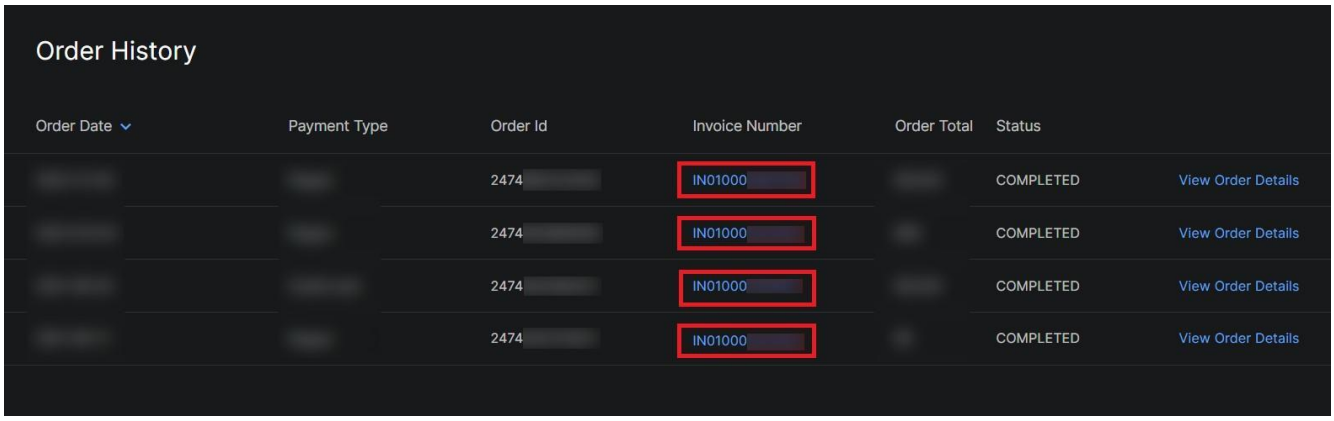


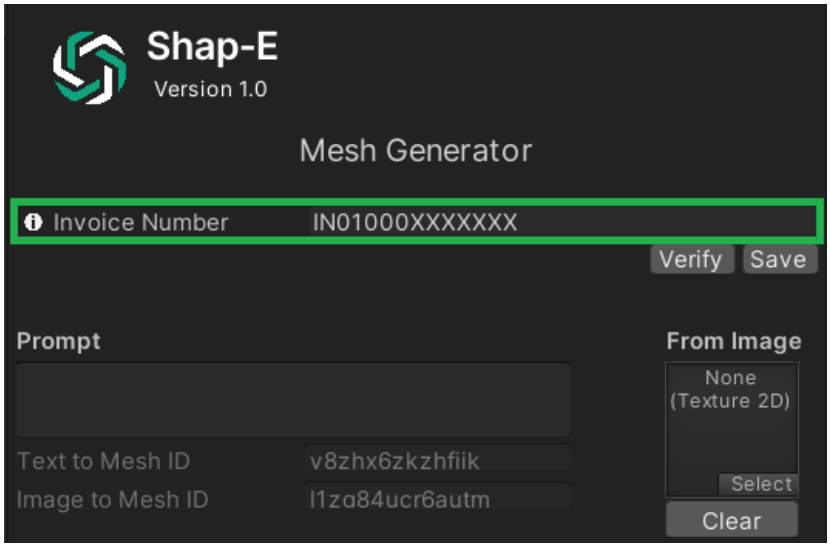
Features

Linked Invoice Number

We use this unique identifier to assign you a number of models every month. You can find the invoice number here in the My Orders section of the Unity Asset Store.







Once you have entered the number, you can then click on **verify** to check if the number you have entered is correct. If it is, you can save the number so when you launch the window again, you do not need to fill this field again. Once you have generated models with the plugin, you can check the status of generation by clicking on the Verify button. It should tell you the number of models you have generated.

Editor Window

Mesh Generator

Prompt: This field allows you to input text for mesh generation. Enter the text you want to convert to a mesh in the "Prompt" field. This would automatically change the name of the file as well. The typical guidance scale range for this is 13-17.

Refinement Steps: This number is the number of iterations performed by the model to render the object. The typical range for the best generations is 60-70 with 64 being the ideal number of steps.

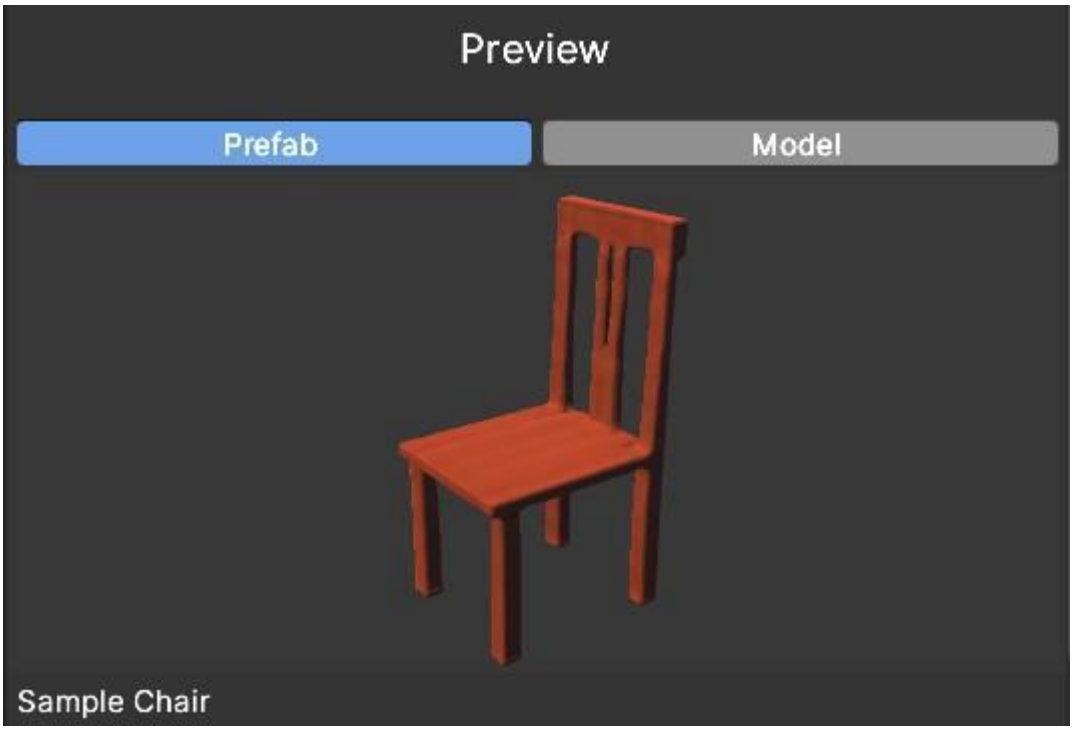
Guidance Scale: This value determines how accurately the model represents the prompt.

File Name and Extension: The file name changes on the basis of the prompt. The file name also prevents overwriting of files with regenerations by including an underscore with the number of items. The extensions available are FBX, BLEND and GLB at the moment. Overwrite file check runs for every format to prevent accidental overwriting.

Model Folder: We recommend against path changing due to paths being hard coded in the editor. The default path is Assets/Shap-E/Models where all the models are stored.

Preview

The preview section is a convenient feature that allows you to preview mesh files directly within the interface, eliminating the need to switch between different windows or applications. By utilizing this functionality, you can quickly assess the information of model (geometry information, Vertex colors, wireframe) files without interrupting your workflow.



To access the preview section, simply single-click on a file within your project. Keep the plugin window active beside the scene. Hover your cursor over this panel, and you will notice that the preview section becomes enabled.

Once the preview section is activated, you can view the Prefab with the Particle Shader which exposes the vertex colors and model on the other tab which shows you the wireframe and the structure of the model.

This functionality is particularly useful when you need to review and evaluate the contents of multiple models. Instead of opening each file individually in separate 3D applications, the preview section enables you to conveniently view files directly within the Shap-E panel.

By offering a seamless and efficient way to preview model files, this feature helps streamline your workflow and enhance productivity. It provides a centralized editor window where you can organize your project's models. Whether you're a 3D designer, 3D artist or modeler, or working on any project involving meshes, the Unity preview section offers a valuable tool to facilitate your creative process and ensure the optimal outcome of your work.

Mesh Tools

Mesh Decimation

Select a model file you wish to decrease the poly count of. Once selected, use the

Ratio slider to adjust how many polygons you want to keep. In the example below, the model has a total number of 7096 triangles. Ratio is set to 0.5. After executing decimation, the model should have 3548 triangles.

You may use the Enable Pan and Zoom toggle to view the model in more detail. You can also change the lighting by right clicking and dragging the mouse.

Mesh AutoLOD

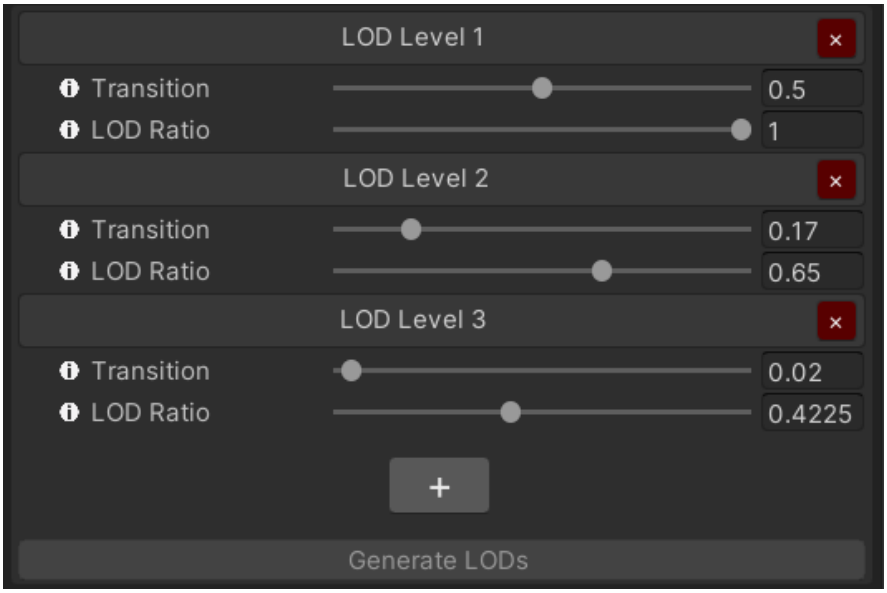
To generate LODs automatically, you need to export the object to the scene. Only exported and visible in hierarchy, you will find the option to generate LODs enabled. Click on the option to generate LODs automatically. The LODs will be saved in the Shap-E folder by the name of LODs.

You may add LODs by clicking on the + symbol at the bottom or remove LODs by pressing on the X button against them.

Transition: This variable gets and sets the screen relative height to use for the

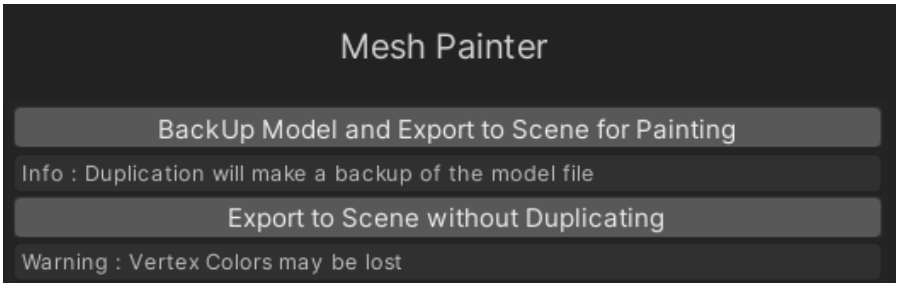
transition to the next LOD essentially acting as the parameter which makes the switch between LODs.

LOD Ratio: This refers to the quality or the decimation value of the model at the particular transition. Typically the closer the model is to the camera and scene, the higher the LOD ratio as you'd like to have a higher resolution model for a higher fidelity up close.

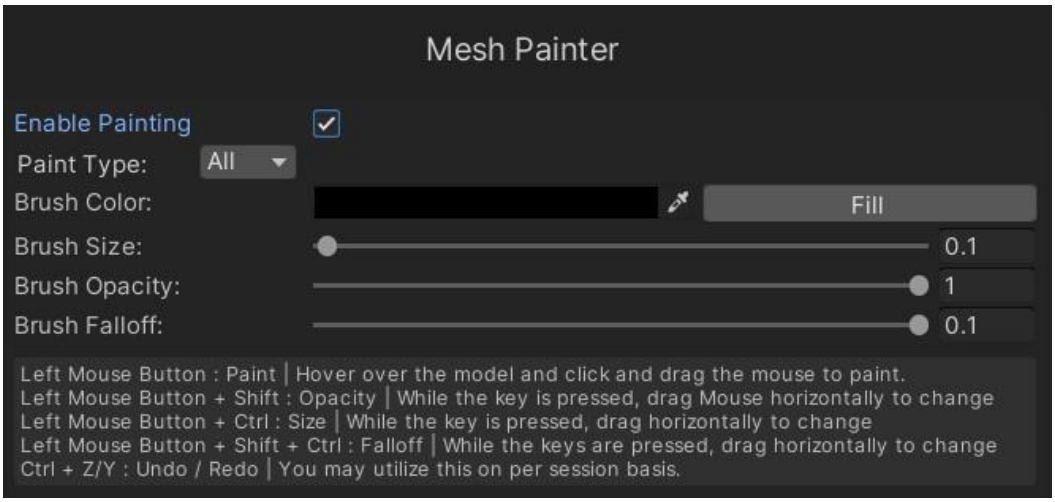


Mesh Painter

Select a model to reveal the options:



It is advisable to create a copy of the model before painting (even though Undo is available while painting in a single session). After clicking on the Export to Scene for painting, a copy of the model will be created and the model will be exported to the scene for painting. After that, click on the button enabling painting to view the menu.



You should see a cursor which will allow you to paint on the mesh. Follow the instructions and key binding on the info bar underneath to have a better control on painting style.

If you have any questions or difficulties in generation of models from text, decimation, AutoLODing or vertex painting, please reach out to info@aikodex.com

Troubleshooting:

500: Internal Server error / Cannot connect to destination host

Possible causes:

There may be quotation marks, new lines or any other illegal character in the text submitted.

There may be times that the server is down. In this unlikely event, please check the forum for announcements by us pertaining to server maintenance or contact info@aikodex.com if this issue persists for over a day. Please check your internet connection and try again in a few hours.

400: Bad Request

Possible Causes

Occurs when the information passed is not recognized either due to syntax error or other reasons. Using special characters like (“”) that have a specific meaning in coding can cause this error. Please send us an email with the Unity version included outlining your issue in as much detail. A screenshot or video of the problem will help us serve you better.

Request Timeouts (408 Request Timeout response status code)

Possible Causes

The server model could have run into a generative error. When this happens, the model file becomes extremely large and is not able to be passed through the API built. Please try again with a fewer number of words.

Too many requests (429)

Possible Causes

It may be possible that a failed generation caused you to skip the timer which triggered

this error. You can try again in a couple of seconds.

Warning: Unable to allocate new scene culling mask

The cause for this is a bug in Unity which prevents the display of 3D models on the Shap-E editor. The resolution is that you can simply restart the editor and the problem should be fixed.

Privacy Policy

At AiKodex, we believe that protecting the privacy of our users is of utmost importance. We provide a secure and private environment for users to utilize our OpenAI's Model Generation services, without compromising on their privacy.

Our privacy policy is designed to ensure that we do not store any data or personal information that is shared between users and our service. We do not store input text, generated models, IP addresses or any other data, and our remote servers are configured to automatically delete any data that is left on the system.

We understand that privacy is a fundamental right, and we are committed to upholding this right for our users. We will continue to invest in the latest technologies and security measures to ensure that our users can enjoy a safe and private experience with ShapE for Unity.

Licensing

You will have the copyright of all the models you generate, thereby granting you full ownership of models you create with this unity asset. You can use the models for all commercial activities.

ASSET STORE TERMS OF SERVICE AND EULA

Original MIT license is included with the asset:

MIT License

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

The software is provided "As is", without warranty of any kind, express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose and noninfringement. In no event shall the authors or copyright holders be liable for any claim, damages or other liability, whether in an action of contract, tort or otherwise, arising from, out of or in connection with the software or the use or other dealings in the software.

Prohibited Activities and Misuse

You shall not use these services, data or content provided by ShapE in any manner that is illegal, unethical, or inconsistent with the intended use of the service. You may not abuse the server by overloading requests on it or using the service from outside Unity. This may lead to termination of service.

Happy ShapEing!

- Offered By AiKodex