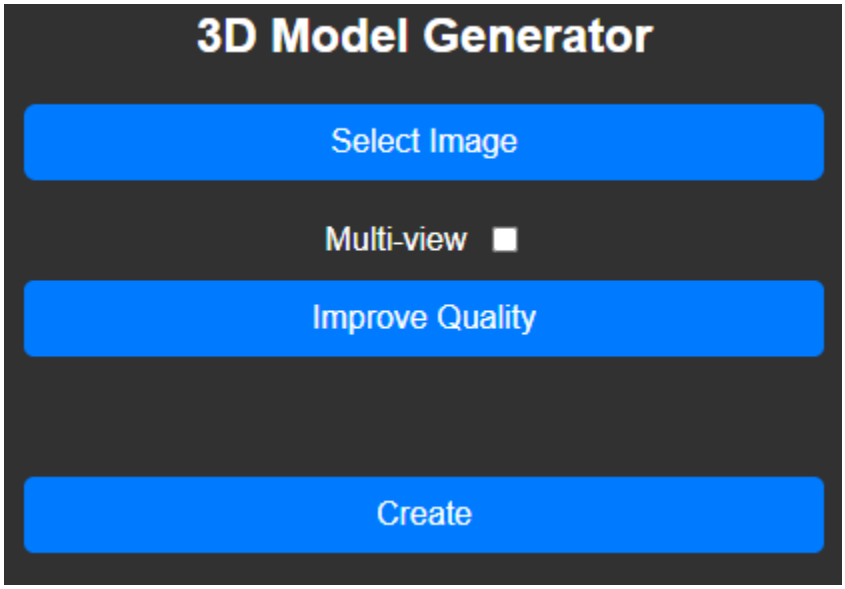
A QUICK HANDBOOK TO REFER TO

Sketch to Shape : *Turn a rough 2D/3D sketch into clean, editable 3D geometry automatically, the system interprets strokes (silhouettes , holes, curves) and builds precise, usable topology.*

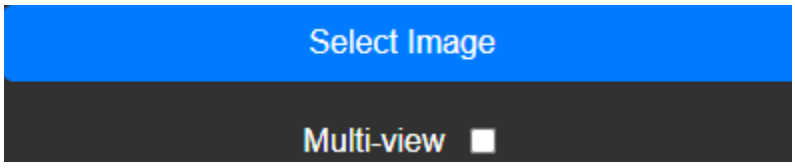
STEPS TO ACHIEVE SKETCH TO SHAPE IN 3D MODEL GENERATOR:

Open the App.



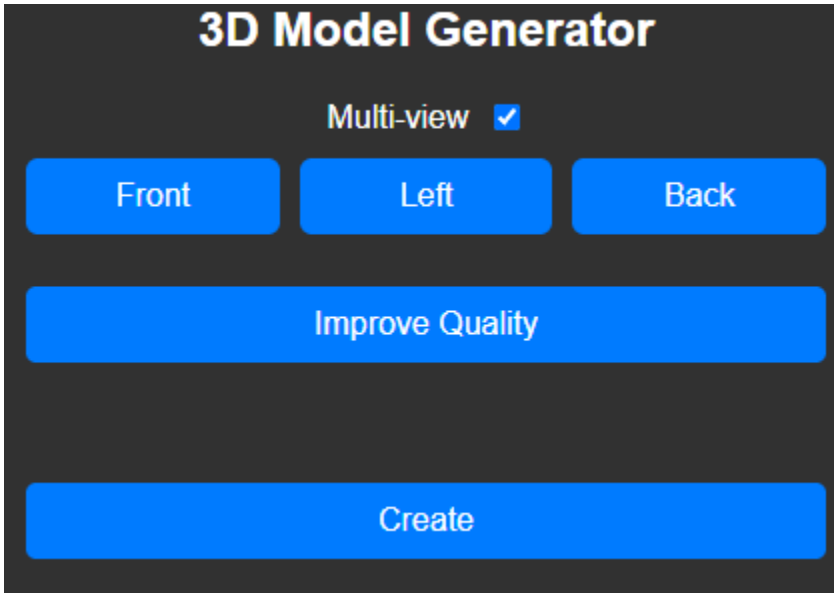
This is the **3-D Model Generator** window, Now, In this window you get two options:

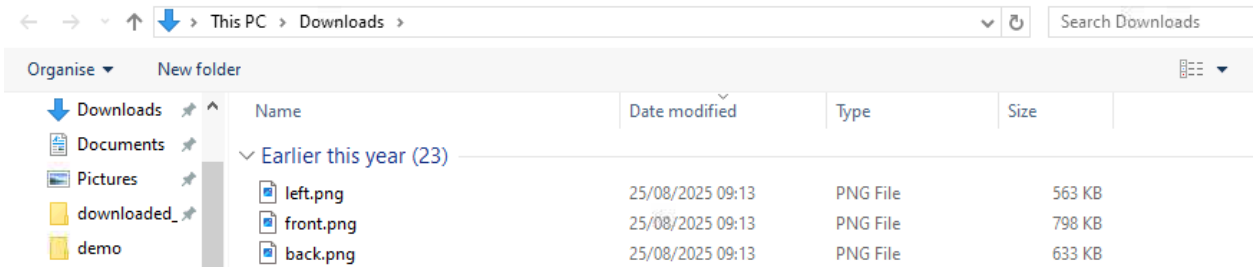
SINGLE IMAGE- Only one image is given.
MULTI VIEW- Three images of the object can be given.

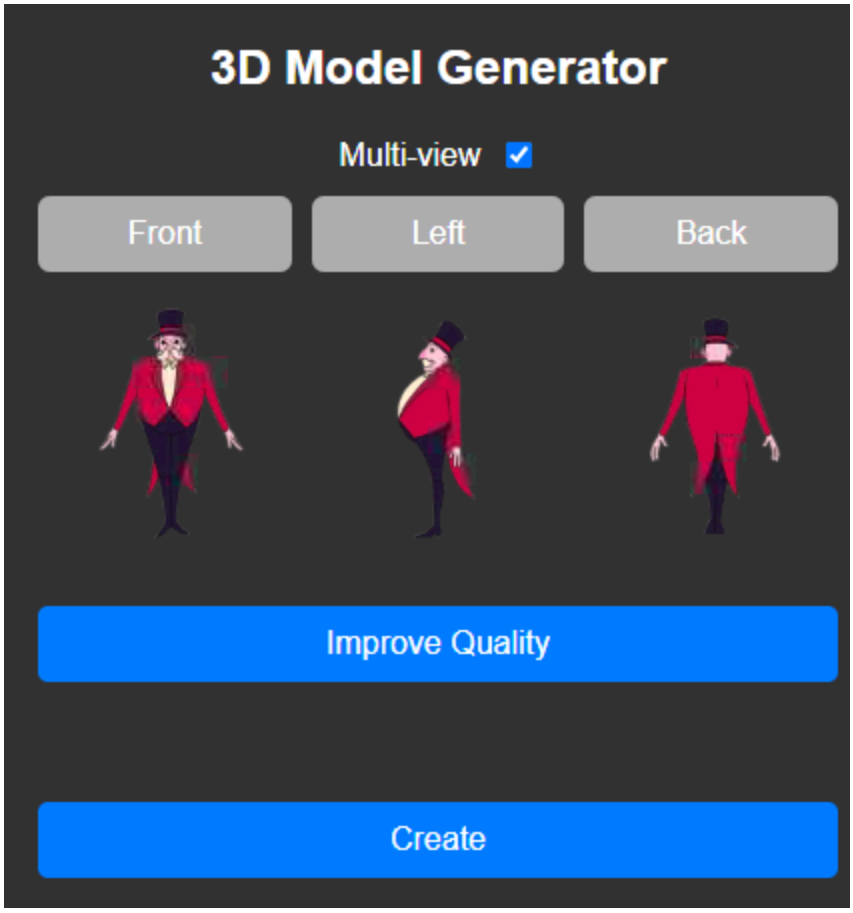


In this example we are only looking at **MULTI VIEW**. However, Single image also involves the same process. In order to enable the multi view image option you just have to just click the **check box** present near the MULTI VIEW option.

After clicking the check box you will immediately get three options:
FRONT- Front side of the Image.
LEFT- Left side of the image.
BACK- Back side of the image.







A very important thing is that the dimensions (width & height) of all the three images(front, left, back) must be the same.

FRONT AND BACK IMAGES:

Front and Back **objects (inside the images)** should be of the exact same size relatively.

For example:
In the above two images, both the image sizes and the object sizes are the same.
In simple terms, the dimensions and the object sizes of the front and back image should be the same.

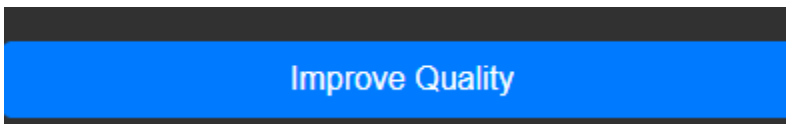
MIDDLE IMAGE:

The Middle Image should be of the **correct size** according to the **object** in the correct location.In simple terms, the **middle image** should be **proportional** to both the front and back images, that is if one object is small and the other one is large you will not get the proper image generation.

In summary, all the three objects should be of the proportional sizes and the dimensions of the image should be the same

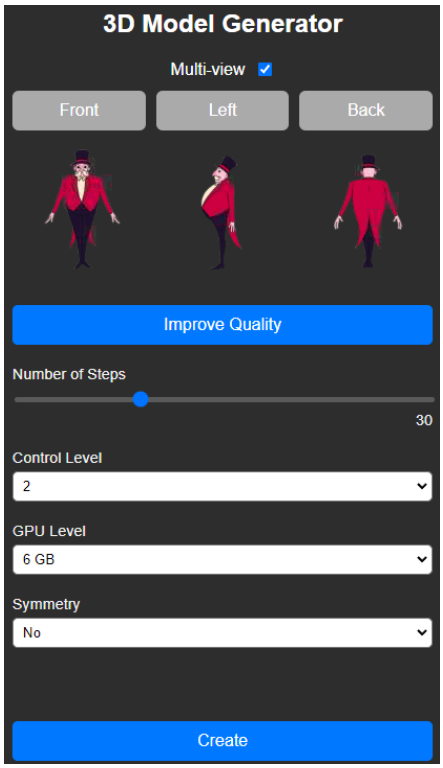
IMPROVE QUALITY:

Now, the next step is to I**MPROVE QUALITY:**



When you click the improve quality, you will have the following four sliders which you can work on :

- **Number Of Steps**
- **Control Level**
- **GPU Level**
- **Symmetry**



NUMBER OF STEPS:

The steps here can be given from 0 to 100.
The more steps you give will fetch you more details but it takes a long time to fetch those details.
If you give less number of steps (Eg: 3 steps) it will fetch you less details but it will be provided in a quick time whereas if you are giving 100 steps it will take a long time but will fetch you a lot of details.

CONTROL LEVEL:

control level- more detail but slower; lower resolution → faster but blurrier
When you have more details it will be slower but when less details are given that is if a lower resolution is given the generation will be faster but the outcome will be blurry.

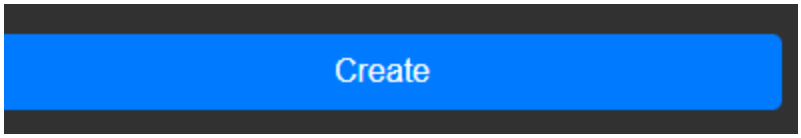
GPU LEVEL:

You can select the GPU level based on what GPU you have. Accordingly the software will run faster.
For Example:
6 GB
8 GB
12 GB
24 GB
You can select from any of these according to your system.

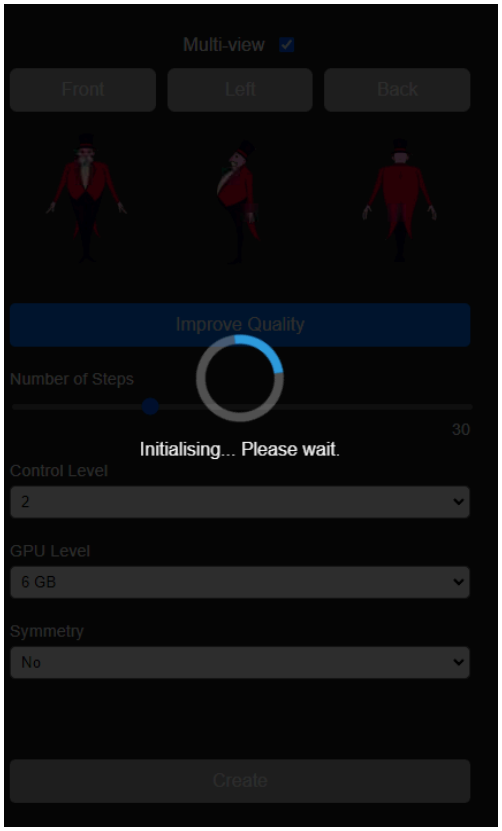
SYMMETRY:

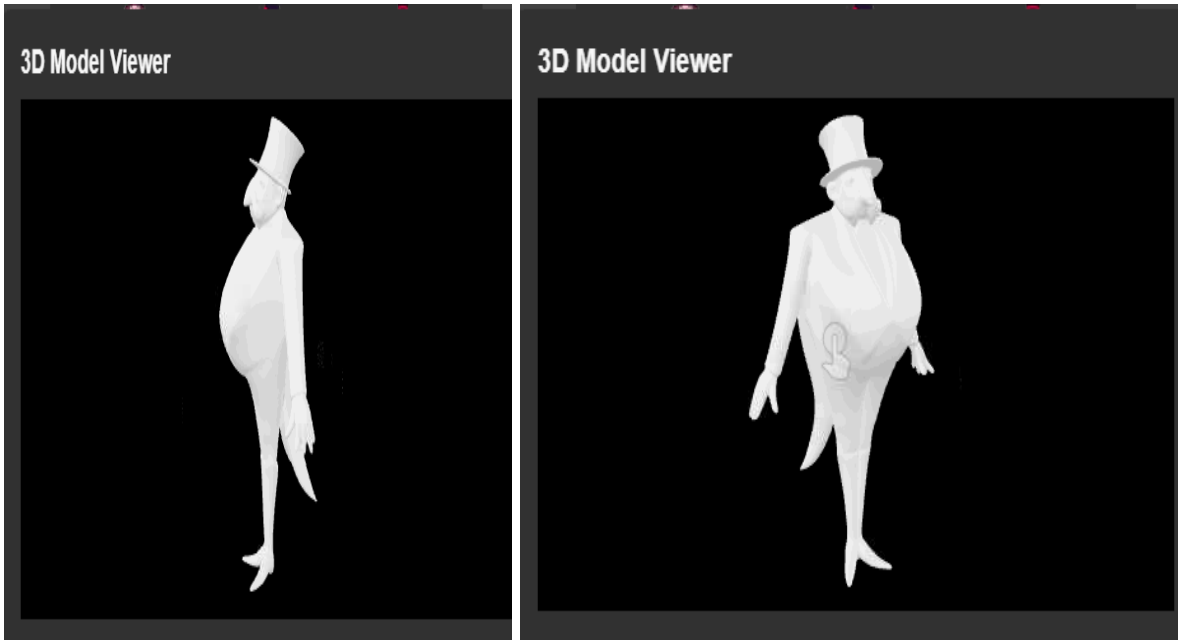
Symmetry is to show whether the model is symmetrical i.e if you want the model to be symmetrical in topology.
For example here, you can select the X-Symmetry, Y-Symmetry, Z-Symmetry or No Symmetry. This will help in the flow in the topology.

Now click on the **create** button for the image creation.



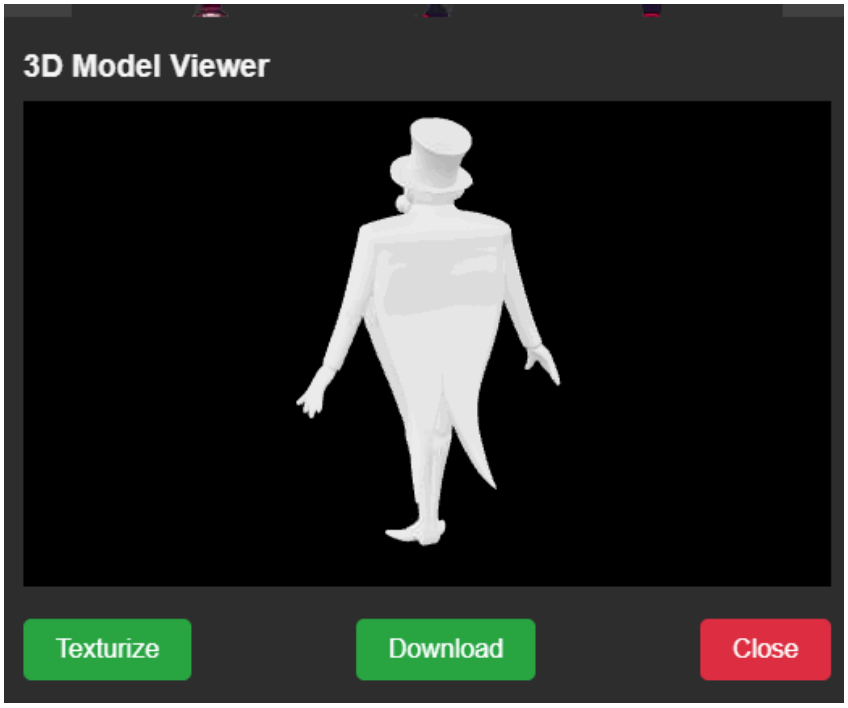
It will take some time for the initialization and generation of the model.





Here we get the options of:

- **TEXTURIZE**
- **DOWNLOAD**
- **CLOSE**

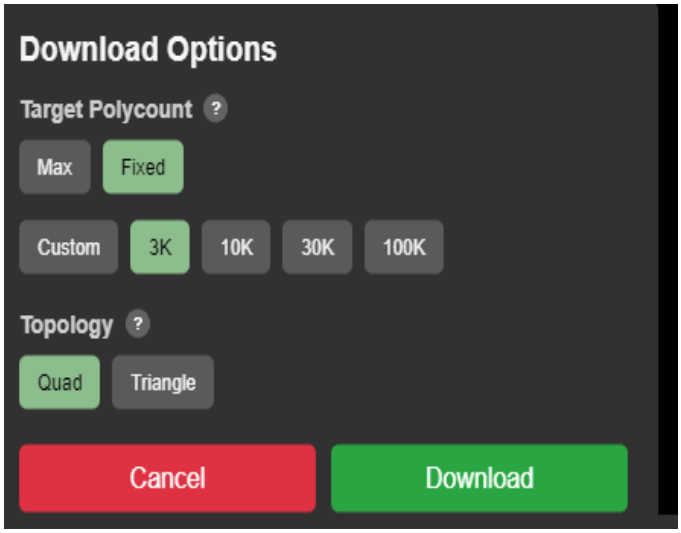


So, we can either continue and **texturize** the model or if you **don't** want to texturize, **download** the model directly or you can **close** it.

This is the end of the first stage.

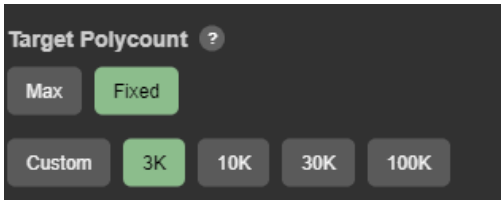
Here the image is being downloaded directly because texturize is actually a one-click button that just creates textures for the model i.e if you click texturize you will get the texture option and then the same window will appear again.
So, just click the option **DOWNLOAD.**

When you click the download option, you will get multiple download options.
They are:



TARGET POLYCOUNT- On how you want the polygon count for the generated image.
Here you can set whether you want a
FIXED POLYGON COUNT
MAX GENERATED POLYGON COUNT

The basic model that we generated or if you want **3k, 10k, 30k or 100k** you can choose from the given options. You can also choose the **CUSTOM** option to provide the polygon count of your desire

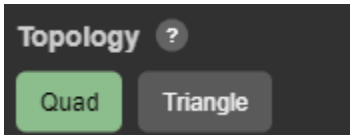


TOPOLOGY:

Two topologies are available. They are:

QUAD Topology

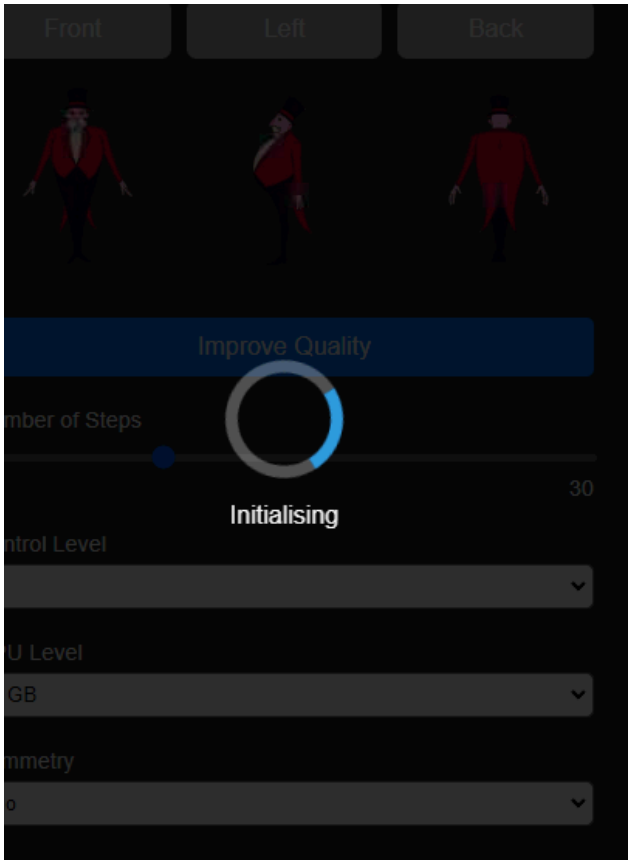
TRIANGLE Topology



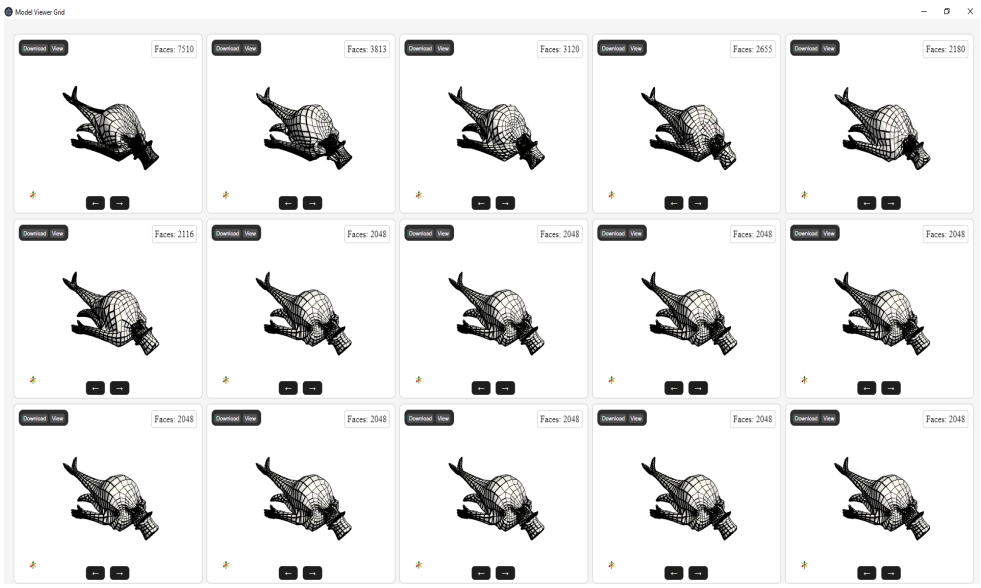
You can choose from any one of these topologies.

Finally, you can click the option **DOWNLOAD.**

It will take some time for initializing and then the object will be prepared for display.

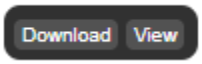


Now **15 OPTIONS** will be displayed i.e you will get 15 images .

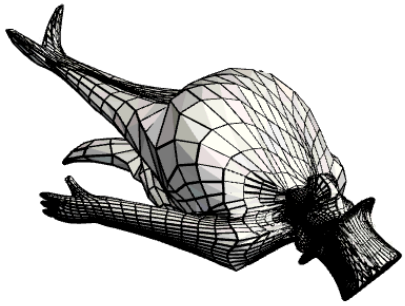


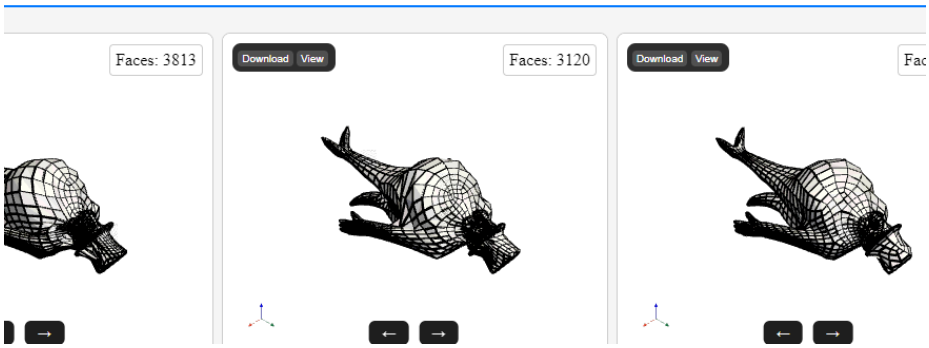
From these 15 options only **ONE option is good.**
Artists have to decide which one is good and what is needed for them.

If they want to have a better view they can click the **VIEW** button from any of the displayed options.

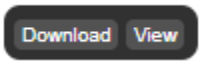


When they click the view button, the selected image will be displayed in a **bigger** size on the top of the screen in full size and you can zoom the image and see it in detail.





Whenever the artist is happy with the displayed image they can click the **DOWNLOAD** option which is right next to the view option to download their desired image.



Once the image gets downloaded, it will be present in the **DOWNLOADS** folder of your system and the app will close

To close the app fully, in addition to clicking the **X** on the TML SKETCH TO SHAPE you also have to close the terminal which is automatically created.