



Escola d'Art d'Olot



Generalitat de Catalunya
Departament
d'Educació



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Erasmus+ Programme
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SCULPTURE WORKSHOP 1

FACIAL SCANNING

FACIAL SCANNING WORKSHOP

3D Print a copy of your face at ¼ scale

TOOLS

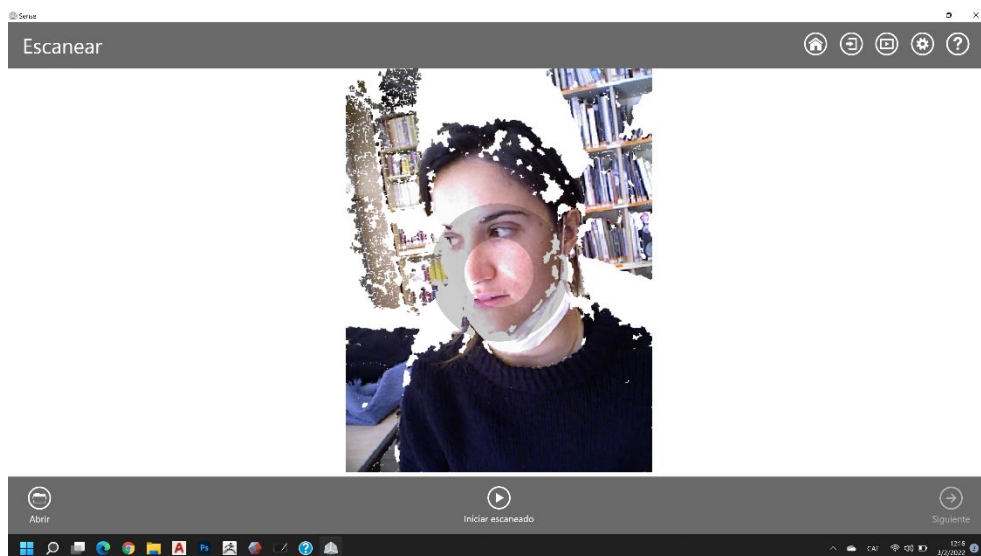
SCANNER	Our scanner	"3D Corporation Sense 2"	
	Other affordable options	"Revopoint Pop2", "Creality CR-Scan Lizard"	
	Alternative methods	3D scanning mobile App (photogrammetry): Iphone – "EM3D", "3DScan" Android – 3DScann	
SOFTWARE	Scanning	Every scan has its own software. Our software: "Sense by 3D corp."	
	Mesh processing	"Sense by 3D corp." For best results use "Pixologic Zbrush", "Blender" or "Autodesk Meshmixer"	
	3D printing	Every 3D printer has its own software, but you can also use a compatible software: "Chitubox" – www.chitubox.com	
		FDM printer: "Ultimaker CURA"	Resin printer: "Chitubox"
3D PRINTER	Our resin printer	"Anycubic Photon Mono X"	
	Other FDM options	"Creality CR-20 pro" or "Creality CR-6"	
	Alternative methods	Use external printing services	
CLEANING THE PRINTED PIECES	Our resin printer	Cutting pliers and Alcohol	
	FDM printer	Cutting pliers	

PROCESS

- **FACIAL SCANNING** – “Sense by 3D corp.”
 - o Plug the scanner and initialize the software
 - o Choose the scan profile to set the volume and resolution



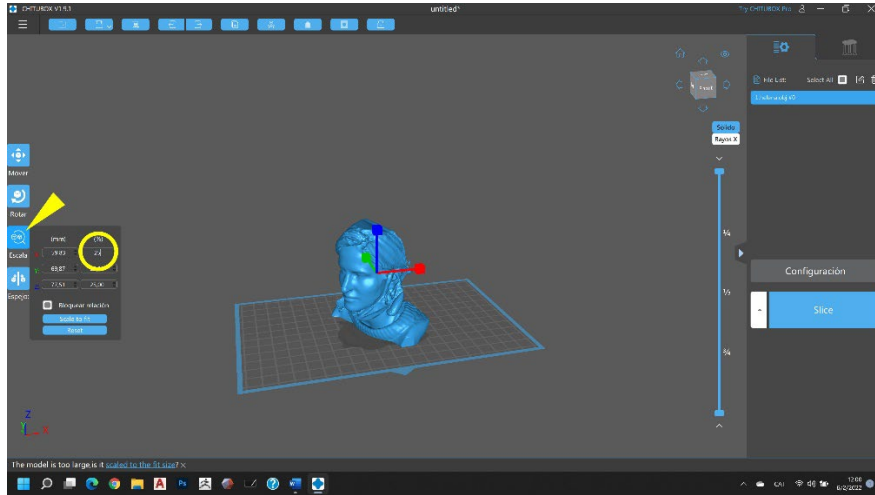
- o Turn the scan around the model taking care of having the circle centred



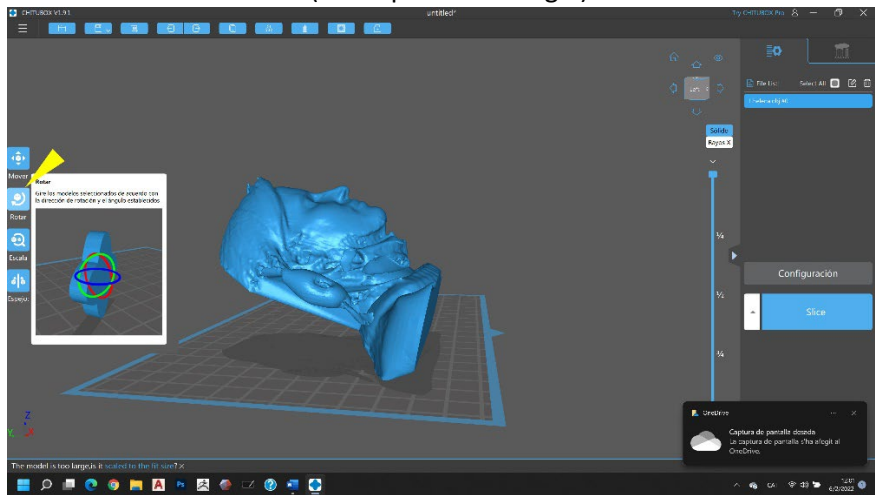
- o Finish the scan when the whole model is covered
- o Select the part of the model that you want to keep
- o Close the mesh in order to have a solid piece
- o Save the model as STL or OBJ file

- **SETTING UP THE 3D MODEL FOR PRINTING – “Chitubox”**

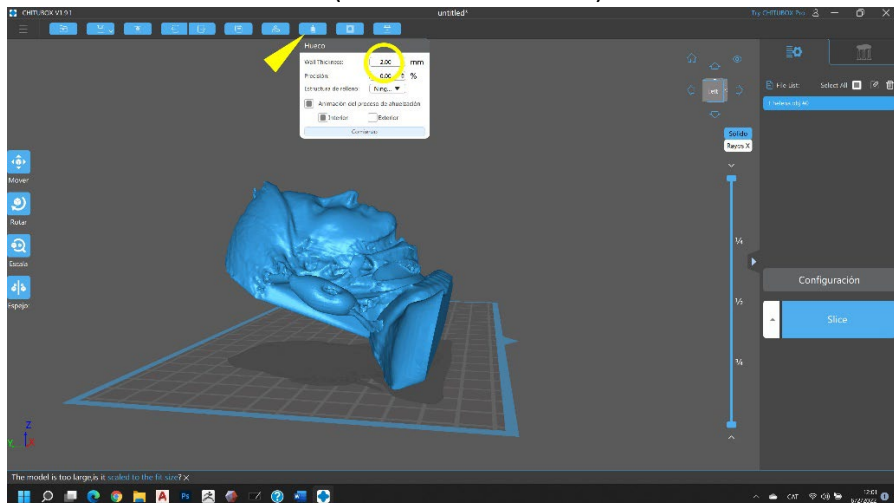
- Import from the printing software and set the ¼ scale to model (reduce scale to 25%)



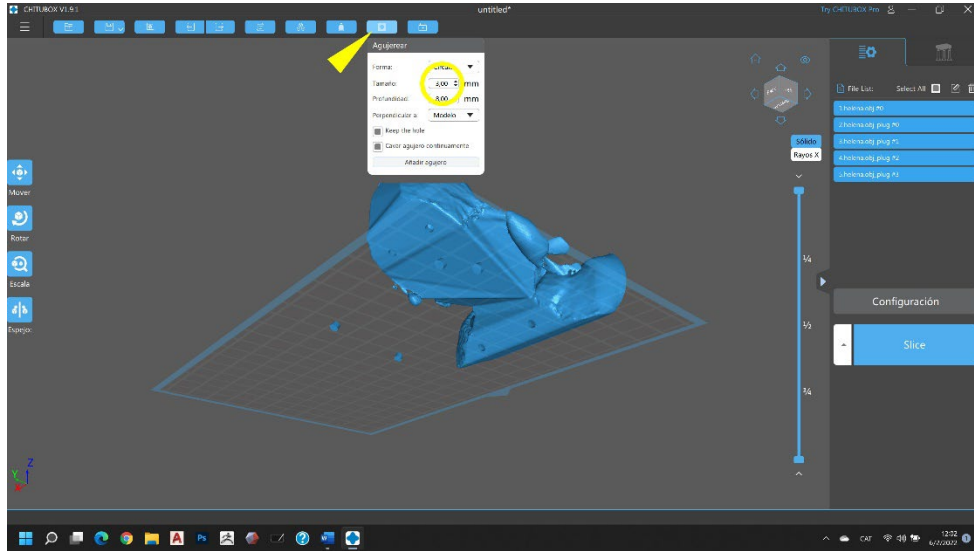
- Rotate the model (face up and <45 angle)



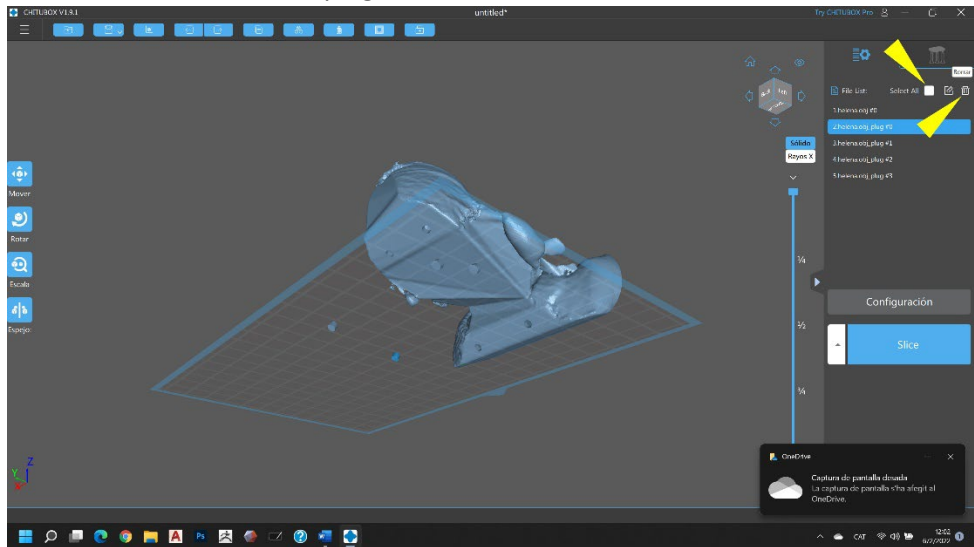
- Hollow the model (set thickness to 2mm)



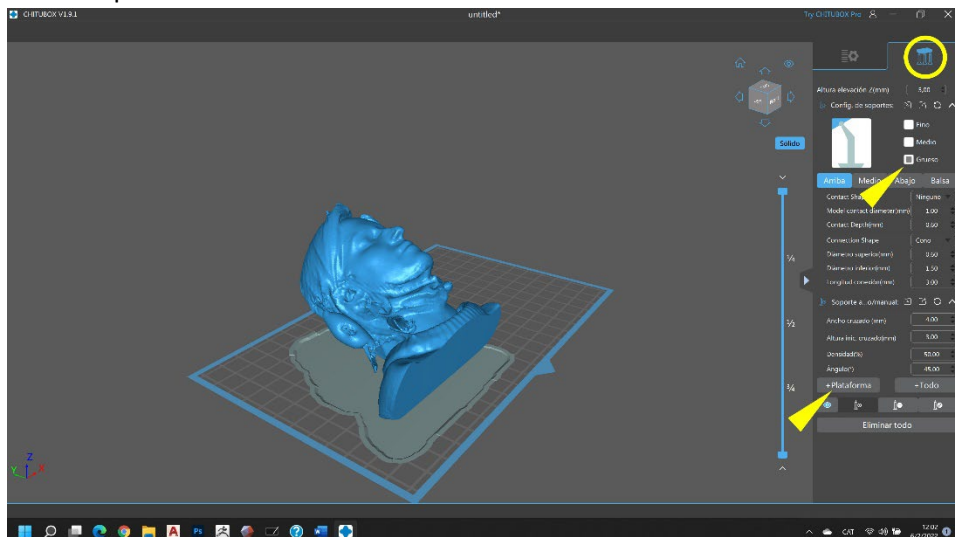
- Place 4 holes (3mm diameter) on the rear side



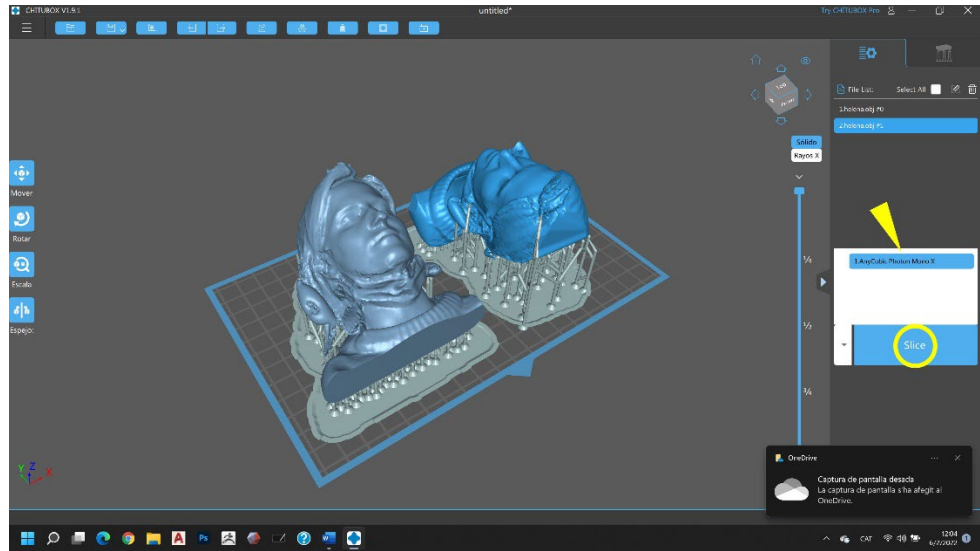
- Delete the round plugs made when we made the holes



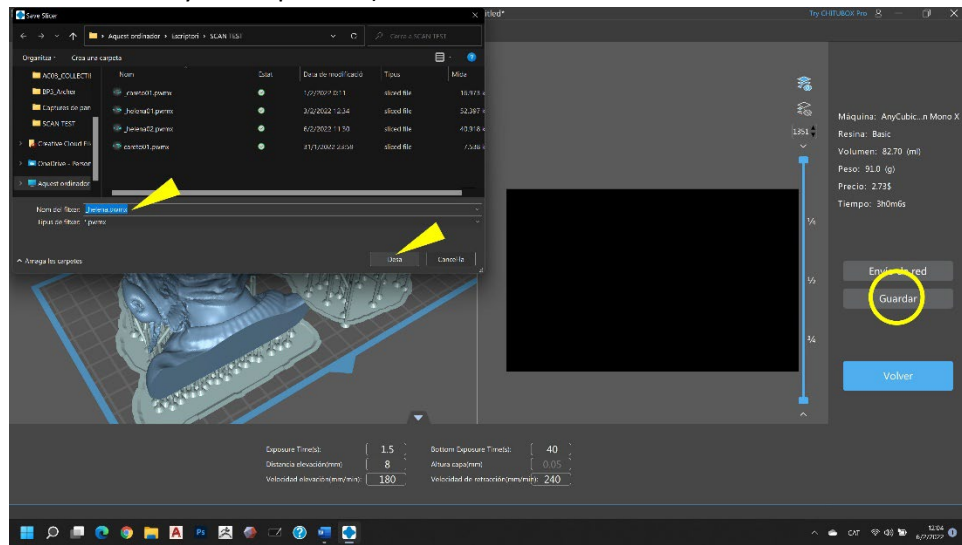
- Set supports to "Heavy" and add "automatic supportation" on the platform



- Repeat the process if printing another model is needed.
- Slice both models taking care of the correct printer configuration.



- Save the model in a pen drive. Check if the extension is correct. (PWMX file for "Anycubic" printers)



THE FOLLOWING PARTS WON'T BE COVERED DURING THE WORKWHOP – We'll do it for you

- **3D PRINTING PROCESS:**

- Turn on the 3D printer and plug the USB pen
- Fill the resin tank
- Choose the file and start printing

- **CLEANING THE PRINTED PIECE:**

- Detach the printing tray and take out the printed pieces
- Put them in the washing alcohol tank and start washing process
- Cut out all supports, repeat washing process
- Set up the curing program
- Start the UV curing
- Enjoy your printed model