3D 2 D

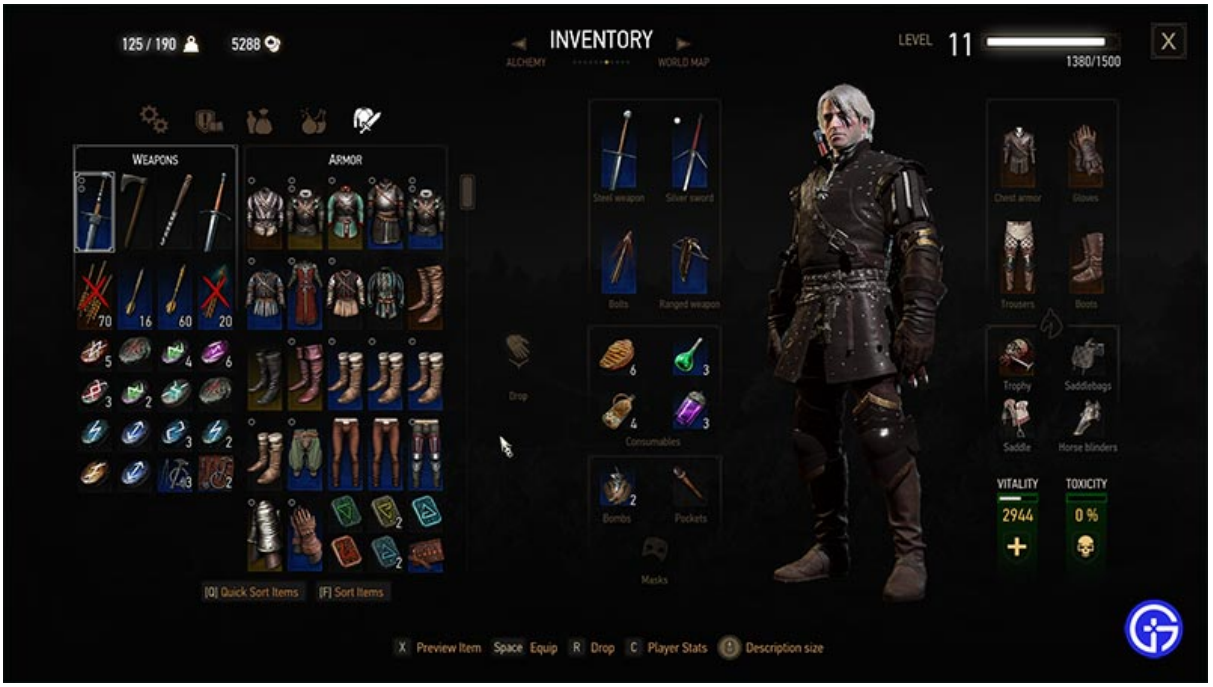
User Guide

How to launch the tool:
Download and extract the zip file to a location of your choosing, then open the extracted folder, and launch the .exe file within

How to use the tool:
Before I get into how you can use the tool, let's talk a little about what the tool actually does.
3D 2 D (cool wordplay if I can say so myself) is made to convert 3d models into images, as well as converting animated objects into sprite sheets, which is convenient when you'd, for example, want a UI representation of your 3d characters like this:

You'd like to have transparent images of your characters to put into the UI. Doing this yourself can be a hassle, and sometimes it's so confusing people end up duplicating the entire models and bringing them towards the camera (which, as you'd expect, is rather inefficient for the performance of the game).

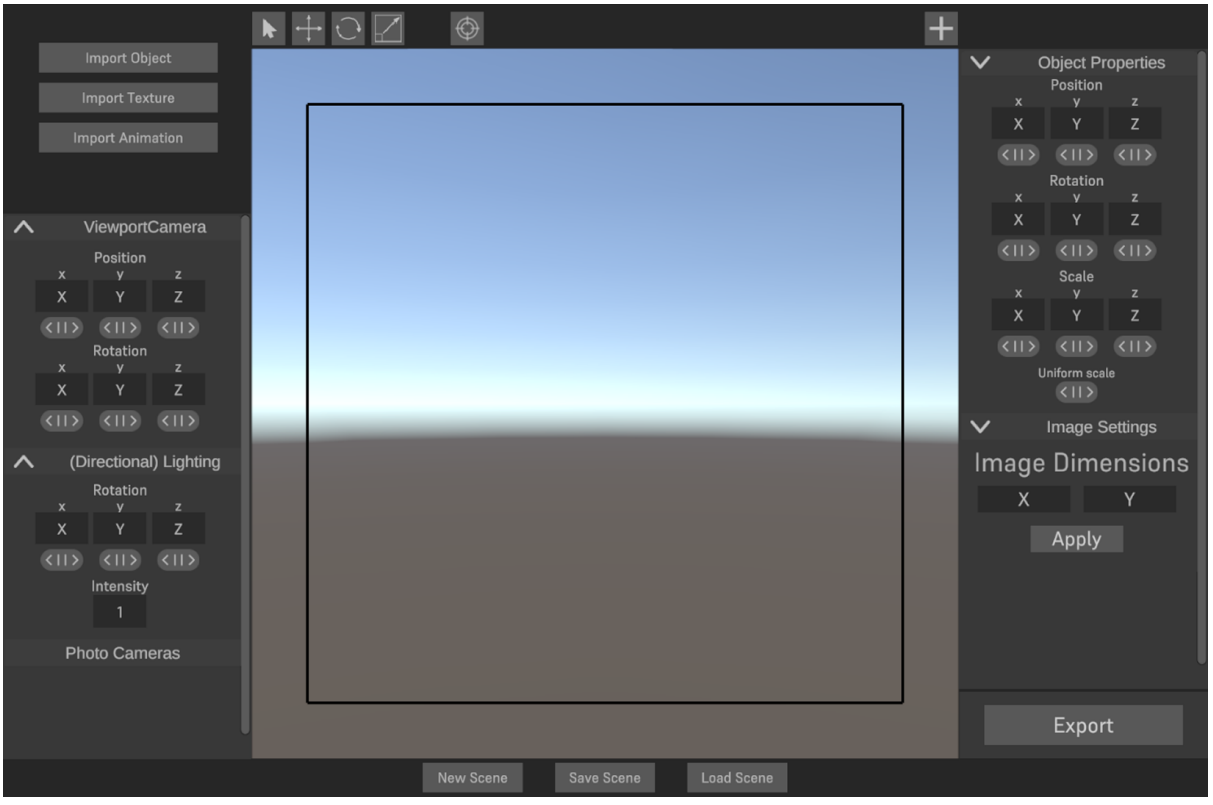
Perhaps you want an inventory screen like this:



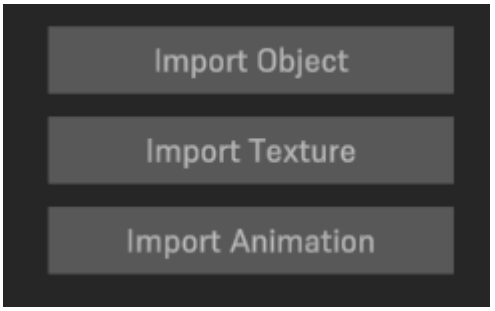
And instead of making separate art for every single item, you'd want to very easily, and very quickly, convert your 3d items to transparent images. That's what this tool can be used for.

So now that the introduction is over, how do you actually use the tool?

To start, here is the interface, we'll go through each button step by step, and then perform a full example.



We'll go from left to right (loosely).

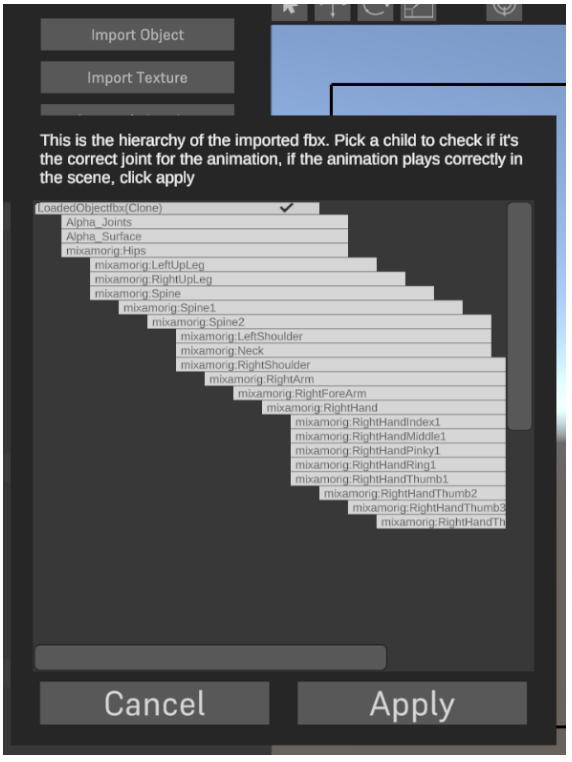


The import buttons. These buttons import what they say on the buttons.

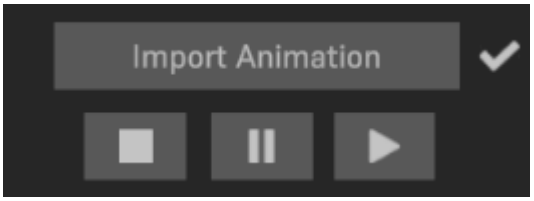
"**import object**" lets you import an .fbx object to the scene.

"**import texture**" lets you import a texture (image) to the scene to apply as a texture on the object. Currently you can only import one texture, and it will be applied to the entirety of the imported fbx object (so it'd be good to have one texture for the entire object.

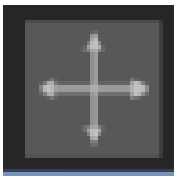
"**import animation**" lets you import an .anim animation to the object. When you do this, a new menu will show up with the hierarchy of the imported object. Once you click a child in this hierarchy, the animation will be applied to that child. Once the object plays the animation in the scene, you know it's assigned to the correct child, and you can click apply.



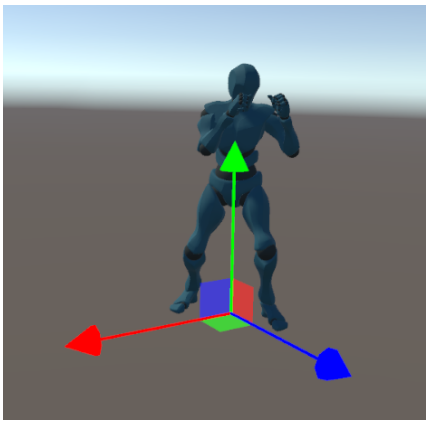
Once an animation has been applied, you can use the play, pause and stop buttons to play, pause, and stop the animation



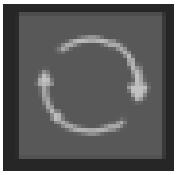
The buttons at the top are for enabling gizmos to move, rotate and scale the object in the scene.



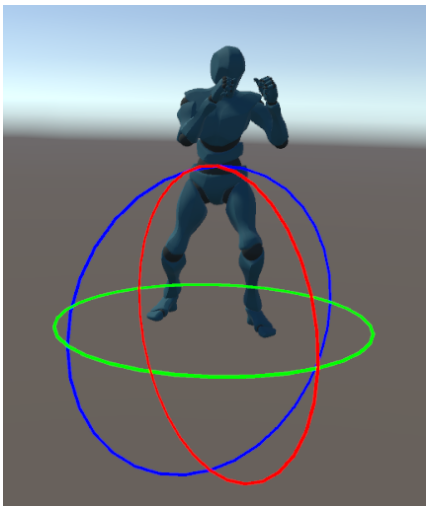
Move Gizmo



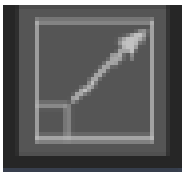
Enable the gizmo to move the object around the scene. Drag on the green red or blue arrows move in their respective direction.



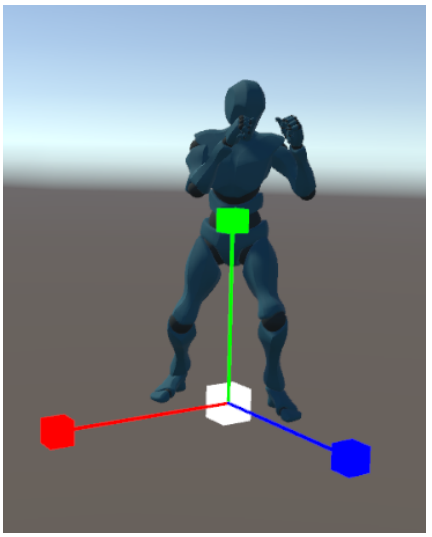
Rotate Gizmo



Enable the gizmo to rotate the object. Drag on the lines to rotate the object on that axis.



Scale Gizmo



Enable the gizmo that can scale the object. Drag on the cubed lines to scale the object in that axis, or drag on the cube at the centre to uniformly scale the object along all axes.

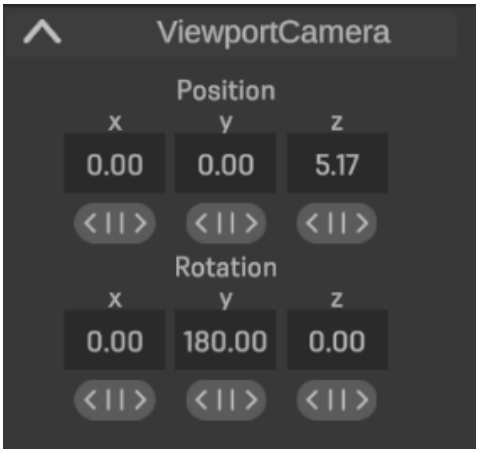
Exit Gizmos

Click this icon to exit out of any gizmo and see the object without the gizmos.

Focus

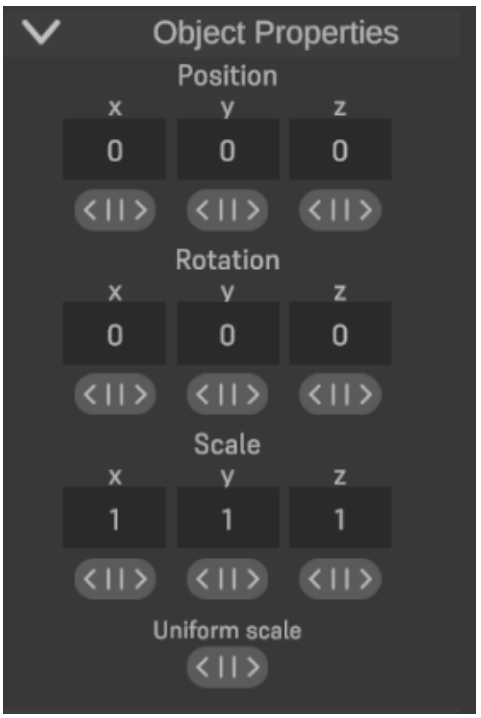
Click this icon to focus the camera on the centre pivot of the object

The Viewport Camera settings will adjust the settings of the camera. You can adjust its position and rotation within these settings. Enter a number in the boxes to put it at that number. Additionally you can use the sliders under the boxes to change the values up or down.
Besides this, you can change the camera in the viewport using the mouse, hold and drag the right mouse button to pivot the camera around. Hold and drag the middle mouse button to move the camera up, down, left, and right relative to the view at that moment.

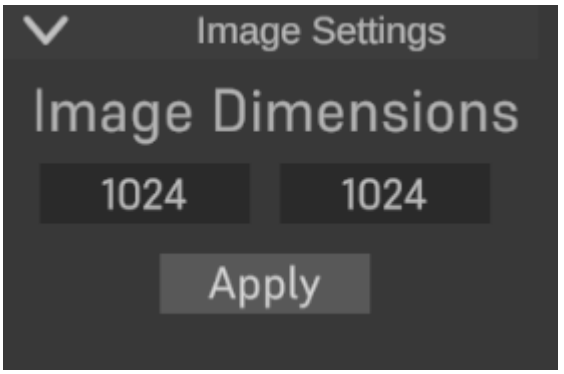


The directional lighting settings are for the lighting in the scene, it's currently basic directional lighting. You can change its angle and the intensity of the light.

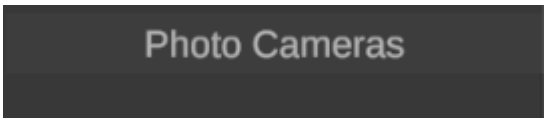
The object properties are for changing the object in the scene. These are the same settings as the ones you can tweak with the gizmos. Besides the position, rotation and scale values, there is a uniform scale slider which will increase the object's scale on all axes.



The image settings are to change the resolution of the exported image. The changes you make within these settings will only take place if you click the “apply” button. The black square in the centre of the screen will match the ratio, and you will be able to see what part of the viewport will get exported. The default is set at 1024x1024

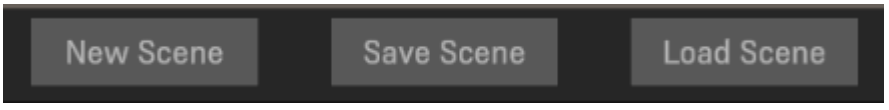


Add Camera button



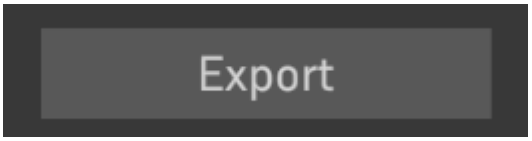
This button will add a camera to the scene and put it in the “photo cameras” on the left. Currently this feature is still a work in progress, and
while you cán add cameras, the important features
aren’t present yet.
You can tweak the cameras, change their resolution, set it to viewport, and delete them. But using them to export images is still under development.

New scene / Save scene / Load Scene

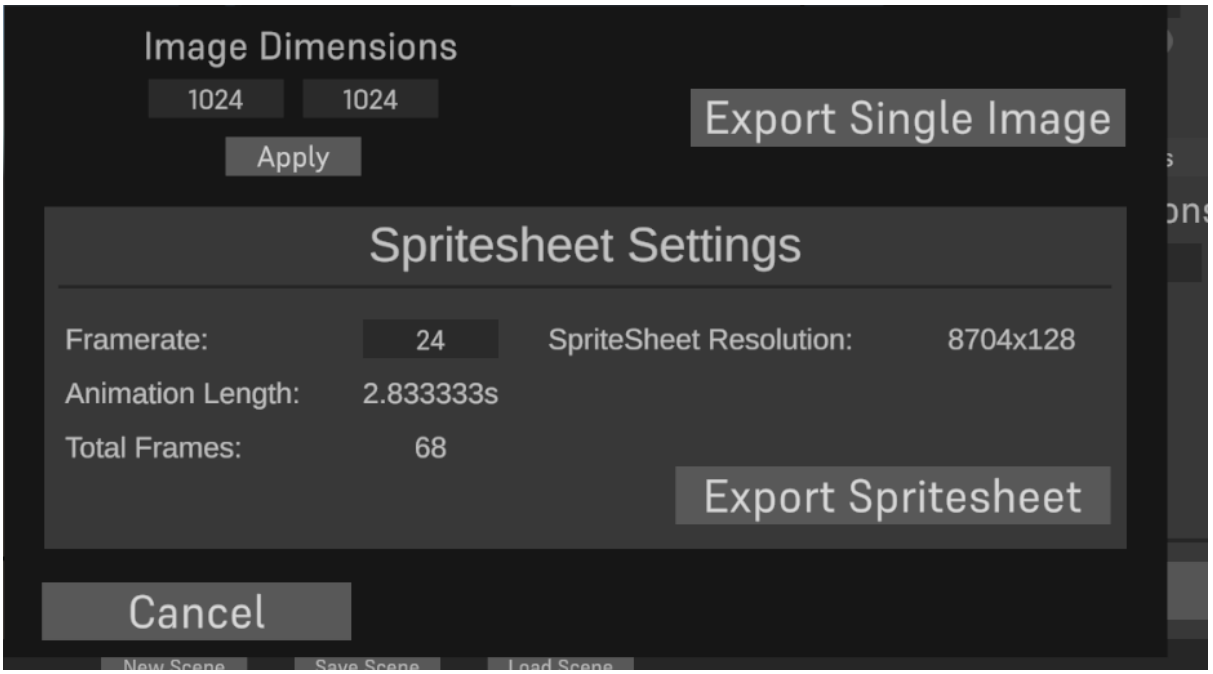


These buttons are for saving and loading scenes, so you can edit what you were working on later. They do what you’d expect.
When you click the save scene and load scene button, you will be shown a file panel from which to make a choice.
When you save a scene, you’ll have to enter a name and pick a folder for the save file. Save files will be saved as .save files. These files are human readable and can be opened by text programs such as wordpad (give it a try).
Load scene will ask you to locate a .save file, after which it will load your saved data into the scene.

The Export Button



Hitting the export button will show a new menu:



In this menu you can edit some settings, and then export as either a single image or a spritesheet.
Once again you'll be given a chance to edit the resolution of the image. This value will be used for the single image, as well as each frame of the spritesheet.
If you click on export single image, you'll be asked for a name and location for the file, after which a single png will be exported.

The spritesheet option will only be available if you have an animation present in the scene.

You'll be able to view some information and tweak one item, the frame rate of the resulting spritesheet.
Animation length is the length of the animation that's currently in the scene.
Total frames is the total frames of the exported spritesheet with these settings.
The resolution will be the resulting resolution of the entire spritesheet. The spritesheet will be exported as a strip, so often the width will be larger than the height.
The total frames and spritesheet resolution will both change depending on the input framerate.
Once you click export, you'll be asked for a name and location, after which the spritesheet will be exported as a single .png file.

If you want to see an example of how to use the tool, you can watch this video:

https://youtu.be/3oJKHPgepGI

Thanks for downloading my tool, I hope it helped your project!