



# TK17 BASIC MODDING GUIDE

[created by [.blue\(modsgarden\)](#) or [AllofASudden#1444\(Discord\)](#)]

# INTRODUCTION

Please forgive me my language, I am German. We only speak German normally.

I like to have everything in one place.. so.. I created this.

Why do I want to create another(?) tutorial about importing, exporting etc.. ?

- Because I learned through chaos and got several help messages from others.

And this won't be another import/export guide, it will be the guide you'd only ever need IF you decide to start modding/to create game assets.

I hope my English is good enough to teach you something. I'll keep it simple and with pictures at first, after that, I enhance some details and make it an advanced tutorial.

(Going into detail with each tool I use and why)

# TABLE OF CONTENT

1. Setting Up Blender
2. Collat Kane, Blender and TxxTools
3. Using/Setting up the Blender Add-On
4. Marvelous Designer Import
5. Creation Process in Marvelous Designer (Simple Creation)
6. Marvelous Designer Export to Blender
7. Decimating, Converting and Weighting inside Blender
8. Substance Painter (Simple Texturing)
9. Creating the Add-On with Collat Kane

+++ Guide Starts here +++

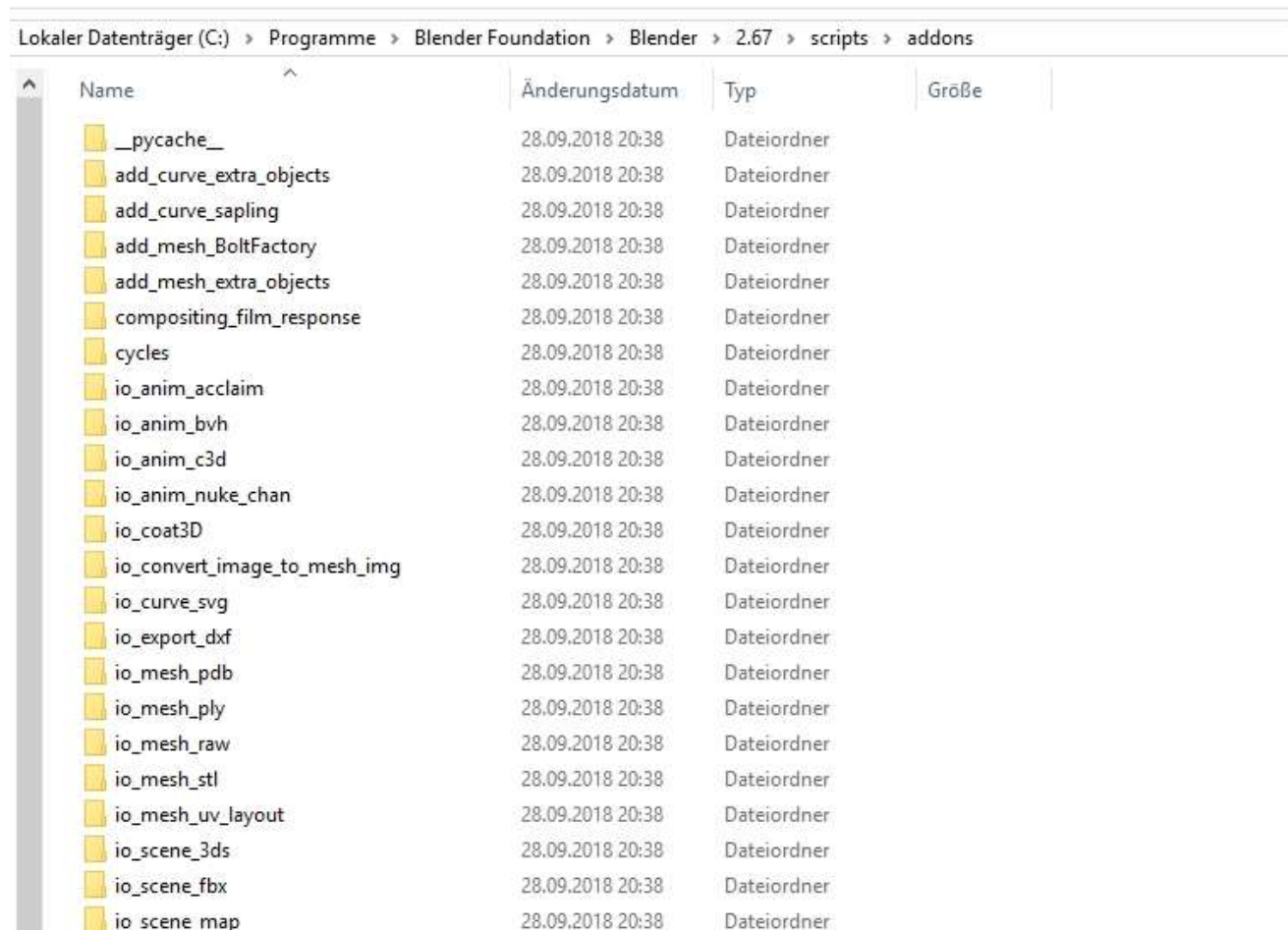
Download either Blender 2.67 <https://download.blender.org/release/Blender2.67/> or 2.69 <https://download.blender.org/release/Blender2.69/> you can use the more up to date Blender Software to do the weighting part later.. because it seems that older versions might f\* up some weighting.

a.) Download the necessary scripts from either NC's Post or mine. [Download here]  
CTK+Blex+TxxTools.zip

b.) Now you need to put all the things in place.

## 1. How to Setup blender

After you've installed one of the suggested blender versions, open your Blender addons folder



Name	Änderungsdatum	Typ	Größe
__pycache__	28.09.2018 20:38	Dateiordner	
add_curve_extra_objects	28.09.2018 20:38	Dateiordner	
add_curve_sapling	28.09.2018 20:38	Dateiordner	
add_mesh_BoltFactory	28.09.2018 20:38	Dateiordner	
add_mesh_extra_objects	28.09.2018 20:38	Dateiordner	
compositing_film_response	28.09.2018 20:38	Dateiordner	
cycles	28.09.2018 20:38	Dateiordner	
io_anim_acclaim	28.09.2018 20:38	Dateiordner	
io_anim_bvh	28.09.2018 20:38	Dateiordner	
io_anim_c3d	28.09.2018 20:38	Dateiordner	
io_anim_nuke_chan	28.09.2018 20:38	Dateiordner	
io_coat3D	28.09.2018 20:38	Dateiordner	
io_convert_image_to_mesh_img	28.09.2018 20:38	Dateiordner	
io_curve_svg	28.09.2018 20:38	Dateiordner	
io_export_dxf	28.09.2018 20:38	Dateiordner	
io_mesh_pdb	28.09.2018 20:38	Dateiordner	
io_mesh_ply	28.09.2018 20:38	Dateiordner	
io_mesh_raw	28.09.2018 20:38	Dateiordner	
io_mesh_stl	28.09.2018 20:38	Dateiordner	
io_mesh_uv_layout	28.09.2018 20:38	Dateiordner	
io_scene_3ds	28.09.2018 20:38	Dateiordner	
io_scene_fbx	28.09.2018 20:38	Dateiordner	
io_scene_map	28.09.2018 20:38	Dateiordner	

and extract the content of io\_tkm17.zip in there..

### c.) Open Blender



### General Controls -

Holding the Middle Mouse Button will move your View angle(Camera)

Left Click sets the position of your target cursor, it will indicate the position where objects are imported at

Shift + C resets your target cursor and view

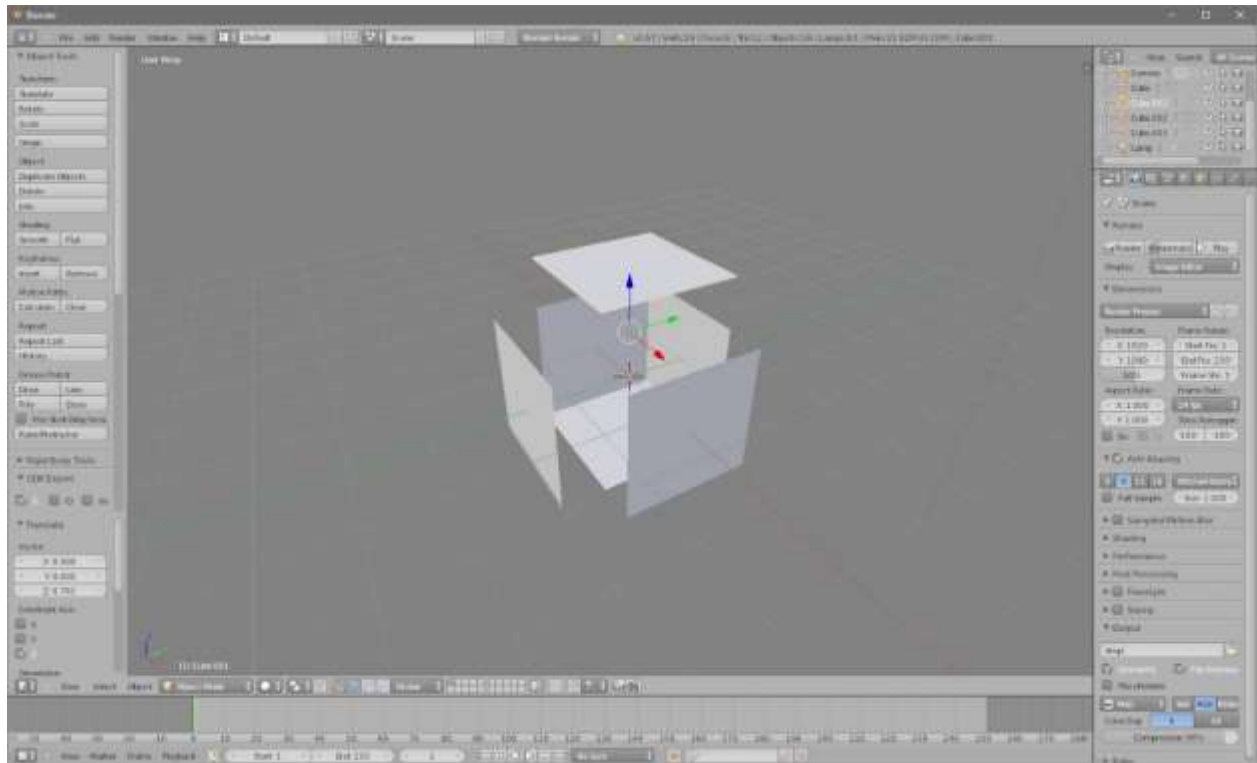
Shift + Middle Mouse Button will let you navigate through the 3D space

Right Mouse Button lets you select objects/cameras etc

A will select or deselect everything

X will delete a selection it

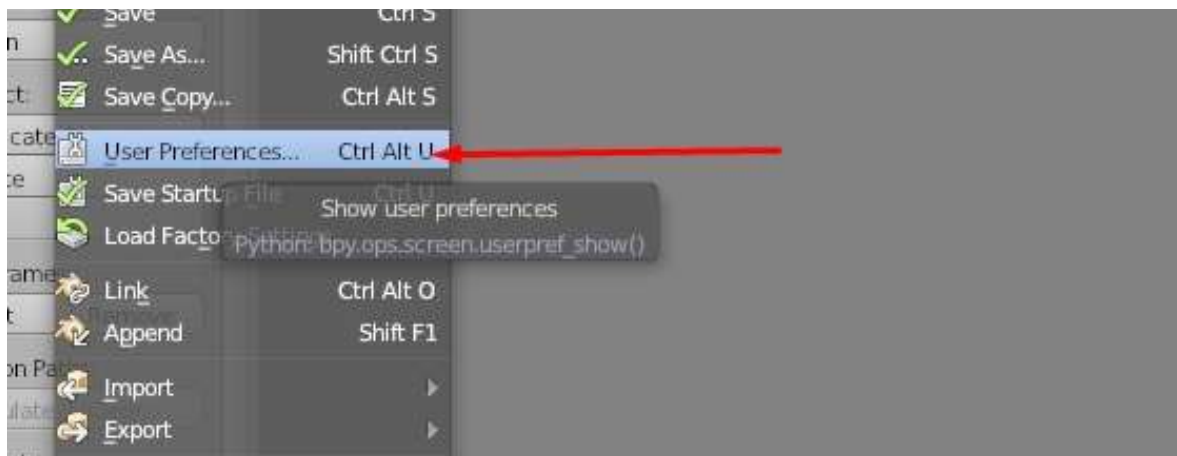
P will give you the ability to part objects.. or faces from one another

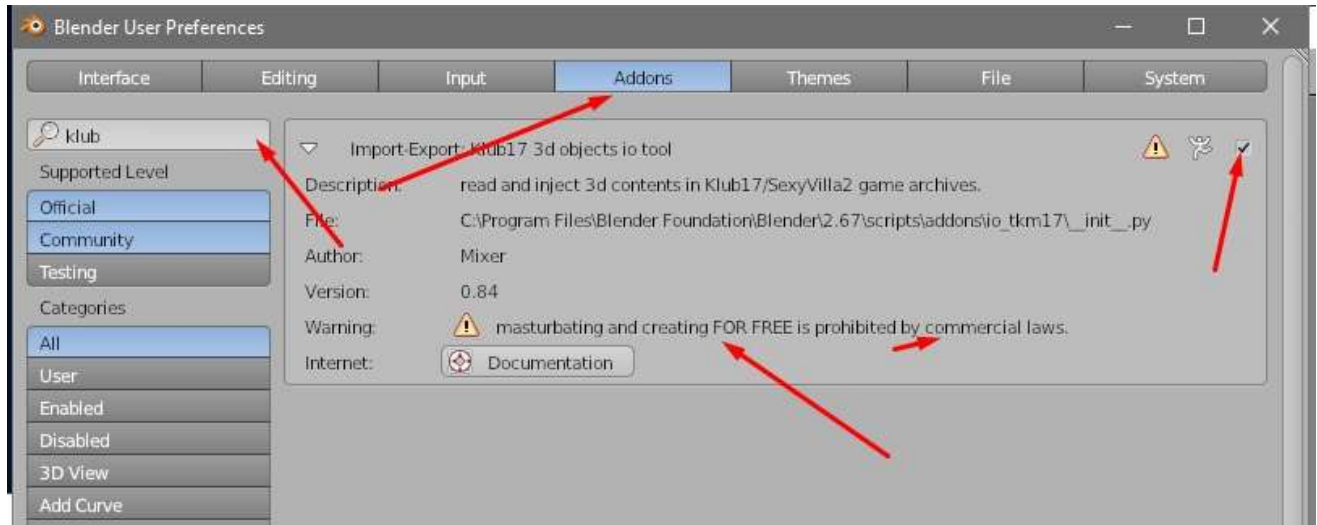


d.)

Select everything with a and delete it by hitting x and confirm with enter.

Go to file, preferences, add-ons and search for klub and activate it.

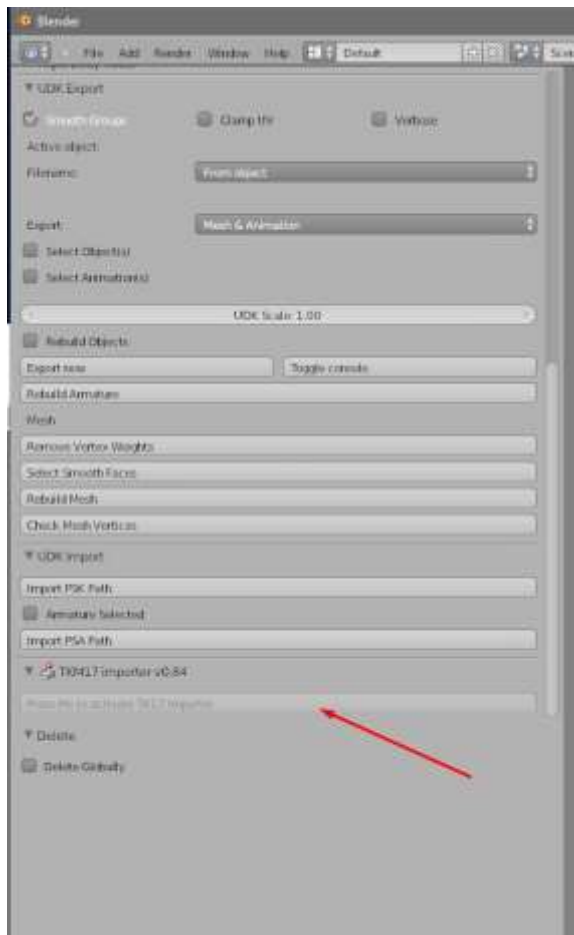




Save your preferences now

Close the preferences window

Look to your left, if it's closed, hit t or the plus top left corner.



You can see that the button is greyed out, not clickable.. remember the thing you downloaded?

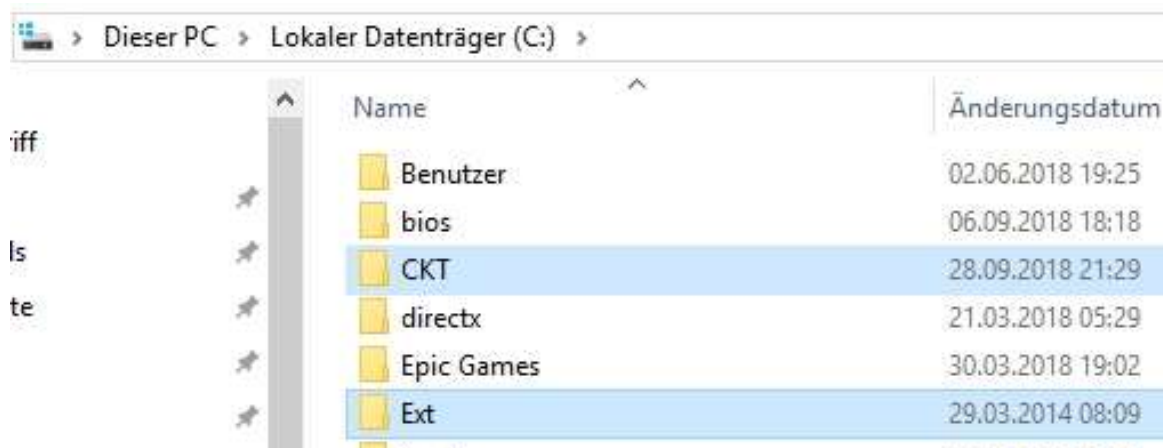
## 2. Collat Kane, Blender and TxxTools

a.)

Extract CollatKane and the "Ext" folder you downloaded anywhere you want but remember its location because you'll need them every time if you choose NOT to use the tkshelltools.

Also remember the location of CollatKane.

I've made it quite easy to remember for myself.



Here are the tkshelltools <http://modsgarden.cc/tools-software/27/game-files-unpacking-tools/414/;msg=69864>

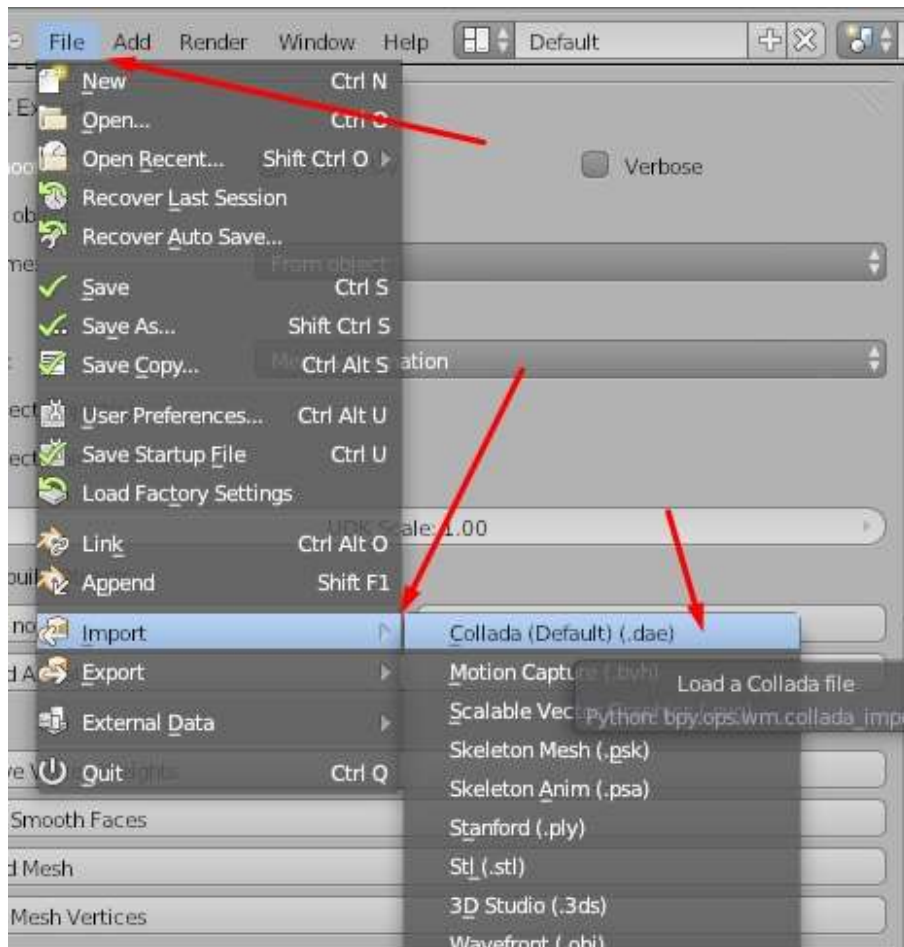
I use them. Why don't you? They give you the opportunity to right click on .txx, .[bsb] files and decode/encode folders or files to .txx/bsb etc.

God sent.

b.) Back to Blender

Go to file, import, .dae, navigate to your collatkane resources folder and import the female trs\_group (This is just for this scenario)





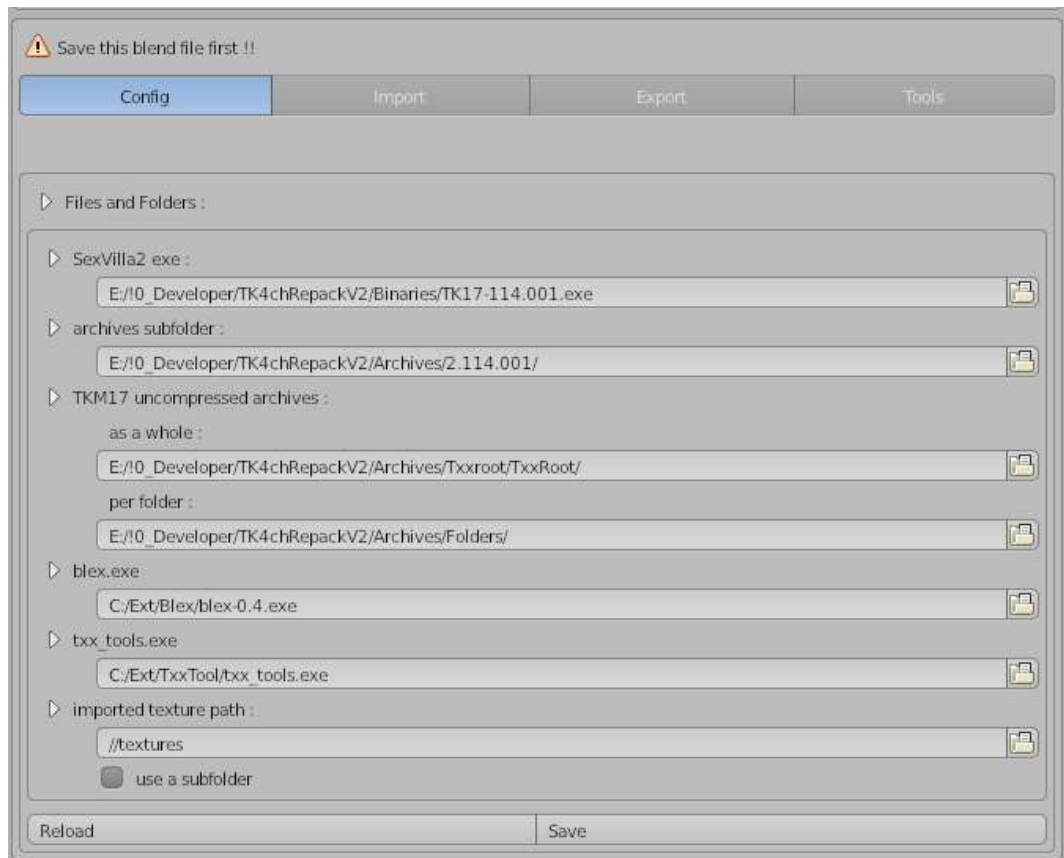
Great, the body (default one) is in blender!

And the button is also not greyed out anymore (You can handle this by just saving a blank or a file with something in it, but in our case, we just import everything before we need it.)

c.) Setting up the blender tool

Set up everything how it is in the picture I provided, navigate to your installation of the tools(Ext) and your Game Installation.

I got an error where I had to have 2 txxroot folders, I don't care because it just works. (Copyright by Todd Howard)



After that, hit save in the window and save the blender file..

d.) Making the body more ""real""

Go to the scene viewer/outliner

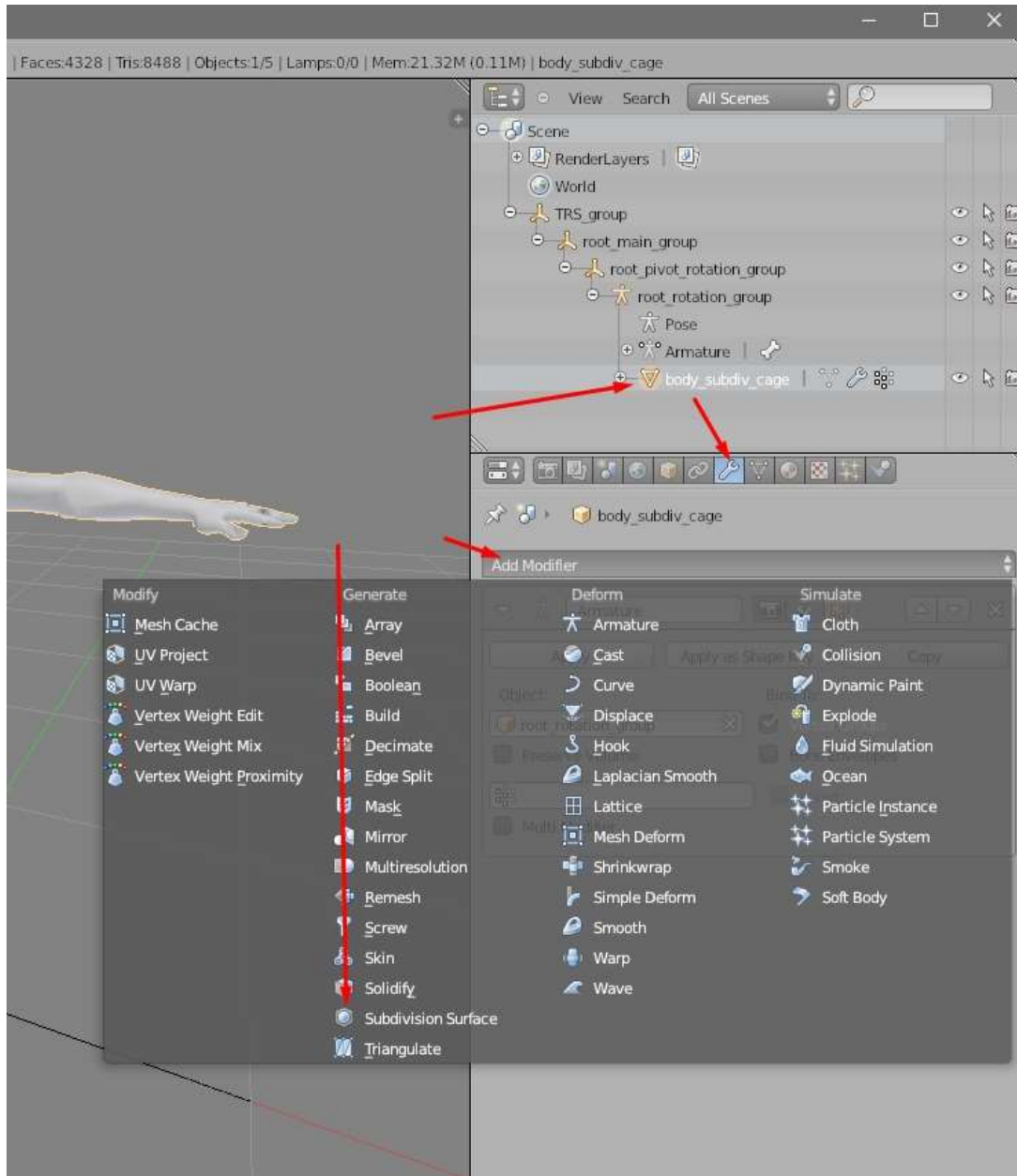
Navigate to body\_subdiv\_cage

Click on the wrench

add modifier

click on the subdivisional surface modifier(Subsurface Modifier)

DO NOT CLICK APPLY.

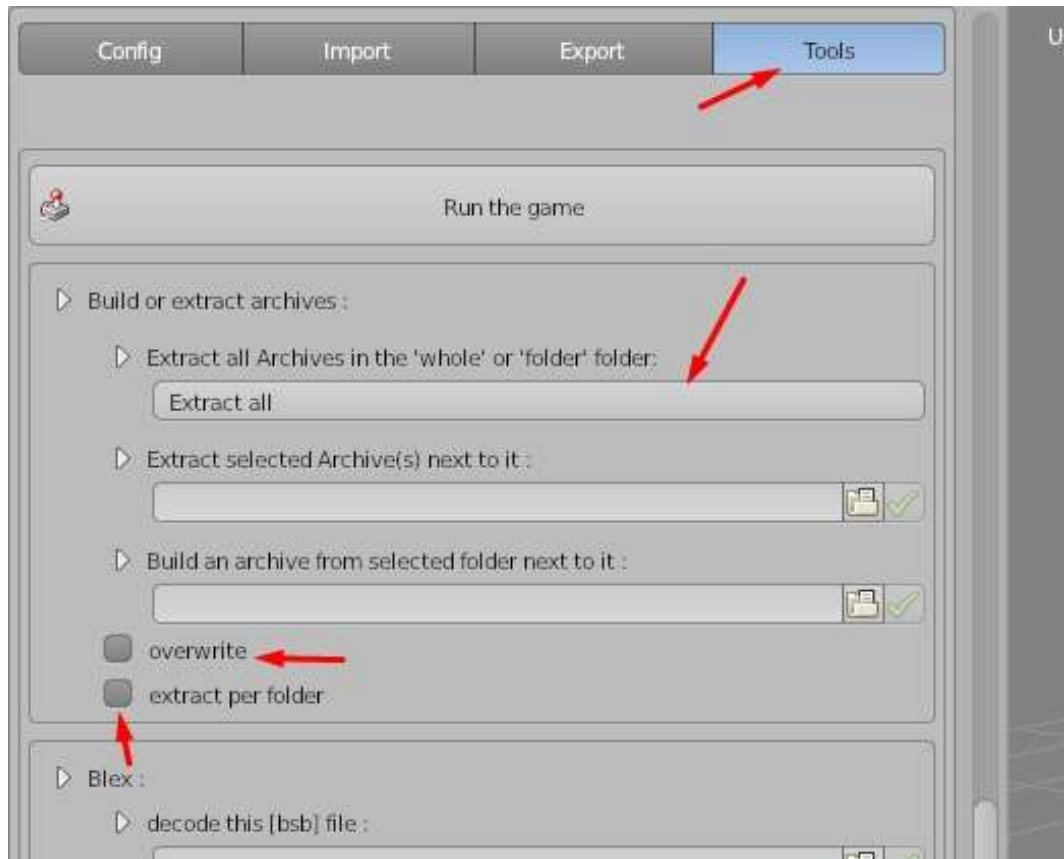
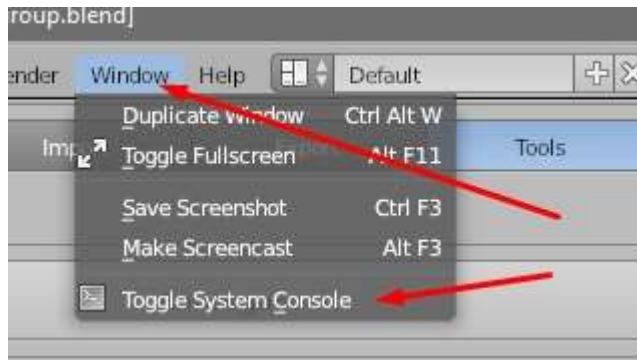


Hit Ctrl + s (saving the blender file, overwrite if necessary)

3. Now we finally start the iotkmtool to get all the raw files we might need in the future.

Go to the tools tab but before hitting extract all, go to window -> toggle system console

A window will pop up which is necessary if there are some errors.



Now hit Extract All, you'll see that blender is working and extracting everything you set up earlier.

After that, extract all per folder and overwrite if necessary

You might not need to as it takes up a lot of space for something you might only need once.. but who cares if you have enough space, just do it.

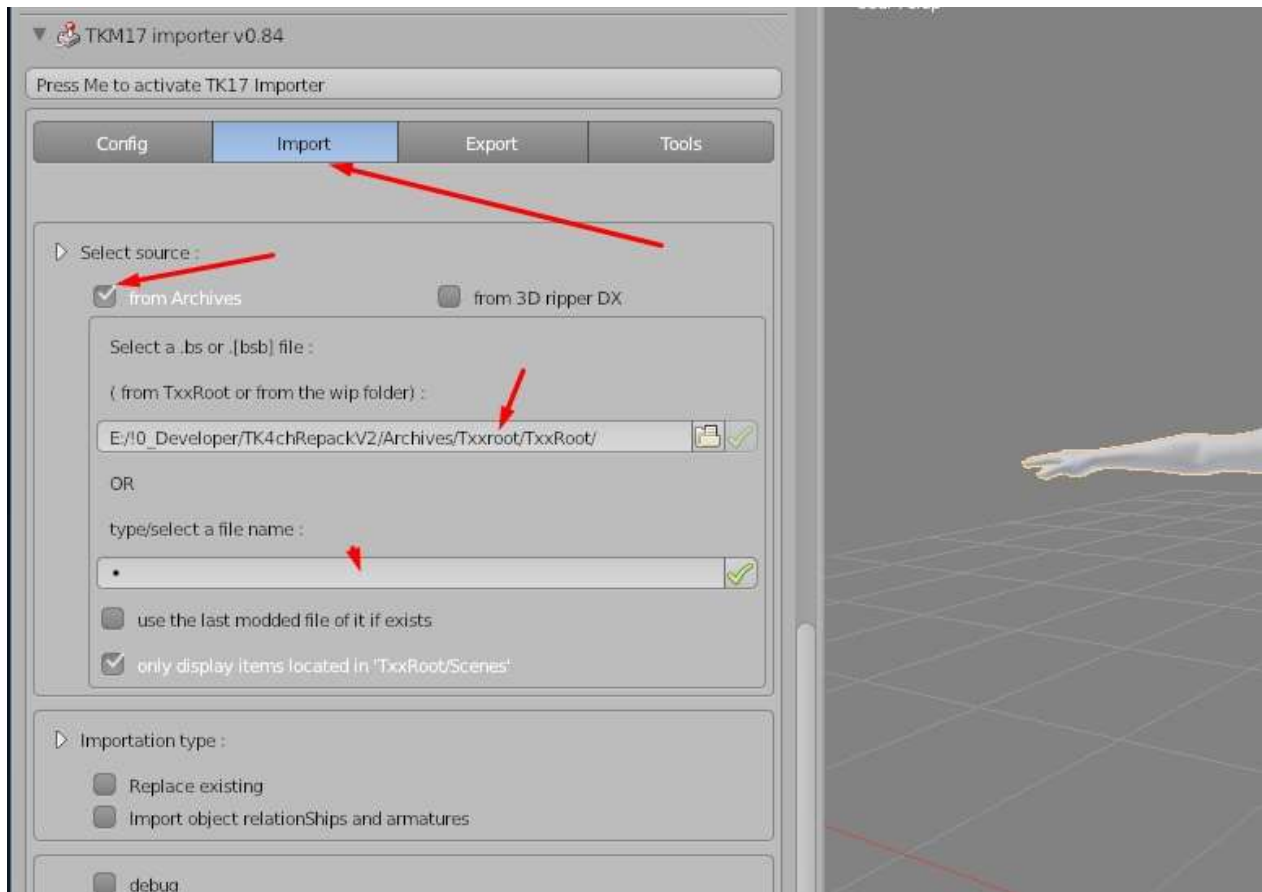
It will extract everything again inside the folder you specified.

After extracting, save the blender file again.. (I save around a 100 times within one project..)

b.) Importing something to see if it's working.

Click on the import tab, from archives, check if everything is correct (Also look inside the folder you specified)

Now type something in the box and click on it, after that click on the "Tick symbol", it will start importing.



It worked!



Now hit Ctrl + z to revert that step because we don't need it right now. Save your file once again..

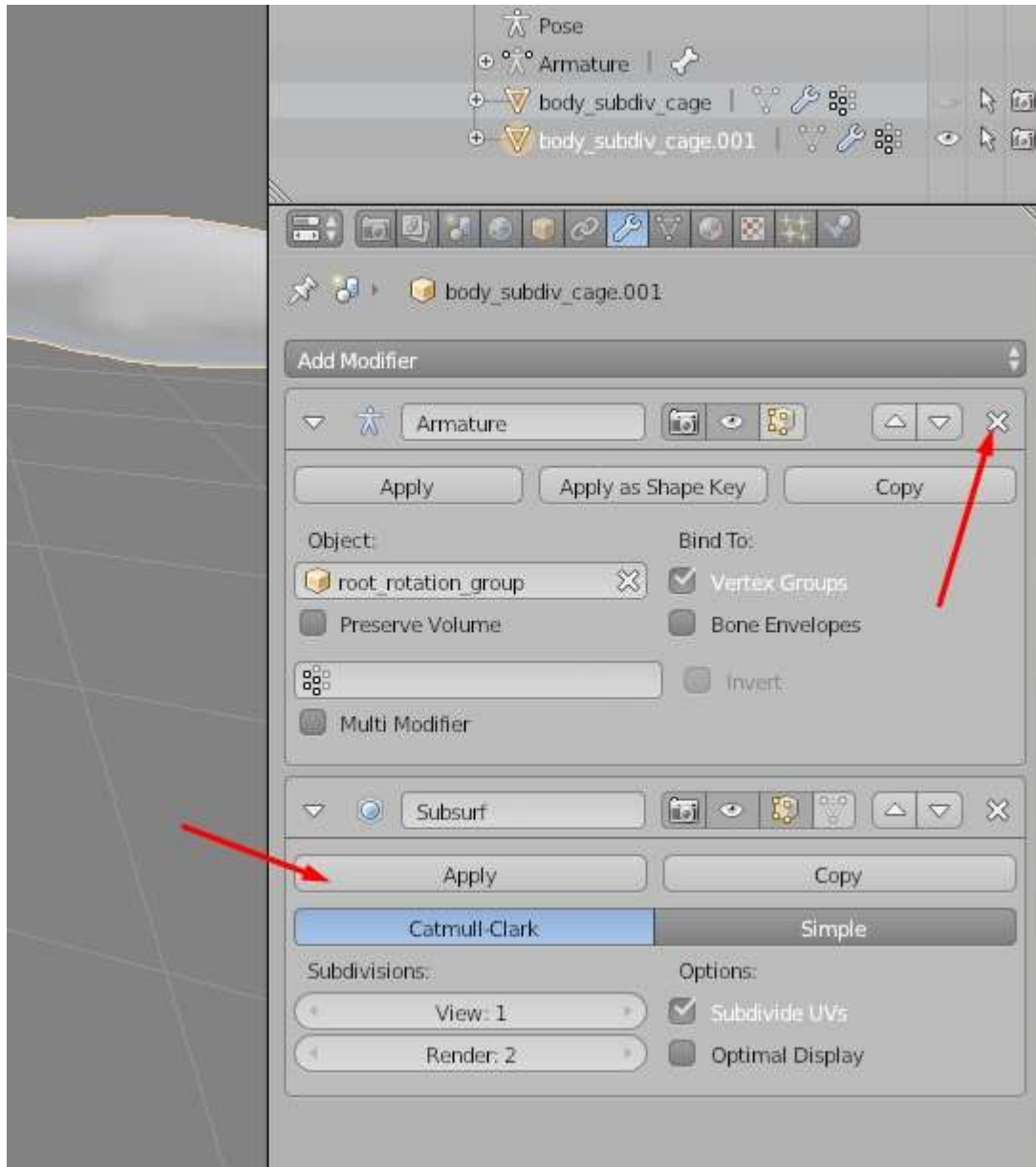
Now click on the body\_subdiv\_cage

hit shift + d (duplicates the whole selection/object), don't move your mouse just hit left click.

Now select the original body\_subdiv\_cage without the .001 and hit H (this will hide it), alt + h will revert everything that is hidden.

Click on the newly duplicated body\_subdiv\_cage.001, go to the modifier tab (blue wrench)

Hit the X on the armature modifier and apply the subdivisional surface multiplier.

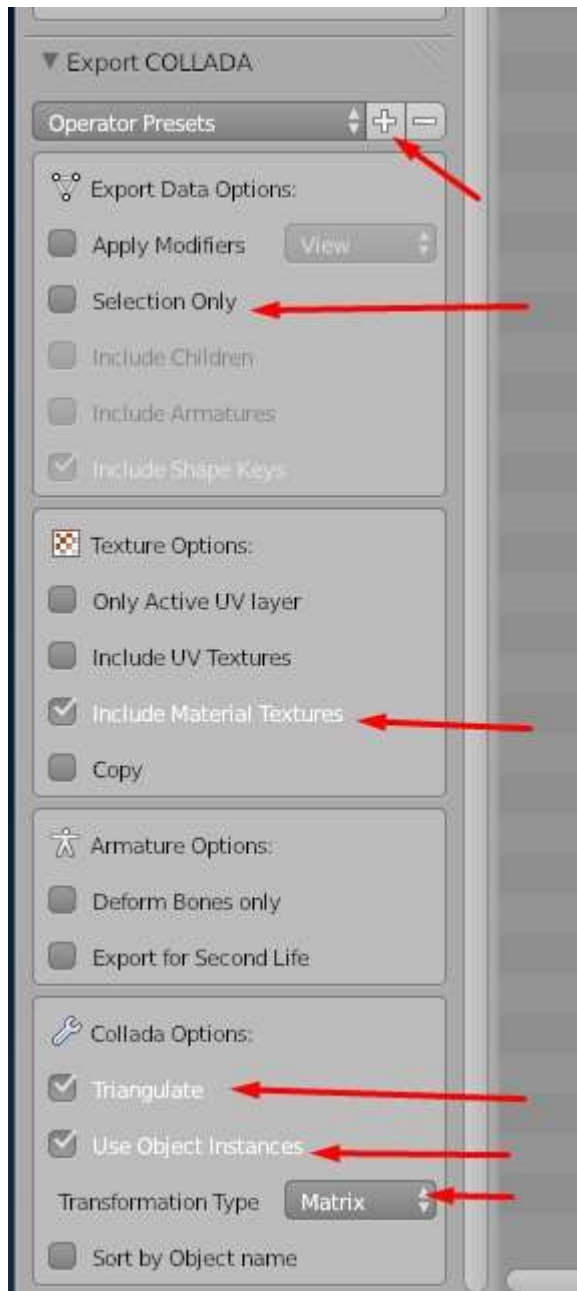


### c.) Setting up the export options

Go to file, export, Collada (.dae) (The file will have the name you gave the blender file.. if you want a different name, just rename it)

On the left we have the operator presets which will tell how the exported file will come out for other programs..

Set everything up like in the screenshot and save this preset by clicking on the + (name it collatkane export option or something you remember is for tk17)



You need to save the pre set without selecting the “Selection Only” option.

Now click on the dropdown list and choose the “collatkane tk17 export” option.

BUT, this time we only want the selected body to be exported as .dae.. this time we hit selection only.



#### 4. Marvelous Designer

Navigating inside MD is as easy as blender with some exceptions once you start creating your garment...

Middle Mouse Button moves like a 2D compass..

Right Mouse BUtton will move you dynamically..

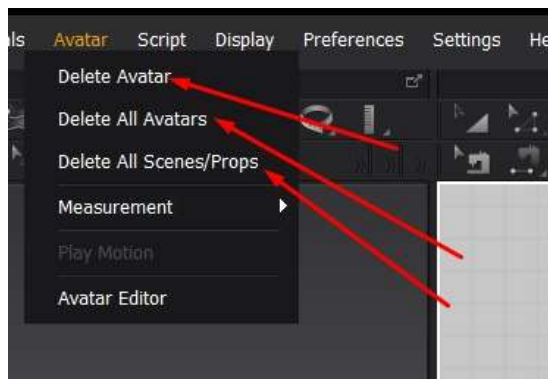
a.)

It is a great tool to create clothing and semi-soft-clothing, not hard surfaced armor. You'd still need to create hard surface with a 3D program the old way.. otherwise use zbrush(great tool)

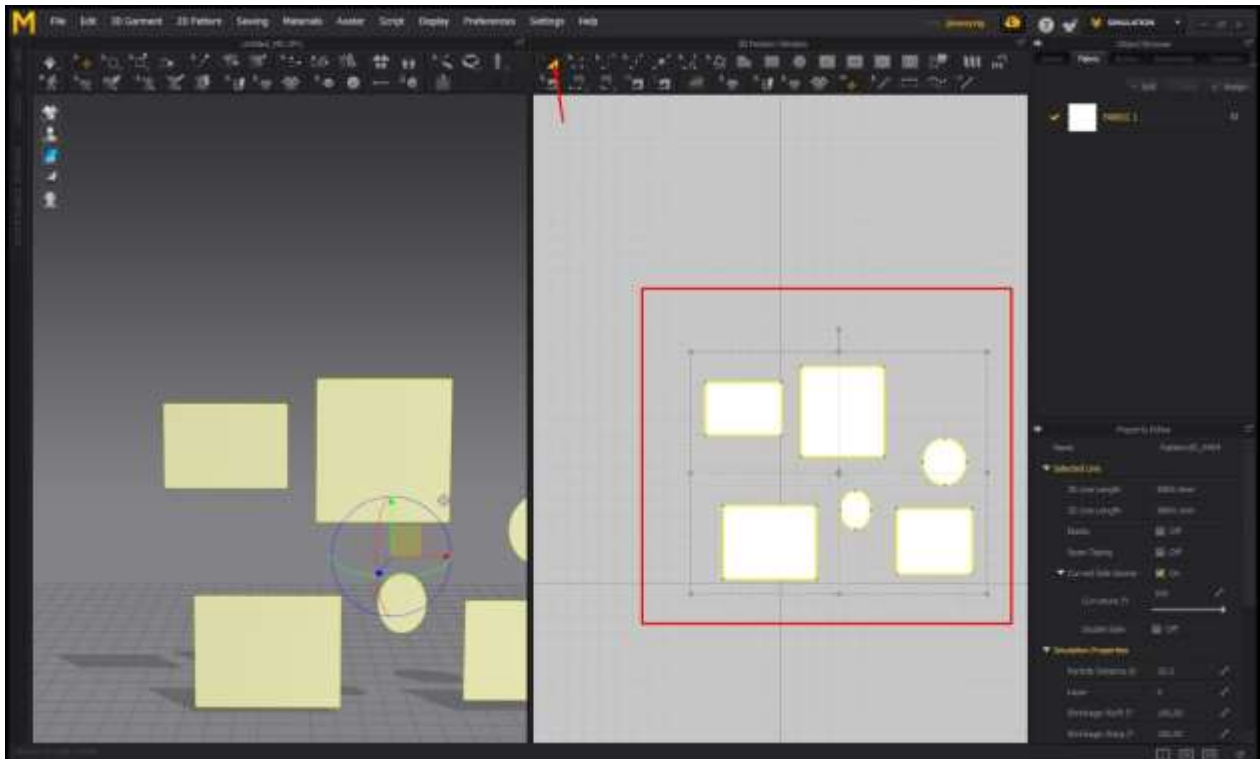
I like to work with Version 7.5 or for you, the latest.

Once you start up marvelous designer, it might come up with a model and a garment.. you need to delete it or create a new project.

Just delete all props/scenes and all avatars.

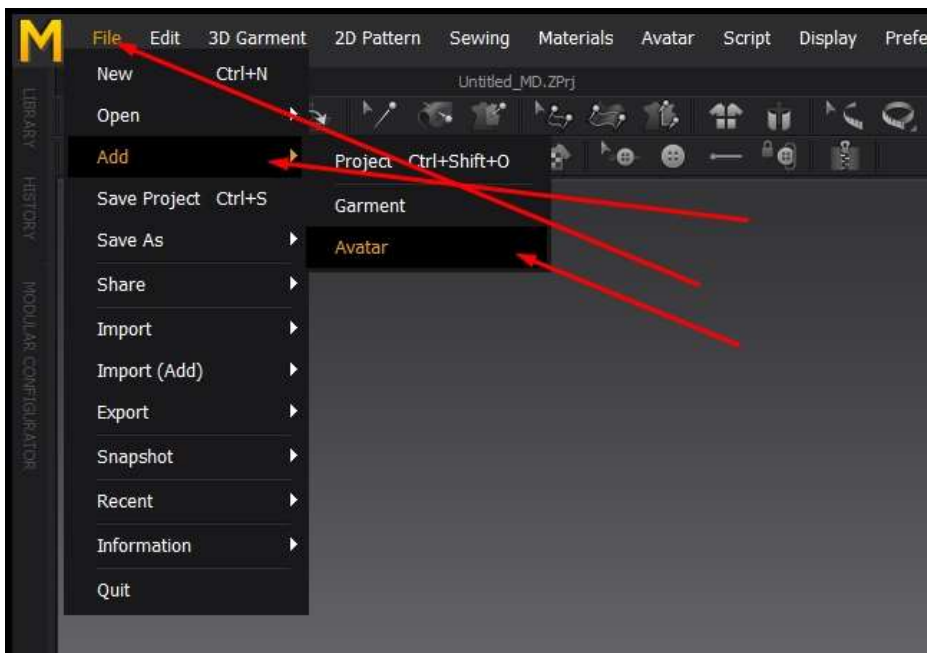


To delete the garment if it's not deleted already, just click on the selection tool, draw a rectangle around the garment and hit delete on your keyboard.



b.) Importing the Avatar

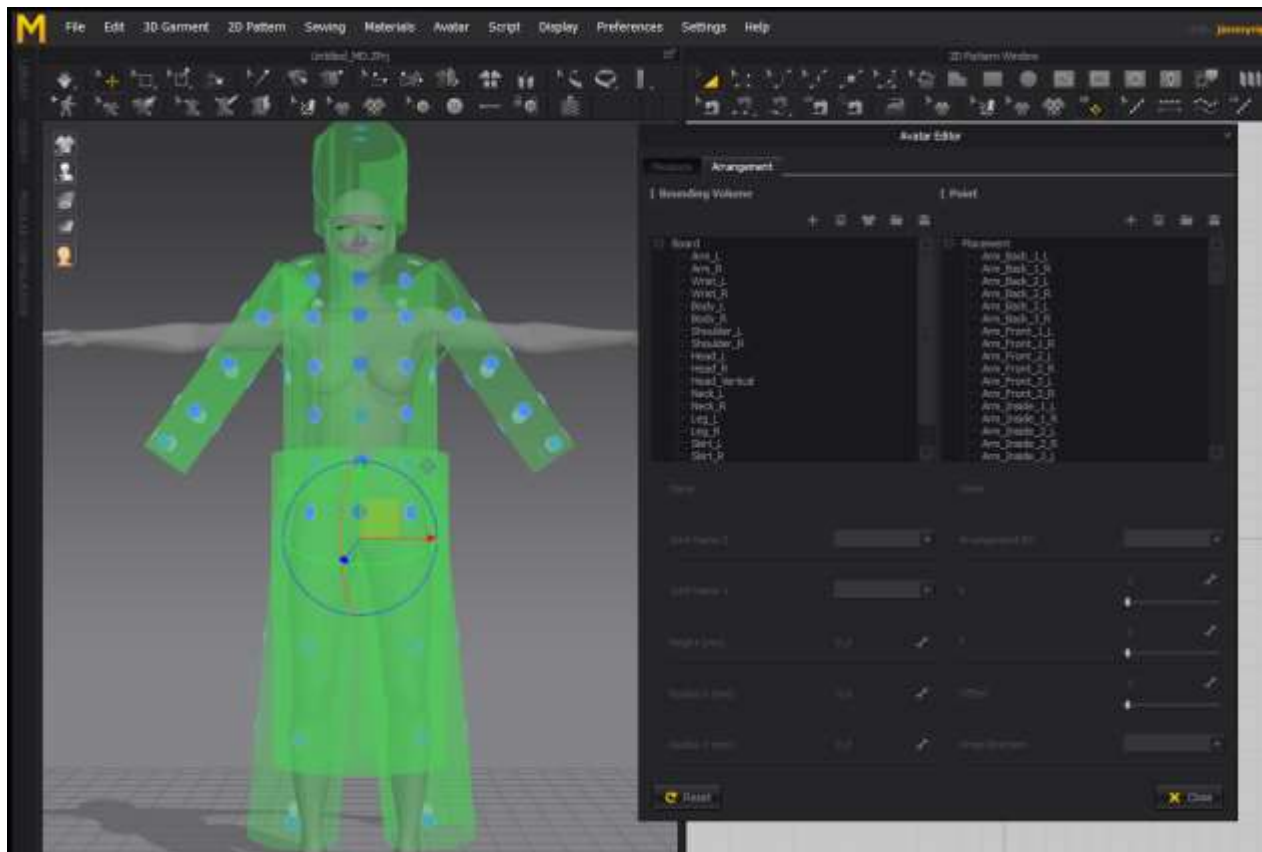
File, add, avatar and navigate to where you exported your body\_subdiv\_cage.dae file.



Apply those settings if not already applied.

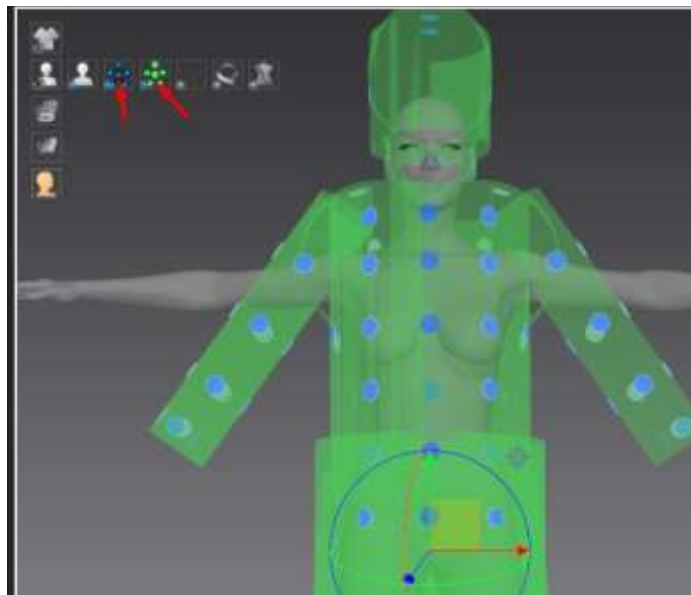


Once you hit ok, there will pop up something like this..



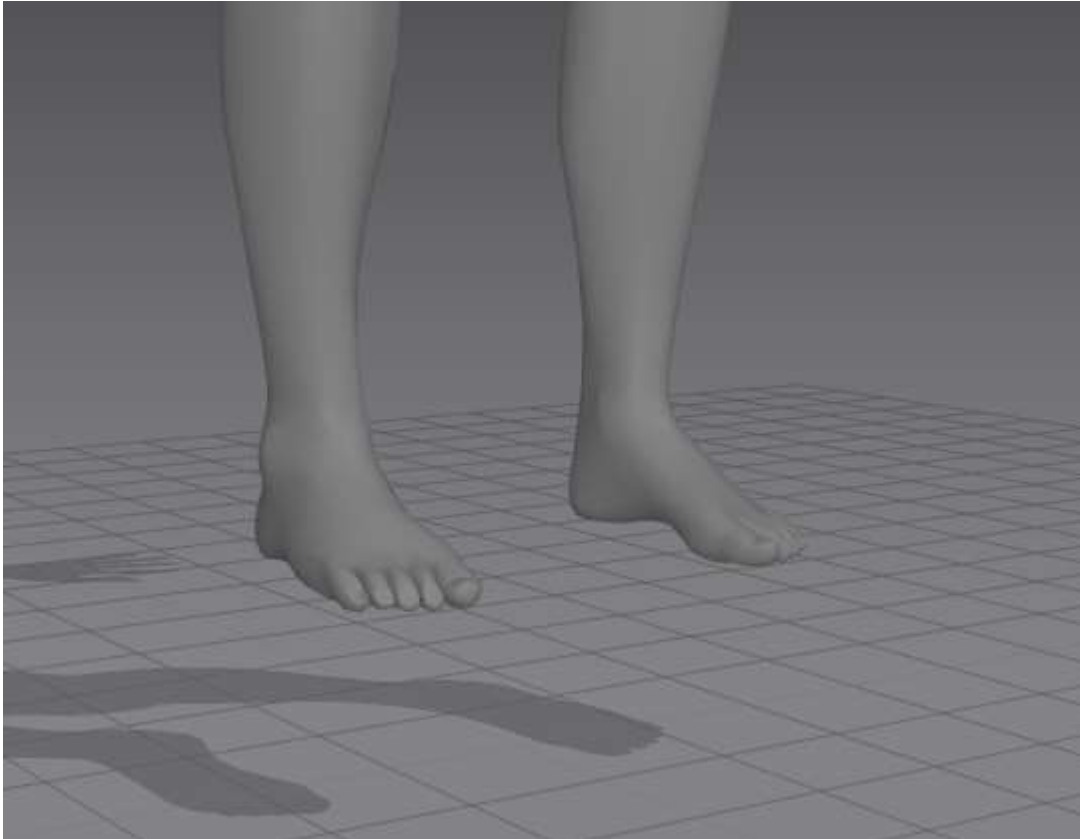
Ignore it for now as it's part of the advanced tutorial after this one here is refined and failsafe.

Untick the options from the picture below because they are not needed right now.



Now lift your avatar slightly above ground(blue arrow).. because you never know if you want to create socks or not..

it should look like this



Now you can save this project -> AsYetUntitled or something you might see fit.

That's it for now. Play around with the steps above until you are able to navigate through Marvelous Designer..

Once done, start with 5.

## 5. What Garment?

What do you want to create? Do you want to create a supergirl.. a venom? Or do you just want to create a casual thing which just is not inside tk17?..

You either choose to create something completely on your own, base it on somebody else's work.. OR you get inspired by something you can't port into the game..

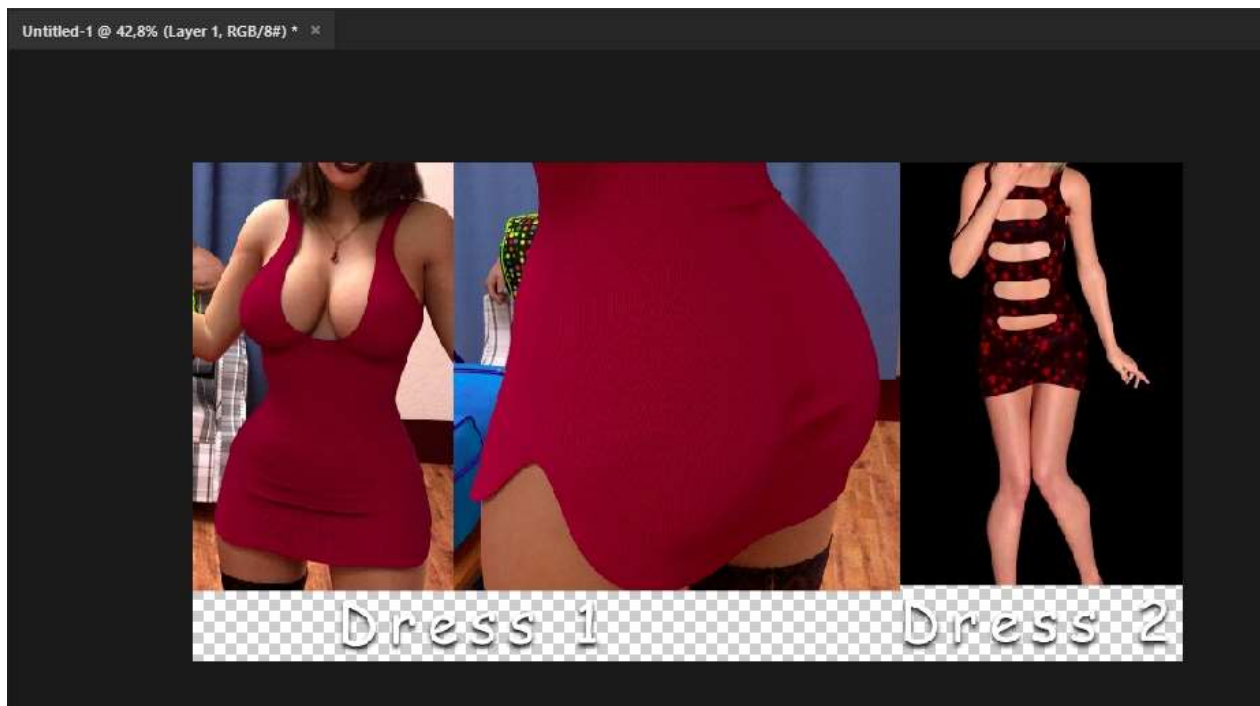
otherwise, head to the request section on modsgarden and help some anon out with your crazy wizardry!

... i took a look around and the easiest thing we can create is this <http://modsgarden.cc/requests-other-content/32/content-requests-prosby-kontenta/27/msg174722#msg174722>

The advanced tutorial will include a harder to create dress you might've seen in the request section.. I'll give my best to explain the following [basic] steps,

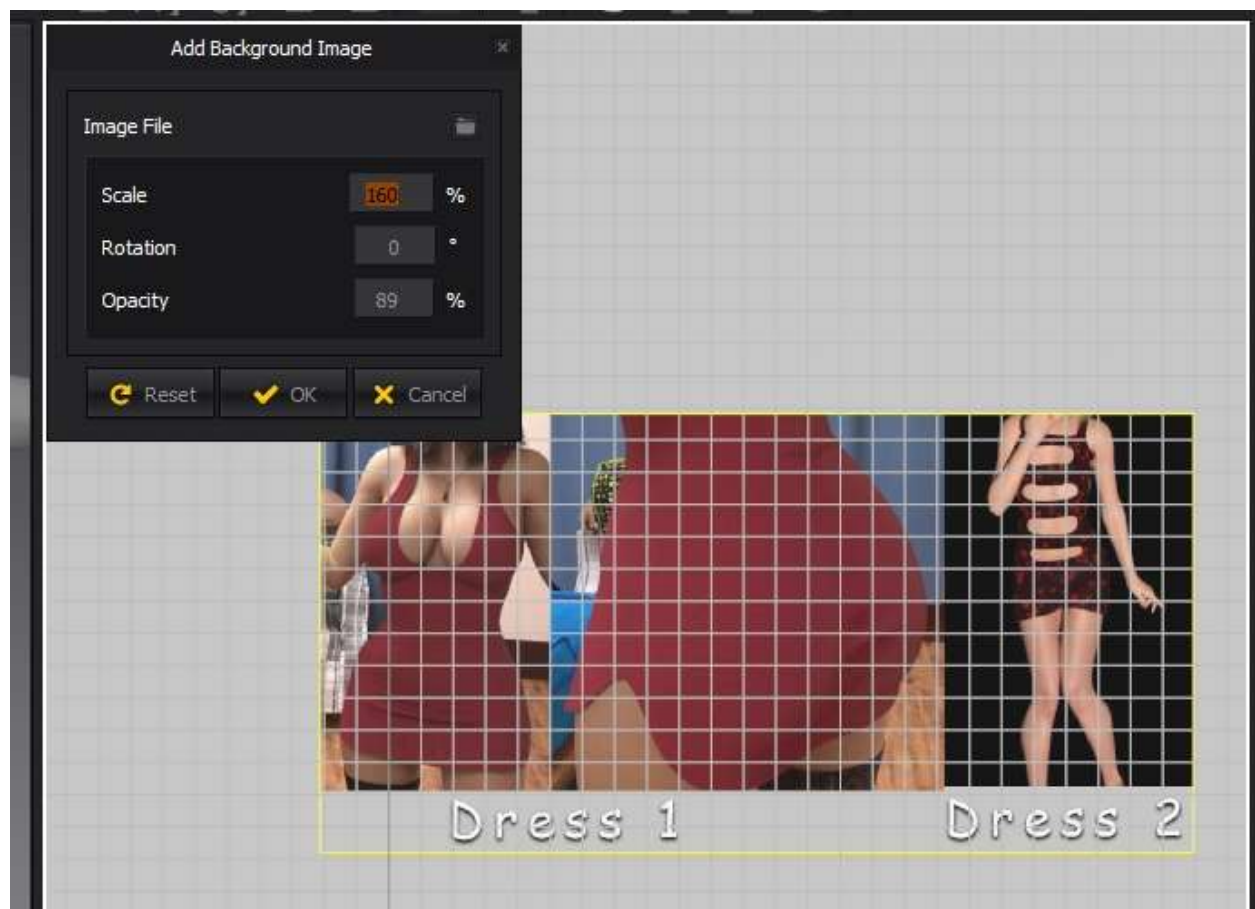
afterward the advanced steps for the dress I am talking about.

Grab his pictures.. and combine them in photoshop like this



a.) Setting it up in Marvelous Designer

right click in the 2D Garment View, add background image and set it either up like in the picture or do it how you like it.



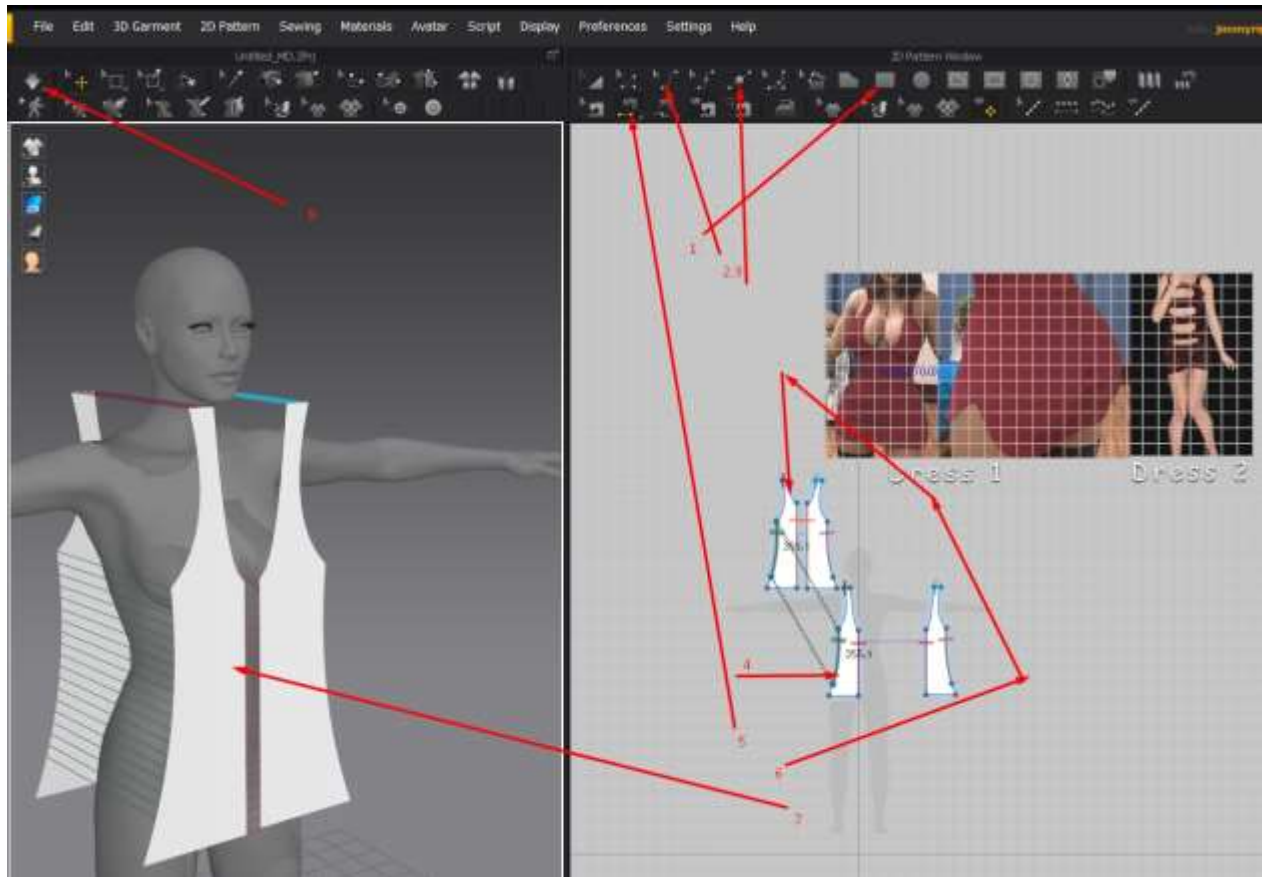
b.)

I aligned everything (background and view on avatar etc)

1. I used the rectangle tool to create a basic shape
- 2+3. I edited points/curves/curvepoints in
4. I rightclicked, made symmetrical pattern without sewing
5. sew it together manually
6. copied the left front piece as a back piece and edited it slightly to fit the back.. and redid step 4

7. aligned every piece to the avatar body..

8. hitting this button or >spacebar< to let the simulation start..



**BUT MOST IMPORTANTLY, SAVE.** Save everytime you might feel your PC can't handle the wizardry.

Save your files either as projects or garment files.. you choose. You get familiar with it.



c.)



Looks like it doesn't look like the dress at all.. we can fix it either by dragging the dress around, freezing it.. strengthen it.. or do some other tricks we might not know as of right now..

Or we could adjust the front dress correctly till it meets the shape of our "background"..

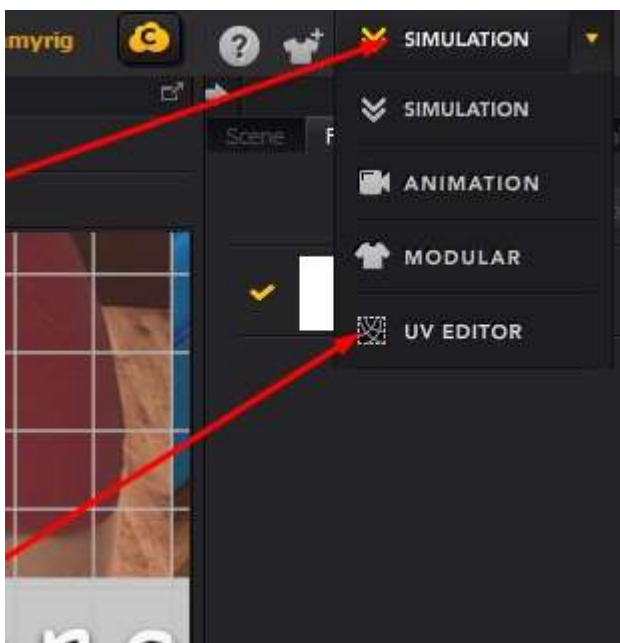
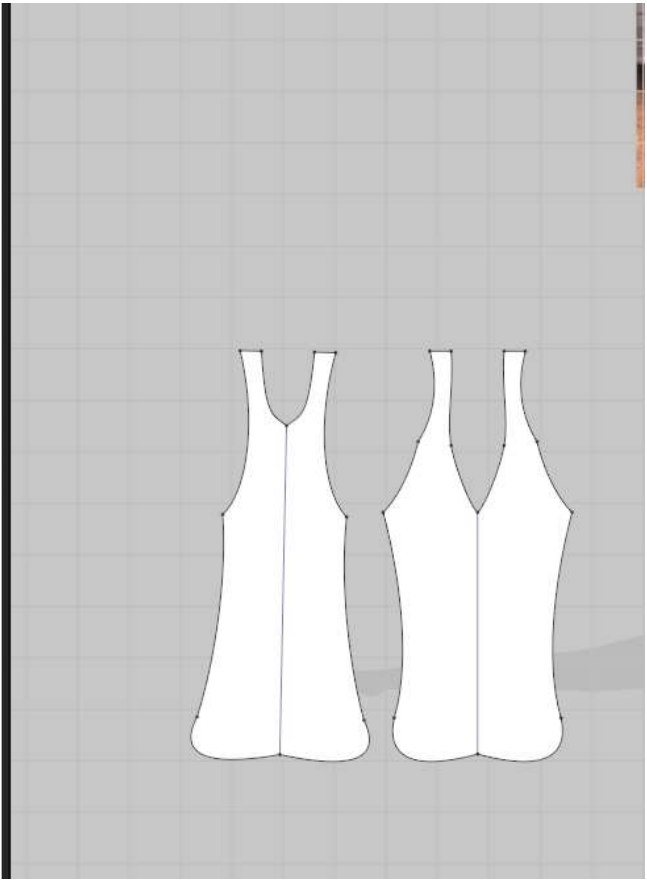
Use the tools MD has, it will make a difference and in the advanced tutorial I talk about how to create specific effects.

It would be too much right now, for you and me.

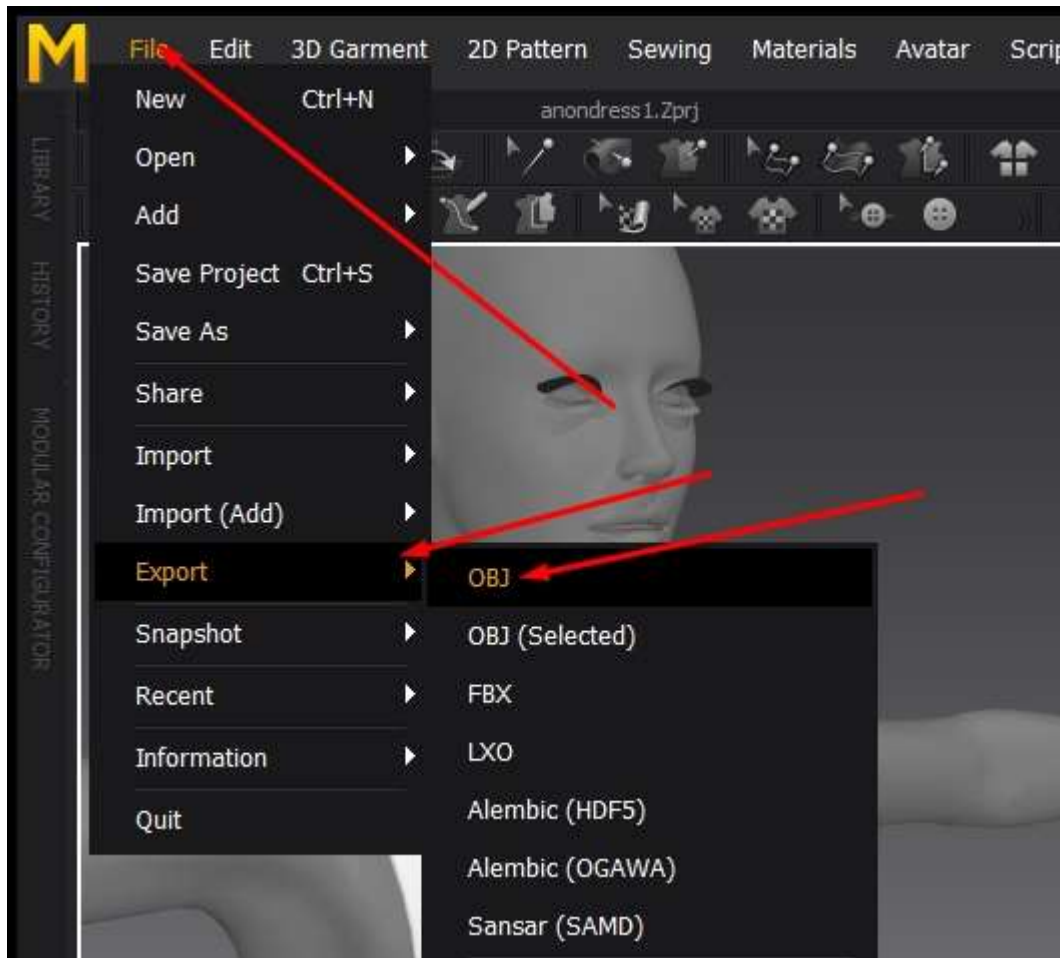
I adjusted it with written tools.. it looks more like it now, except the booby part.. but that's a customizer thing.



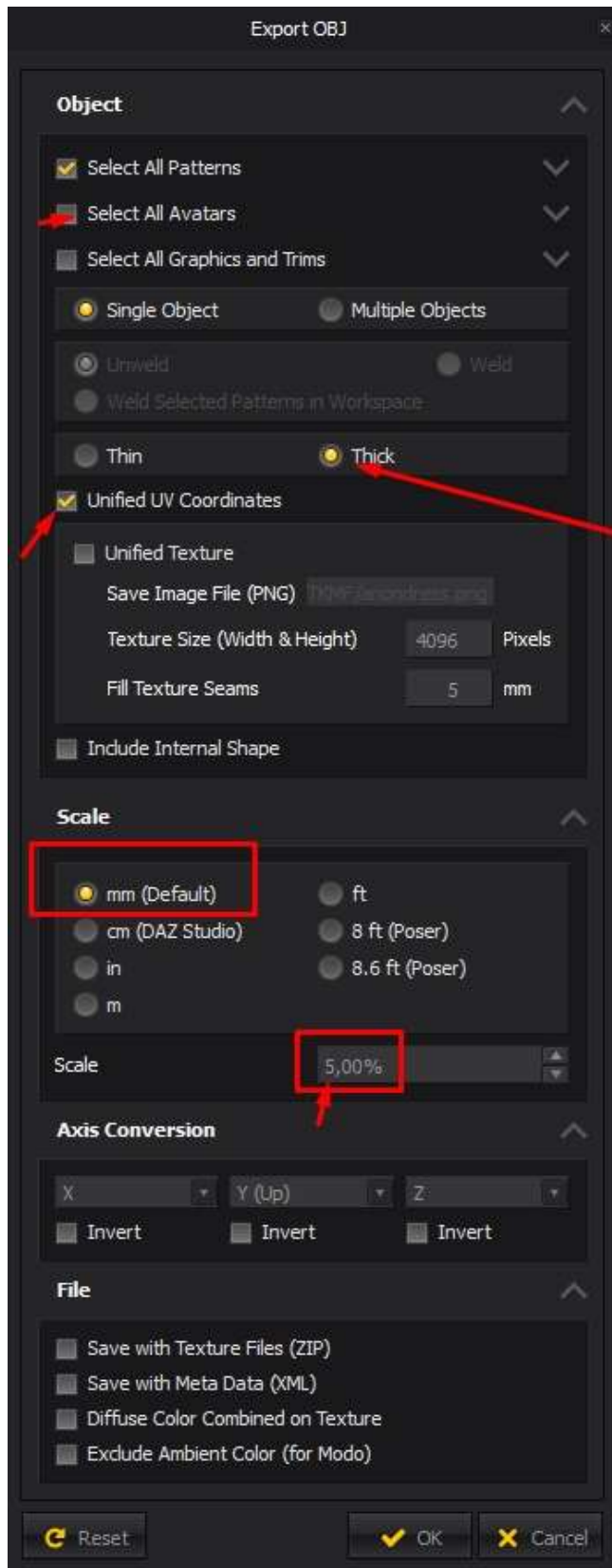
e.) I now merge all the pieces together at the sewed lines.. and edit the UV Map to fit inside a square.



After that I export the model as obj because it looks ok right now.. and can be used.(No floating polygons which can happen)



Be sure to use the settings I have, otherwise it won't be turning out that well..



You can play around with the % value till you get to the needed %.

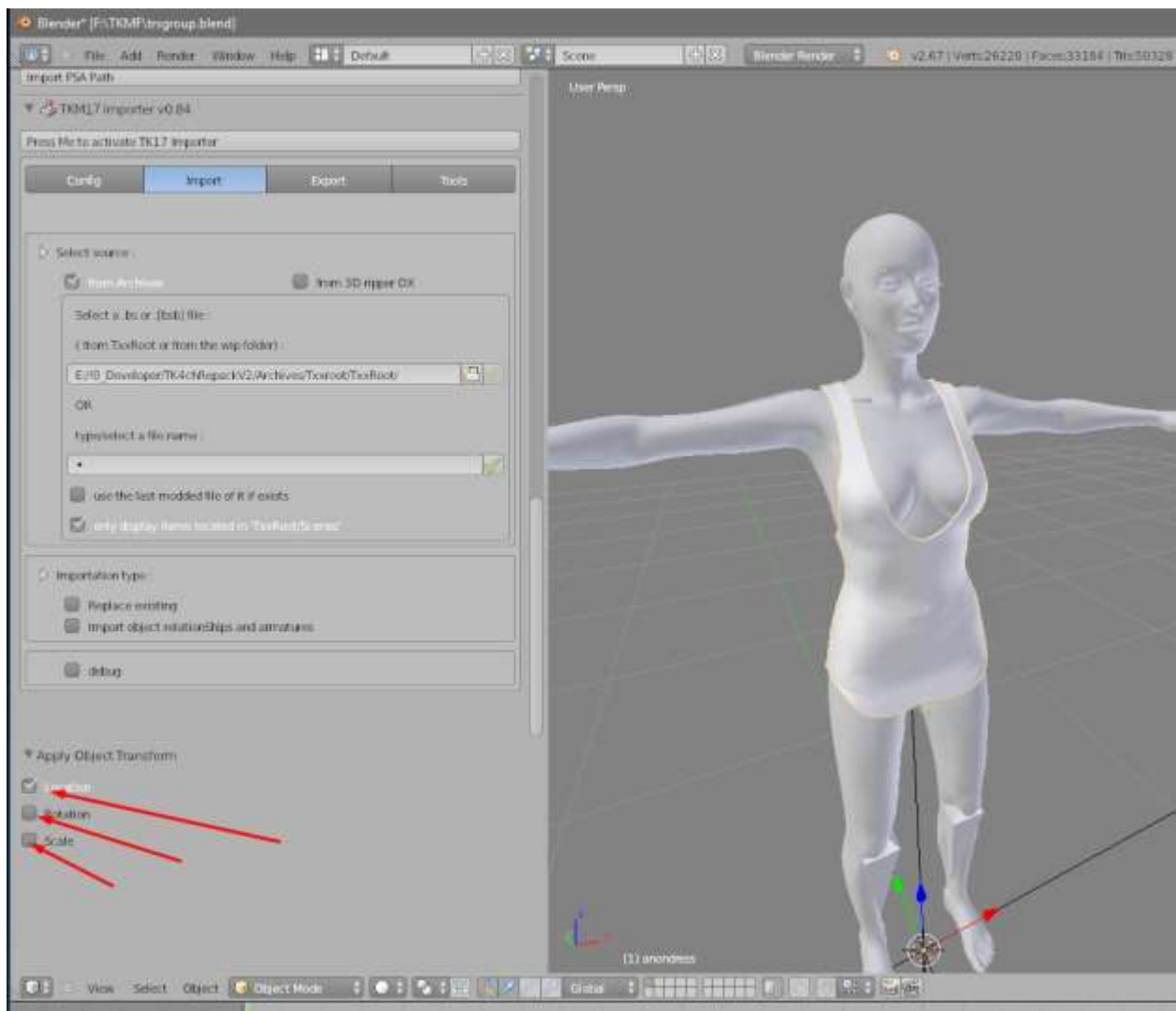
## 6. Back to Blender..

Import your freshly created .obj from the place you exported it from MD.

Once imported you might not see it.. hit S and slowly move your mouse around to see if it pops up..

otherwise test around with a different %%% Number, you might actually get it.

After finally adjusting your clothing to your blender avatar, you want to hit CTRL + A and apply location + tick everything on the left.



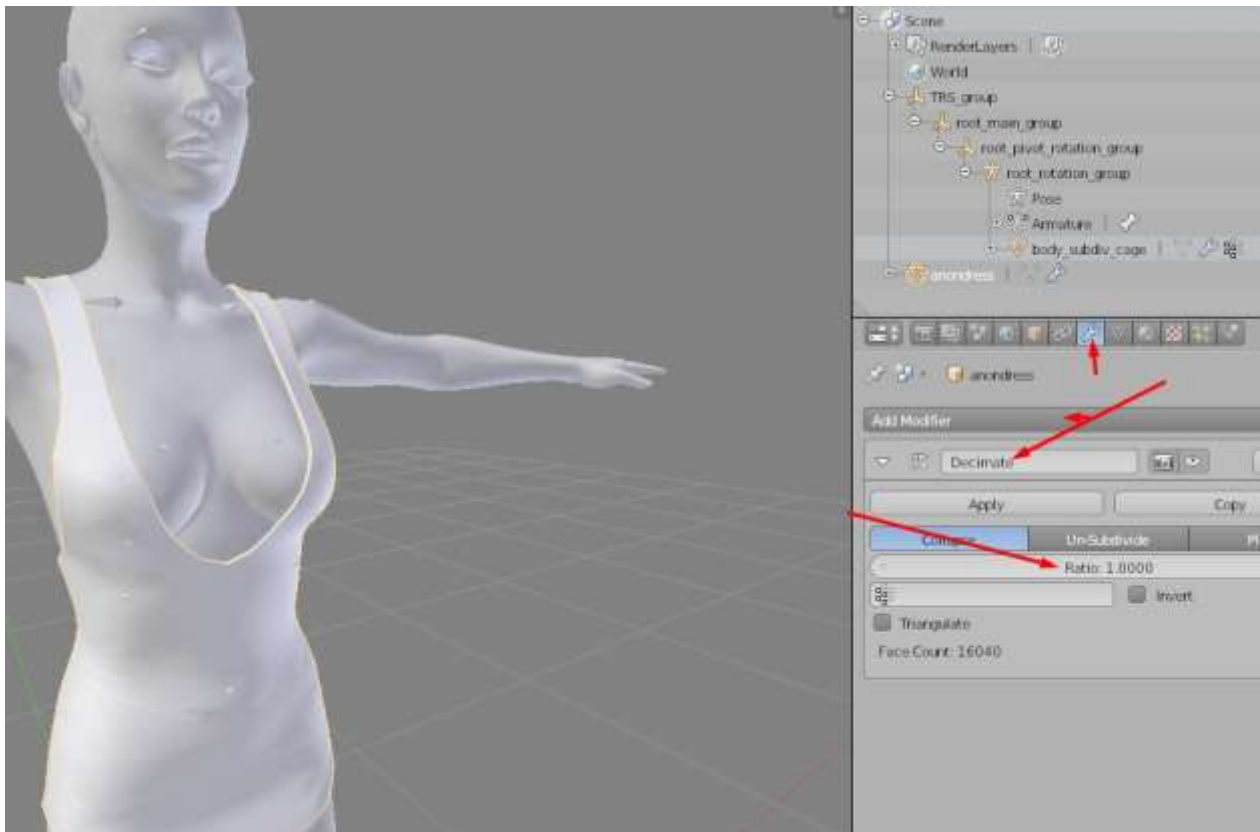
7. Decimating the dress if too much tris.

a.) Click on the modifier tab, add modifier, decimate, collapse and change the ration

Now we take a look at the dress.. it has 16k faces.. we might not need all of them..

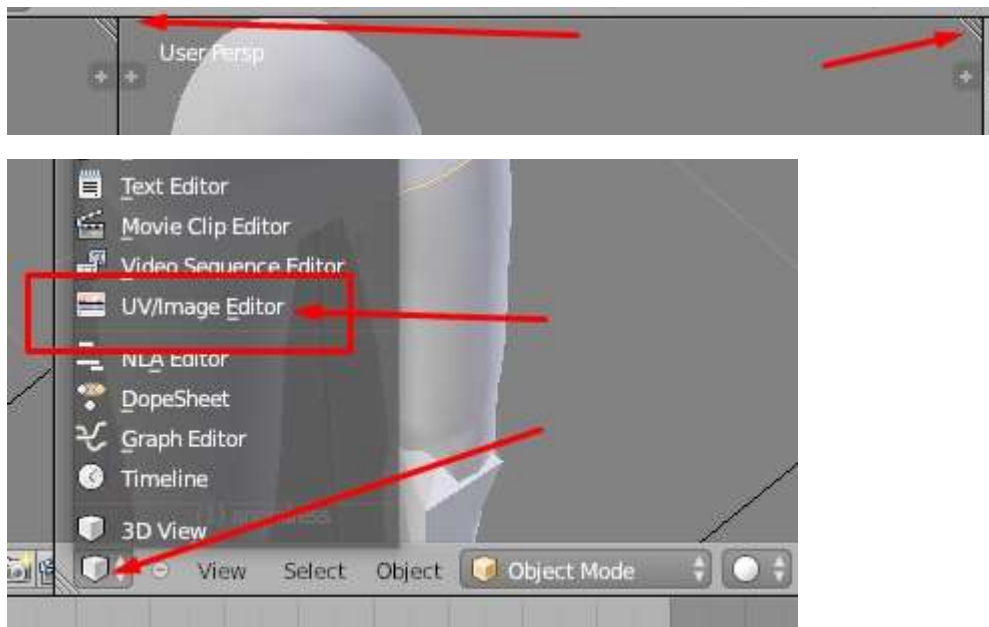
some may be just there to exist. Try reducing the ratio to where the dress wont be affected in shape but in facecount.

Once you think it's good enough, hit apply.



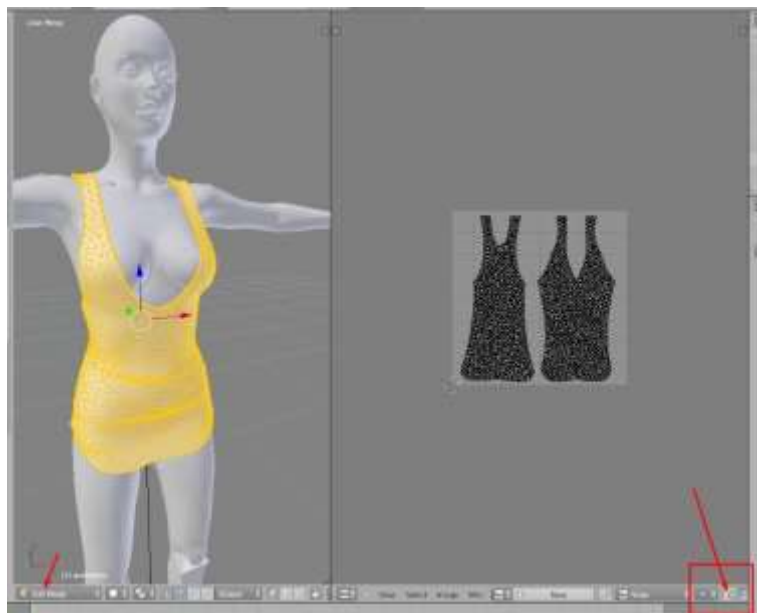
## b.) Adjusting viewports

Drag one of the arrows in a corner to the left till it's almost the middle. Now you have 2x 3D Views, change the newly created view to uv/image editor.



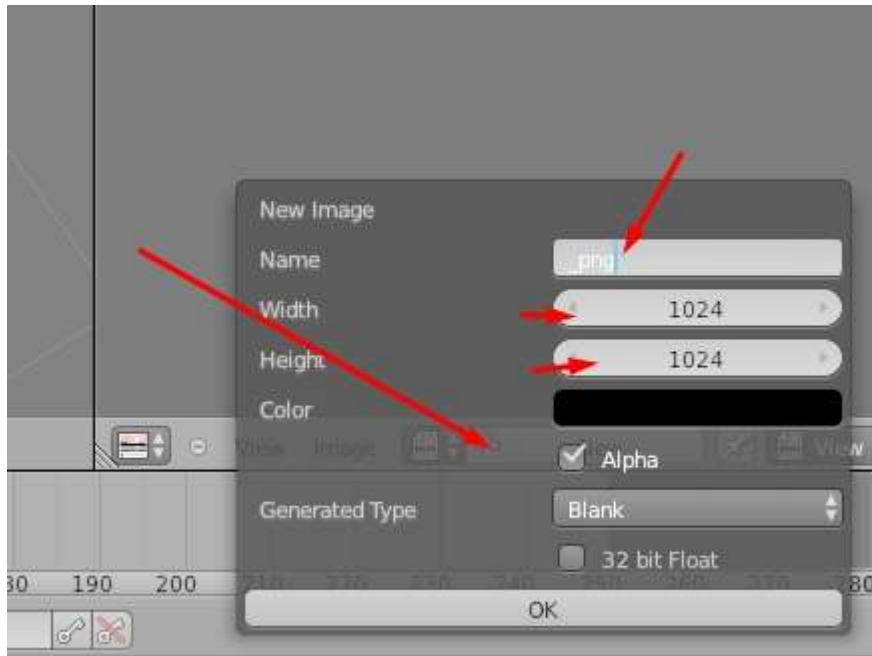
## c.) Tabbing

Hit tab in the 3D view on the left, so that you are in edit mode.



After that, hit the rectangle thing to select the faces in both uv editor and 3d view

Now we create a new picture and just name it `_png` <- without a .



And we choose the size of the texture and be sure that the uv is inside that square.

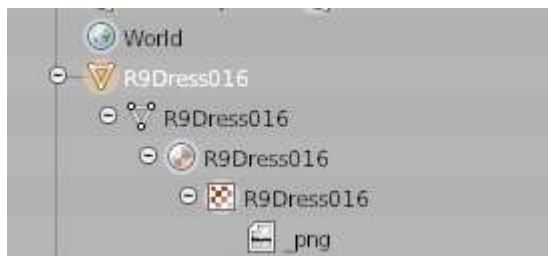
d.)

Now we need a number for our addon.. head to Olaf Sand's Thread and get yourself a number.

<http://modsgarden.cc/3d-addon-mods/23/add-lists/2607/15>

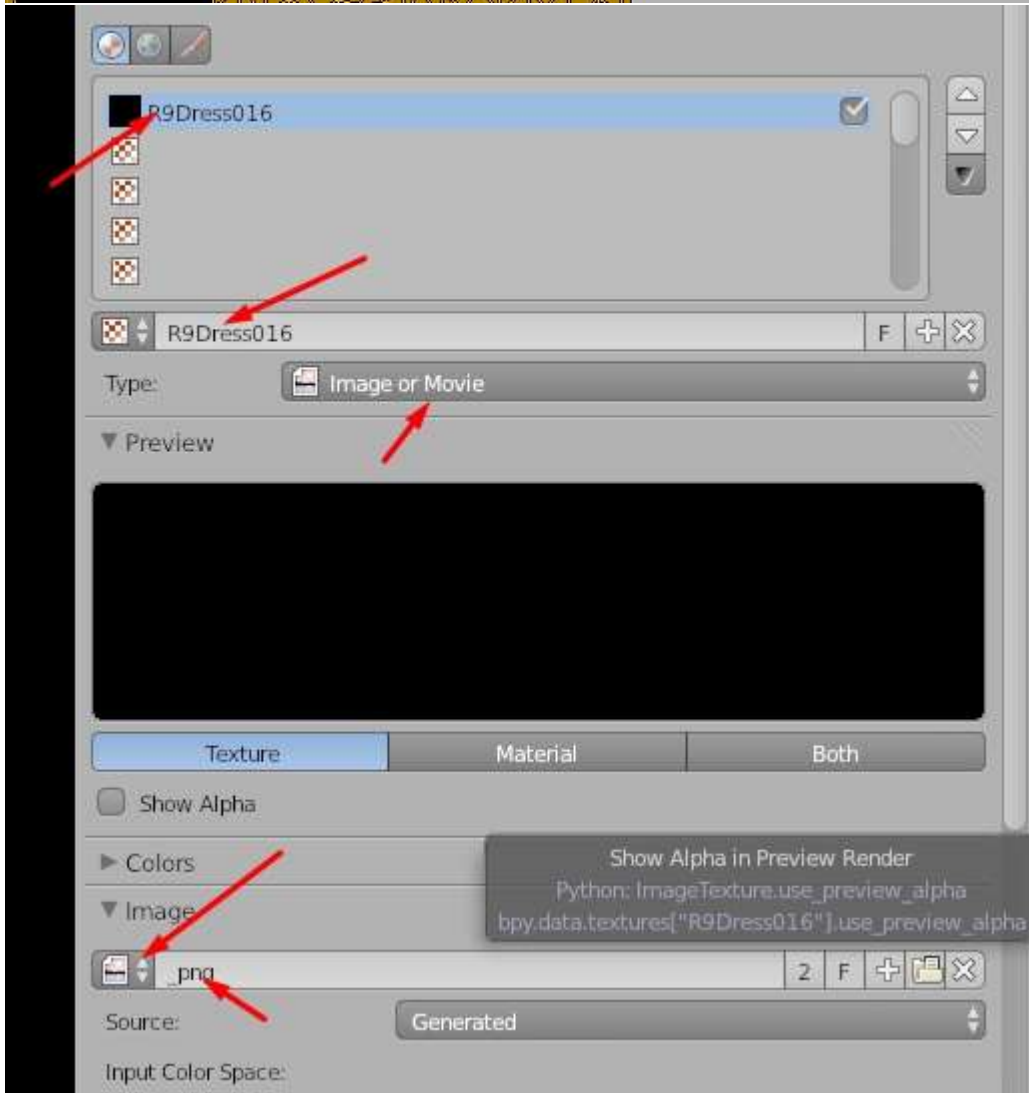
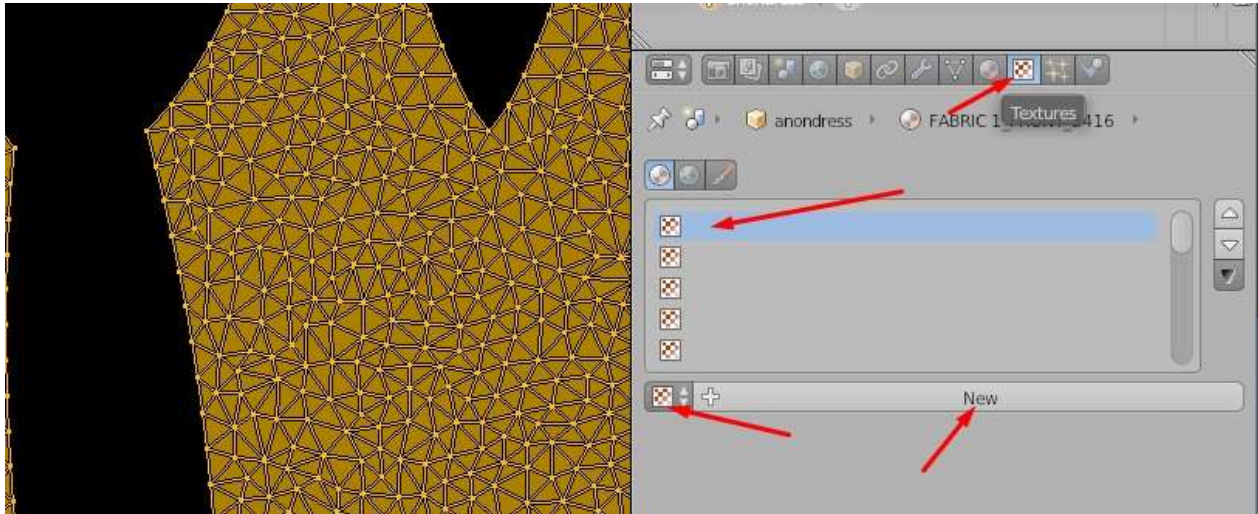
The free number I took is 016 from the dresses, it should be named R9Dress016 now. Our Anondress has a name. R9Dress016.

This is how we name this dress and everything which belongs to it. Look at the picture.





And also don't forget to create a texture for your dress if there's none.



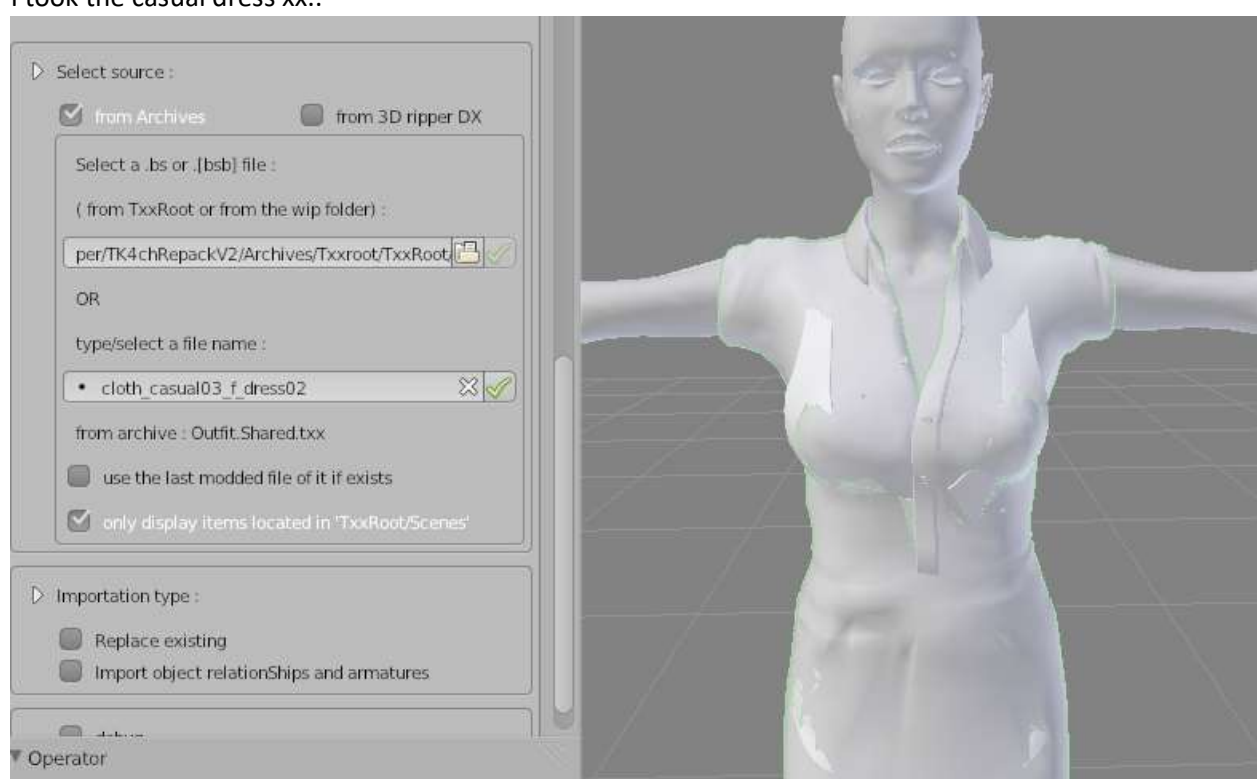
## 7.) Converting and Weighting.. (The lazy but efficient way.)

a.)

We now need something which looks similar to our dress.. maybe taking a dress would be good?

Search for a dress which fits your mesh.

I took the casual dress xx..

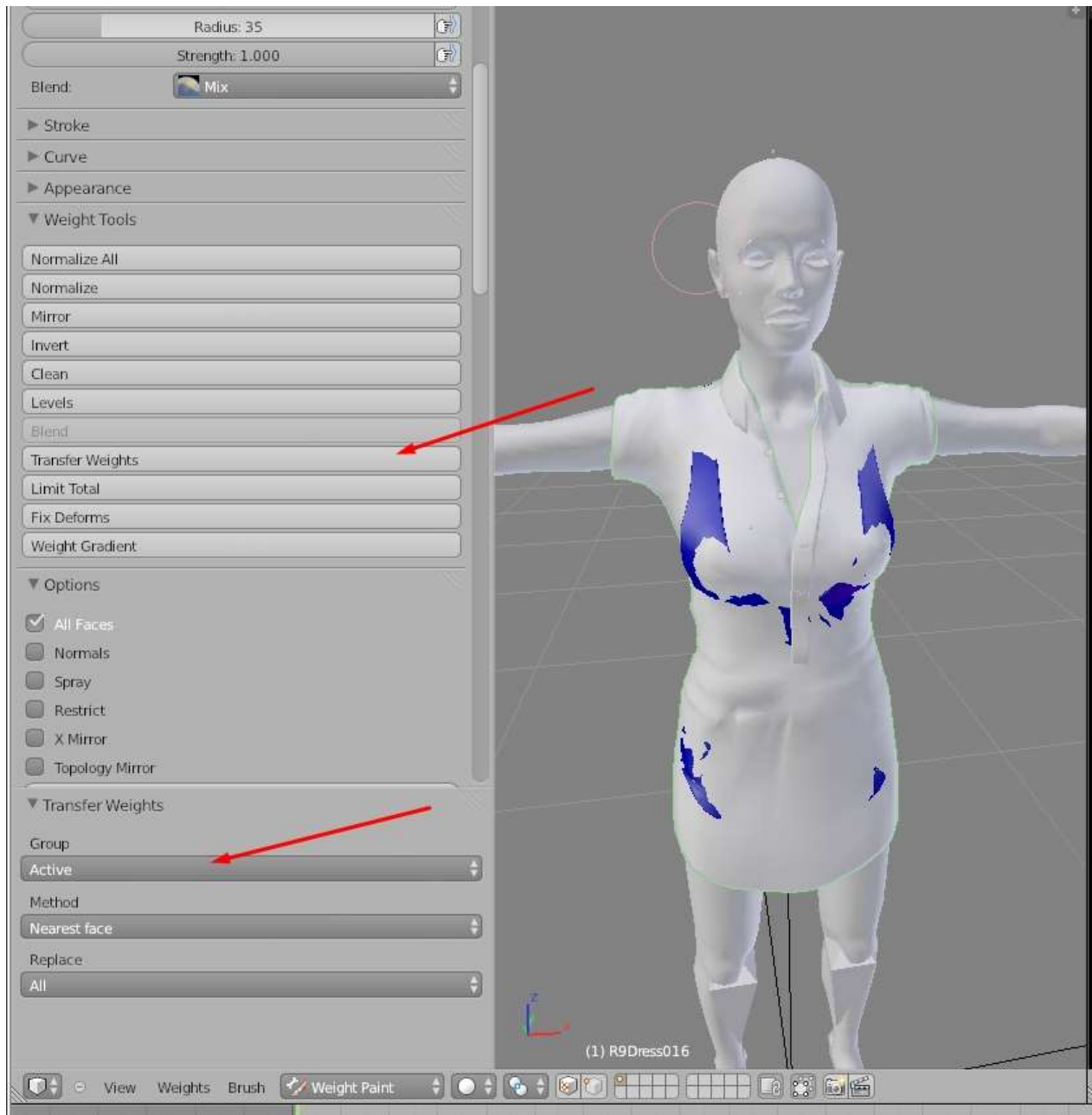


Now you need to parent your R9Dress016 to the root\_rotation\_group with empty weights.

Click on your R9Dress and shift click the root\_rotation\_group, after both objects are selected, hit ctrl + p (parent to armature with empty groups) to parent your mesh to the armature.

Now select the imported tk17 clothing and shift select your R9dress, once selected go into weight paint mode.

Click on transfer weights and select all - under group option.



Now click on your r9dress again and hit normalize all.

But here's a problem.. your weighting might not be correct because of the older blender version, you might want to save this blendfile now, open it up in the newer blender version and do the weighting part there..

b.)

Delete the imported tk17 clothing.

Go into pose mode by either clicking on the pose humanlike figure or in the 3d view under pose mode.

test your clothing.

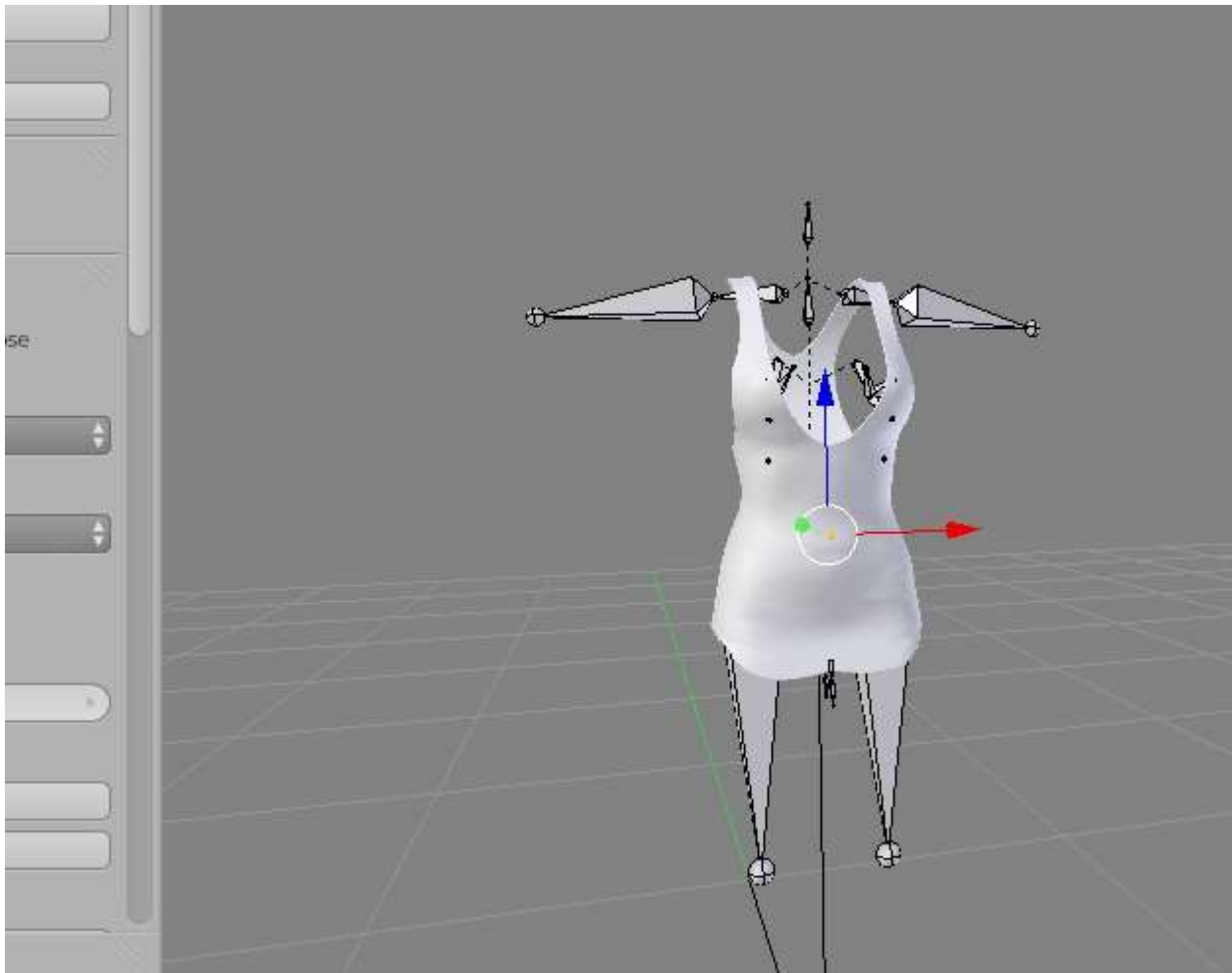


Looks funny sometimes.. but it's necessary to test it before you release it anywhere.. and it's not finished yet.

Now you need to delete the outer bones which do not interact with your dress.

a.E. Fingers and lowerarms, feets and lowerlegs.(You can also do this before you actually bind it to the armature..)

it should look like this afterwards

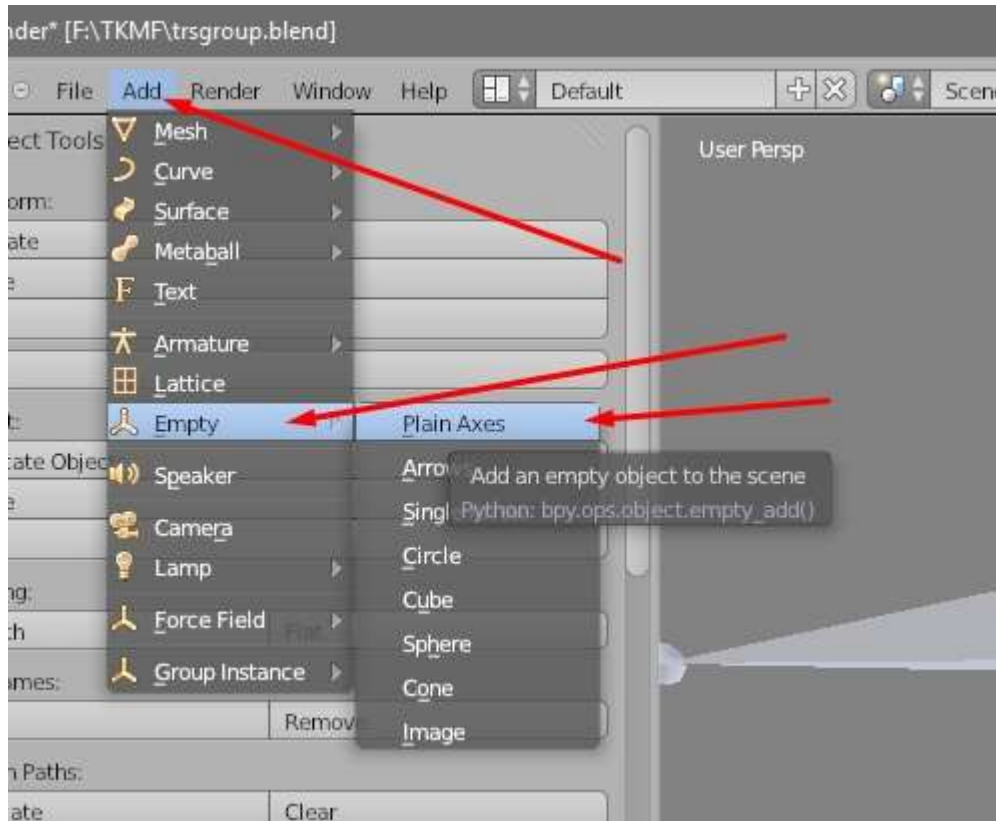


Now delete the last body\_subdiv\_cage.

Click on your dress and go into object mode.

hit alt + p to unparent it from the root\_rotation\_group

Click on Add, Empty, Plain Axis



Shift + C if you moved your camera or cursor.

Now rename this empty to something like your dress is called

As example -> R9Dress016, Empty name has to be R9Dress016\_group

After renaming, parent it to the trs\_group by selecting the empty and shift selecting the TRS\_group and hitting Ctrl + P afterwards.

Unselect everything with a.

Parent your R9DressXXX to the newly renamed empty called R9Dress016\_group.

Now click on your R9DressXXX and give it an armature modifier.

**SAVE YOUR FILE!**

You are almost ready.. there are only a few steps left..

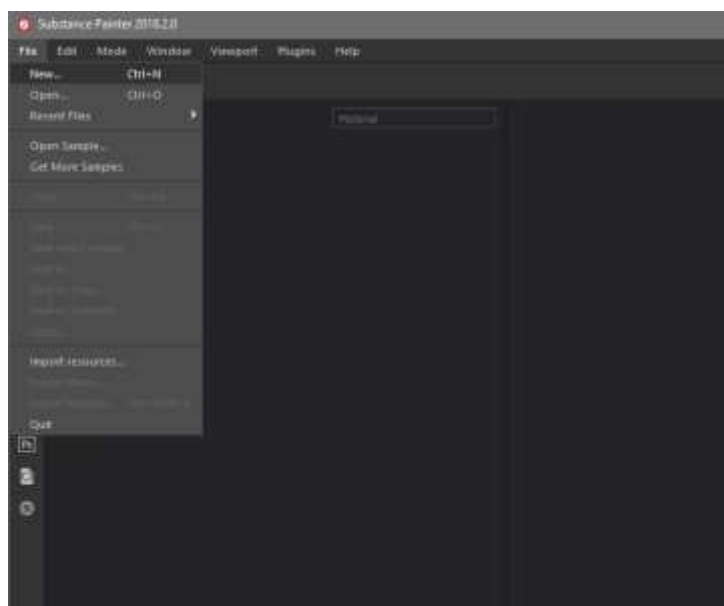
## 8. Texturing this dress with simple methods.

To texture it, simply select your dress and export it like you did before with the body, choose your pre-configured option and hit once again selection only.

### a.) Substanting the Paint

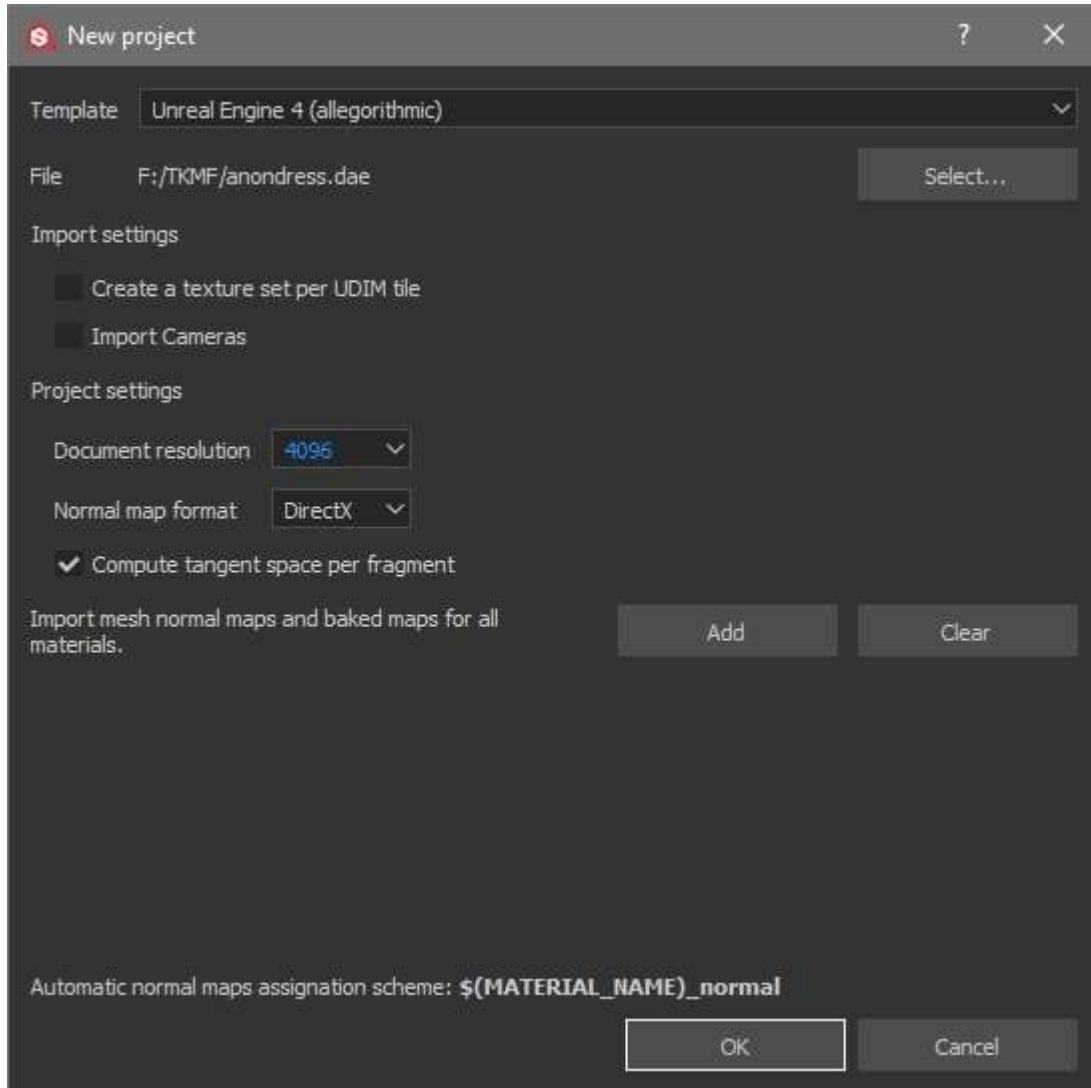
Open up substance painter.

Click on file, new.



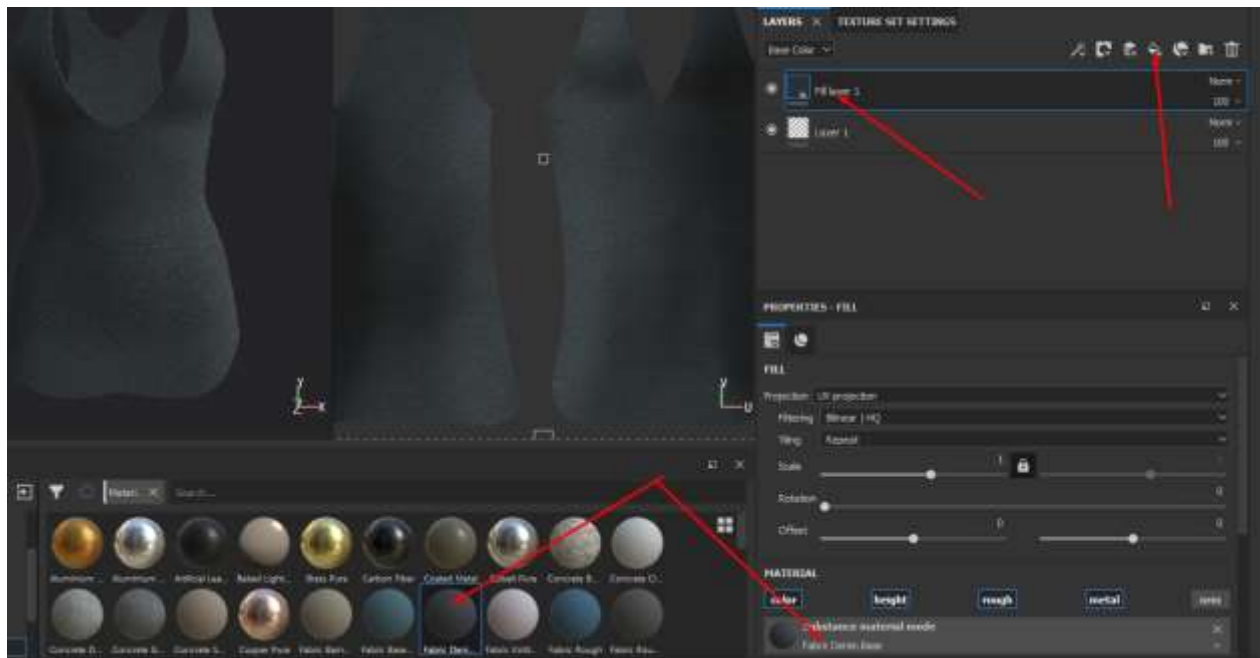
Select your anondress.dae

Use the settings i specified and keep in mind that the document resolution is only for the texturing process and exporting process later.. it will show more detail in 4k than in 1x.. and if you've chosen to work with 1024 or 2048 UVMMap, you should use that resolution.

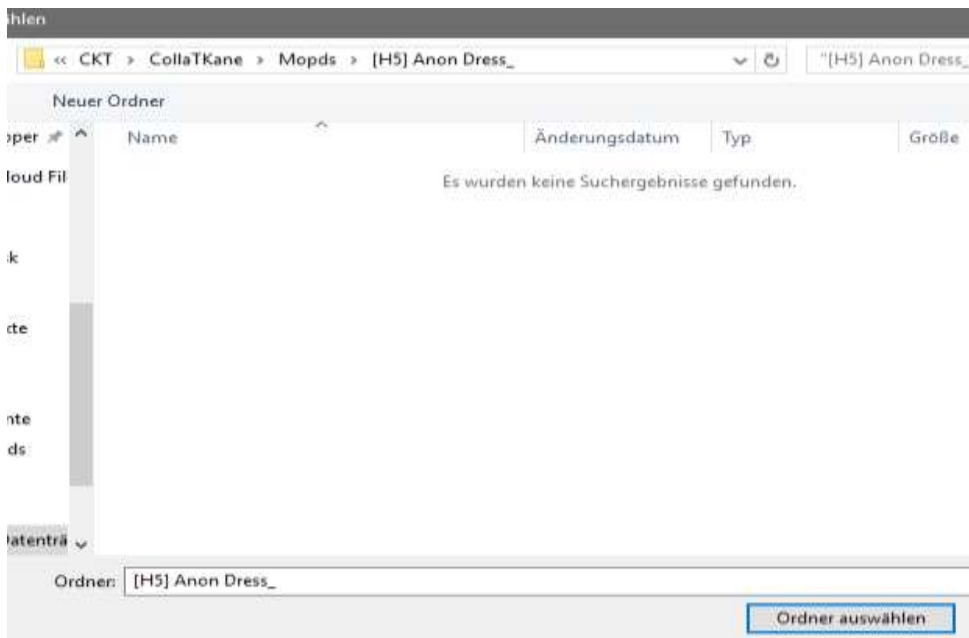




Once inside Substance Painter, add a new fill layer.. drag the material inside the material slot on the right et voila it textured it all in one even with a normal map.



Now hit file, export textures, choose a folder and export it. Open that folder.



Save that project and close Substance Painter for now. (More texturing options will be explained in the advanced tutorial)

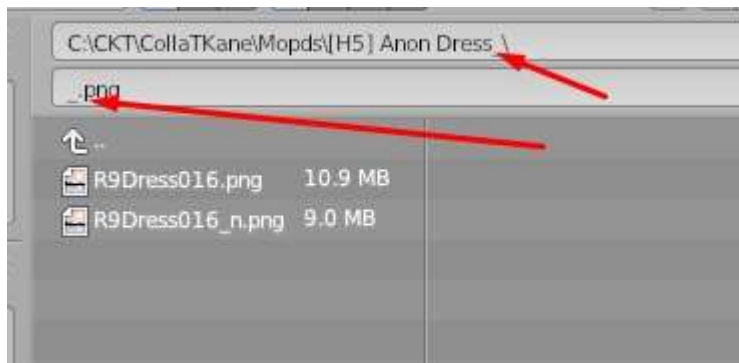
Rename your textures to something more fitting(R9Dress016 for diffuse and R9Dress016\_n for normalmap)

delete the specular map SP created or just keep and use it

Go back to blender.

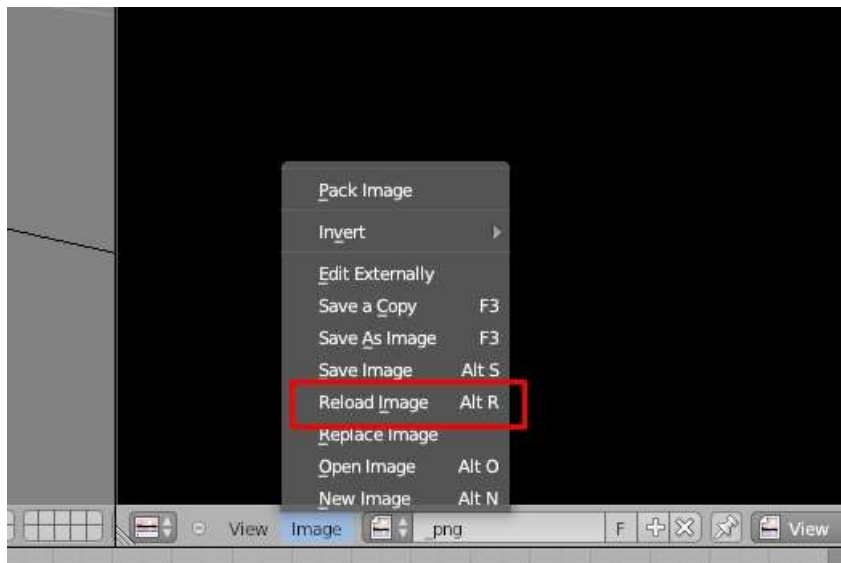
b.)

Save the image you created where you saved your texturefiles from substance painter.

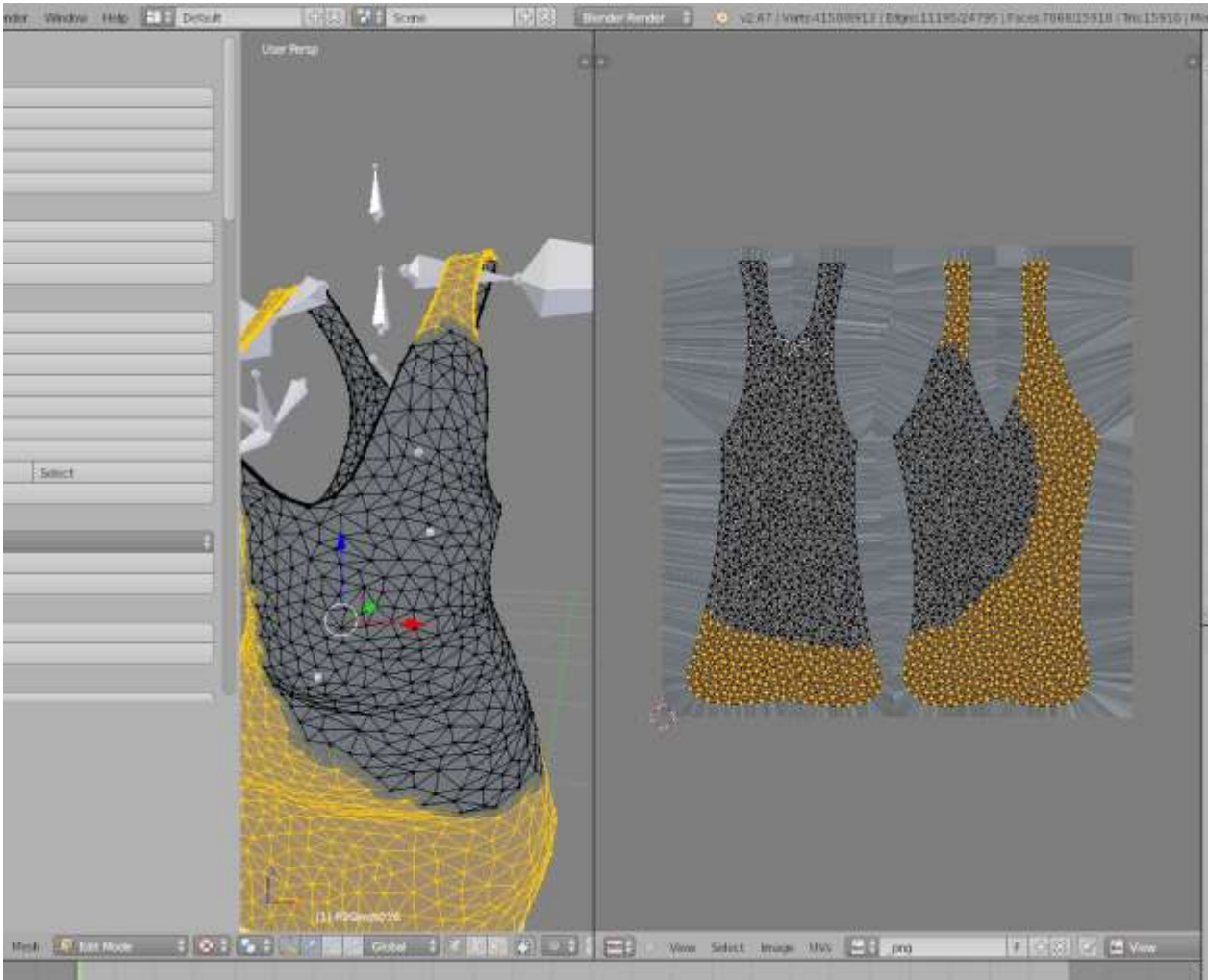


Now delete the `_.png` you created and rename the R9Dress016 to `_.png`

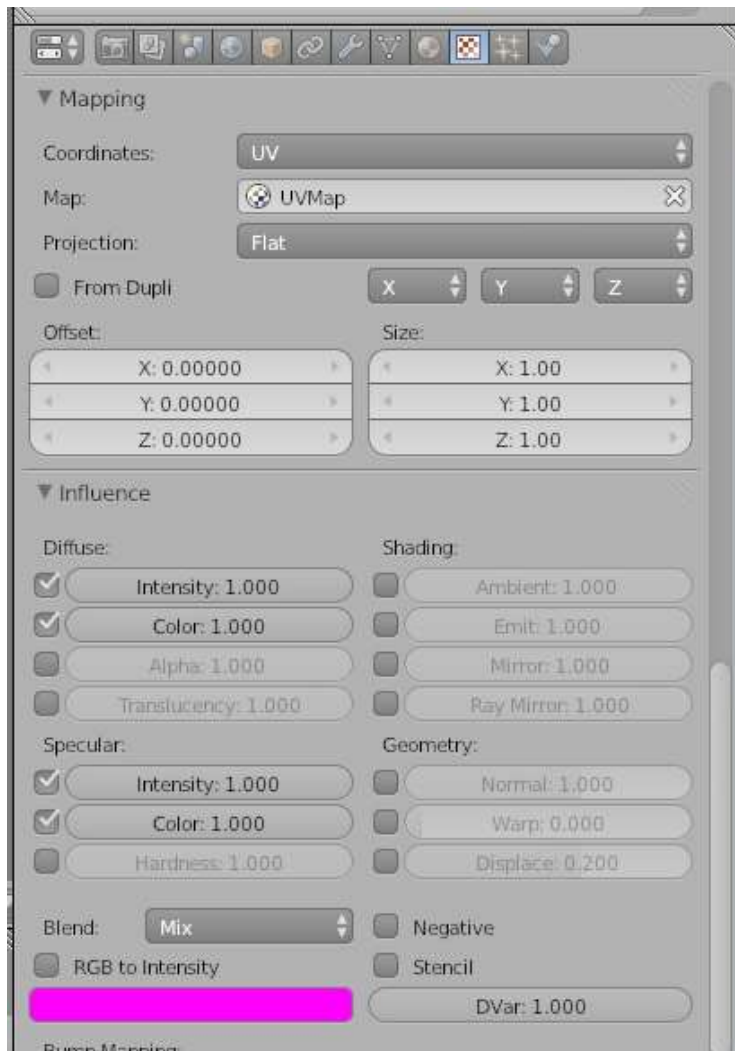
Refresh inside blender



Should look like this now.

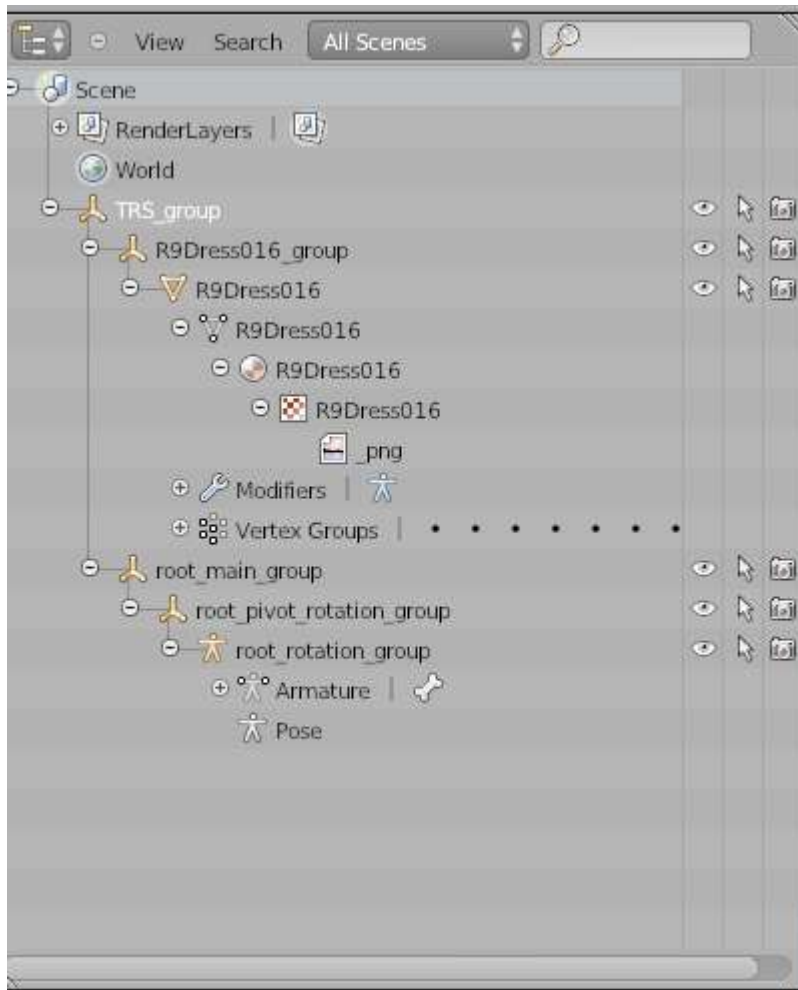


Double check your material settings



SAVE YOUR FILE.

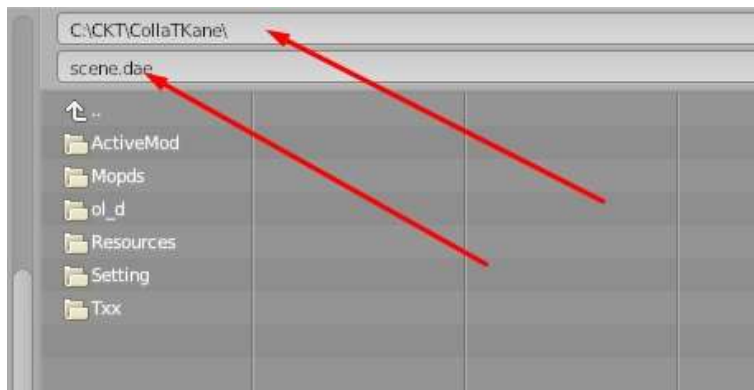
Your sceneviewer should look like this now.



Deselect everything and export it as collada like before but this time completely with the pre-configured setting for COLLADA.

Do not hit selection only.

Name the file "scene".dae



9.) Collat Kane or.. the holy grail.

a.)

Now that you have saved your scene.dae inside collatkane's folder, it's time to get to know the CTK-Tool.

Inside the Settings folder you find everything you might need to create a working addon.

Resources contain every resource you might need for an addon..

But let's keep it simple.

What did you create? A dress? Go into settings and find the R9Dress(TRS\_group).

keep that in mind.

You'll find a go DRESS.bat file which contains a line.

```
CollaTKane_V2.17.exe "Scene.dae" "Setting\Official\R9Dress(TRS_group).txt" 016 z as "Setting\AnimSkeleton.txt" ncbs aon "Anon_Dress"
```

From left to right ->

CollatKane Version, File you created, AddOn Group, Number, Skeleton(M/F), nocullingboundingsphere, AddOnName, Name

Edit it to your needs and save it.

b.)

Inside resources you'll find a really basic .psd .. it consist of a basic addon\_icon shape you can edit to your liking.. but keep it simple..

Back to the root folder.. just run your go DRESS.bat file.

Now double check the txx folder with your newly created addon and the activemod folder.

If you've done everything right except the size of the texture which is 4096x4096 for me, your addon should be ready to go.

We just need one more step.. but first put your .txx inside your archives folder.

Remember the folder you created earlier for the texture from substance painter? Copy that one to your CollatKane Activemod.

Now go into your newly created folder, for me it's R9Dress016, go into hook5 and grab the R9Dress016\_S.png and \_pass.txt.

Move it to the folder you copied recently to collatkane.

Once inside your Hook 5 folder, rename the \_n.png file to R9Dress016.png

Now open up the \_pass.txt file and replace the default\_n.dds with R9Dress016\_n.png (or your addon name/number)

Your Hook5 activemod folder is almost ready.. but if you don't want the dress to shine, you can leave it as is.. otherwise grab the Default\_S.dds(to reduce size of h5 folder) and adjust your \_pass file with it.

Copy that folder to your activemod folder..

Now test your new Add-On ingame!

Well, look at that. Wasn't it easy? No? Yea.



It took me a while to figure out all the things but it shouldn't take you the amount of time others had to invest to know all this.



Thanks to all the great modders which are still here, gone.. sailed past the sunset and forgotten inside the garden..

... and to pervo, that nasty programmer with a perverted hobby(programming) and who breaks the limits.

Thanks.

We Are TK17

Divided by Continents

In Hobbies United

Modsgarden.cc

Put together by .blue with knowledge from all the modders, programmers, users and gamblers from the garden.

