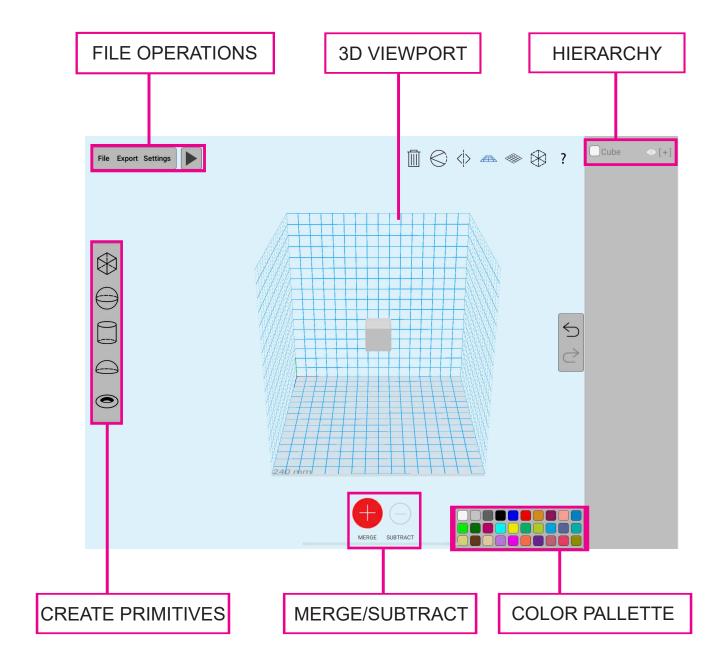# OVERVIEW

Claydo is a simple 3D Design app for everyone. It is used by designers, hobbyists, teachers and kids to make toys, prototypes, home decor, Minecraft models.. the list is endless!

Model your design using simple shapes such as spheres, cubes and cylinders.. merge or subtract in order to get the right shape with a few clicks.

Meshes can be exported as .STL files or .OBJ files so they can be 3d printed or used in software such as Blender or Maya for animation and rendering.

Export your Claydo creations to a 3d printer or external apps like Maya and Blender. Claydo's technology allows you to work with complex polygonal meshes in realtime. Handy measurement tools to export STL files with millimeter precision.

*Easy UI and workflow, get up and running in minutes

*Export out precision models as .STL files for 3d printing

*Export out as .OBJ for use in DCC software like Maya/Blender/C4D

*In-built Videos tutorials and technical manual to get started fast, perfect for schools and teachers to introduce kids to 3d modeling

*Turntable mode for showcasing and sharing your creations as movies

FILE OPERATIONS

3D VIEWPORT

HIERARCHY

File Export Settings ▶

🗑 ⊗ ⟨⟩ ⛰ ❖ ⬡ ?

☐ Cube 👁 [+]

240 mm

MERGE SUBTRACT

CREATE PRIMITIVES

MERGE/SUBTRACT

COLOR PALLETTE

NAVIGATIONS

Orbit: Drag to Rotate

Zoom: Pinch to Zoom In/Out
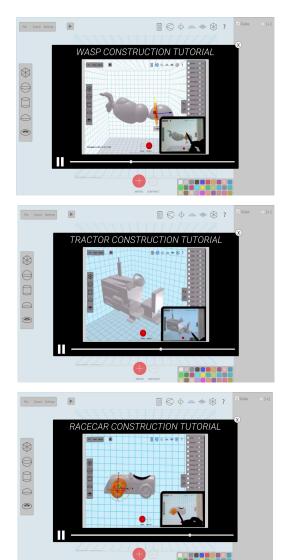
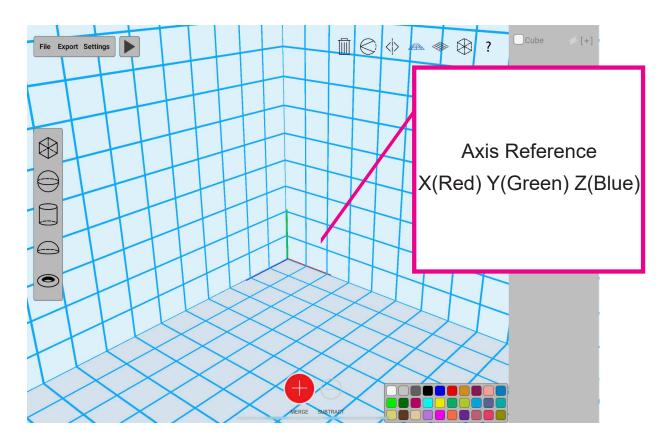**Pan**: 2 Finger to Pan

USER INTERFACE

HELP MENU

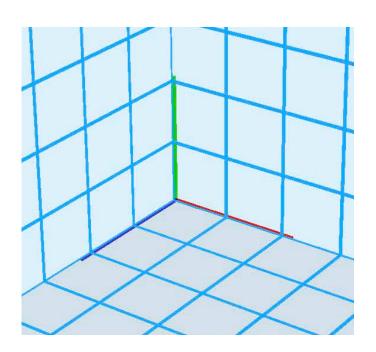Dropdown Menu which contains **Icons, Instructional Videos** and **Technical Guide**

VIDEOS

11 Bundled Video Tutorials showing a **time-lapse construction** of objects such as chair, bee, house, airplane, head etc.
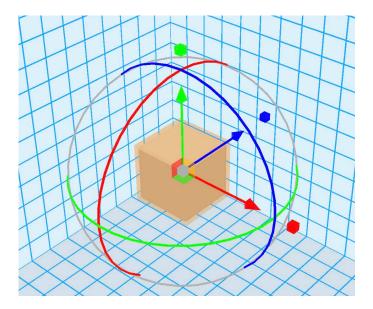
CO-ORDINATION SYSTEM

An axis reference is given to the user to understand in which axis is the transformation happening, i.e X (Red), Y(Green) and Z(Blue)
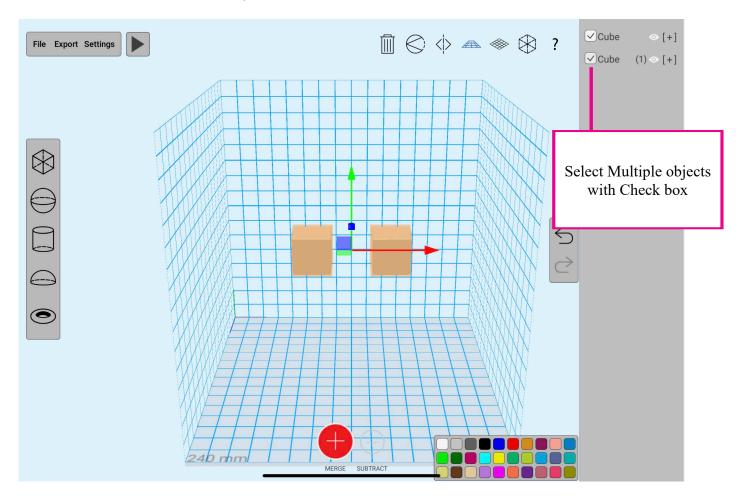
SELECTION OF OBJECTS
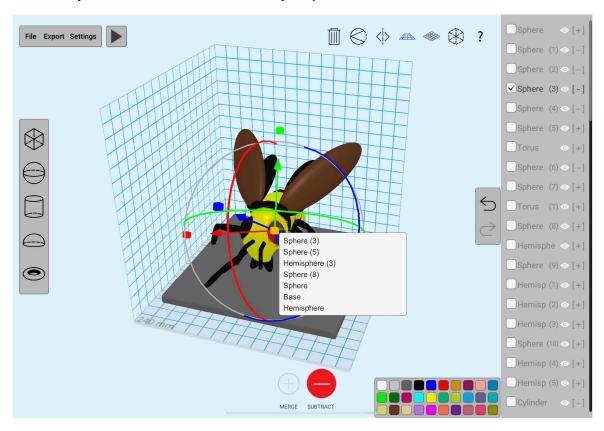
Tap on a mesh to select

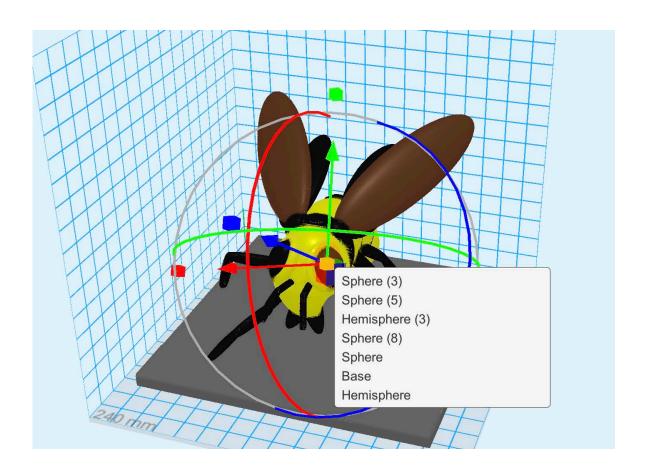The orange selection bounds show the active selected object.

Click on Check box to select multiple meshes.

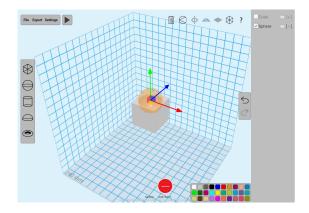**Selection Dropdown Menu** is activated by **Tap & Hold** on meshes.

This is very helpful whilst trying to select overlapping meshes or meshes which are close together as in the screenshot below.

HIERARCHY

Meshes in Claydo are added to the **Hierarchy** on the right in the order they are created in.

User can select multiple objects in a row using **Hierarchy Check Box**

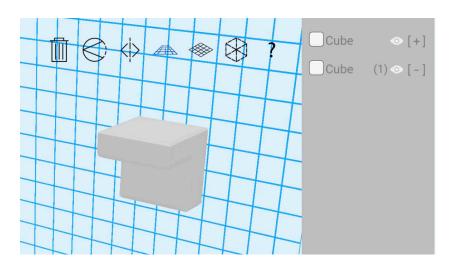Meshes can be Renamed by double-clicking on the name field

Hover over the mesh name in Hierarchy to reveal the full name.

Meshes can be hidden and unhidden by clicking on the Eye icon in the Hierarchy

[+] means the mesh is in **Merge Mode** and **[-]** means that the mesh is in **Subtract mode**

FILE MENU

New creates a **new** scene

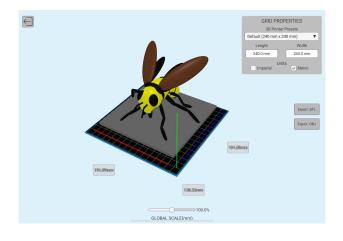**Open** .CLAY file
Save .CLAY file
Exit Exit Program

EXPORT TO .STL /.OBJ

Export will launch the Export Screen to export for .STL (3D Printing) and .OBJ

3D Export/ 3D Printing Guidelines

Scale the model to the required scale using the **Global Scale** slider in Millimeters(or inches) and export as .STL or .OBJ for printing or import into other 3D Applications like Maya or Blender.
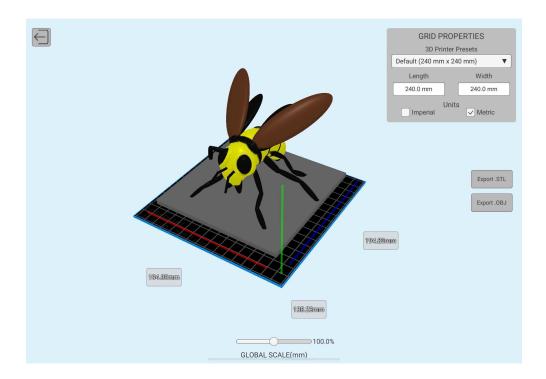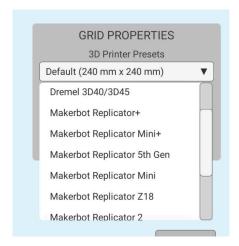
GLOBAL SCALE(mm)

This slider will change the scale of the full model so that it can be resized to the user's needs.

GRID PROPERTIES

3D Printer Presets

Default (240 mm x 240 mm) ▼

Length	Width
240.0 mm	240.0 mm

Units

☐ Imperial   ☑ Metric

This allows the user to set the size of the workplane below the model. This can be used as a reference to see how large the model would be in real life.

The dropdown menu contains various preset 3D printer bed sizes. The user can also change the size to a custom one of their preference.
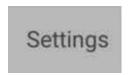

GRID PROPERTIES

3D Printer Presets

Default (240 mm x 240 mm) ▼

Dremel 3D40/3D45

Makerbot Replicator+

Makerbot Replicator Mini+

Makerbot Replicator 5th Gen

Makerbot Replicator Mini

Makerbot Replicator Z18

Makerbot Replicator 2

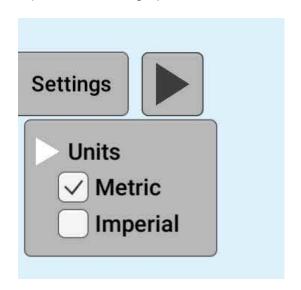****ALL MODELS IN THE PHOTO ABOVE HAVE BEEN MODELLED AND PRINT-ED USING CLAYDO*****

General 3D Printing Guidelines

1>Print models around **100-200mm in length, width and height for maximum detail**
2>Avoid making individual parts smaller than 1 mm, they will not print well.
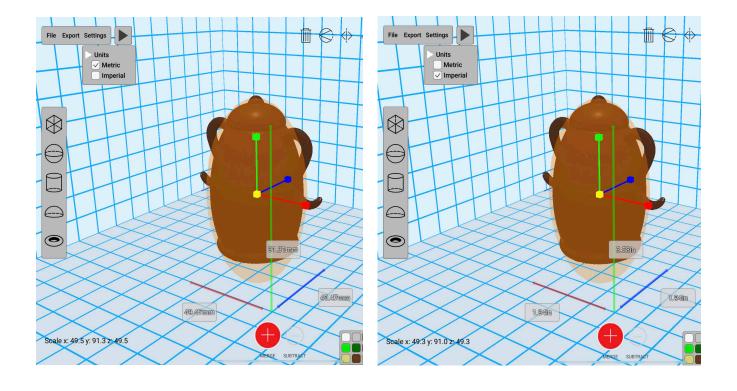3>Model a stand or make the base of the models thicker so its easy to handle after printing.

Opens the settings panel.

If **Metric** is selected, all the measurements will be in millimeters.
If **Imperial** is selected, all the measurements will be in inches.
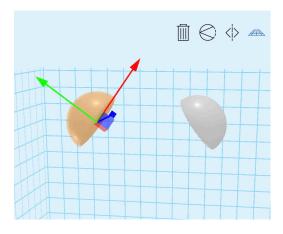
VIEWPORT PANEL

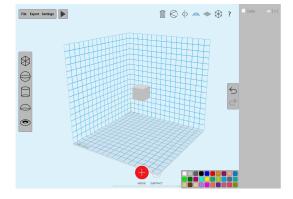This panel controls snap, mirroring, perspective/orthographic cameras, X-Ray Mode and the Help menu.

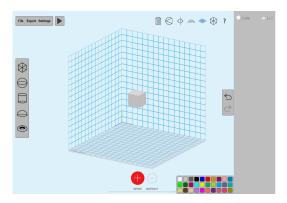Clicking on Mirror-X will duplicate and flip the copy along X Axis.

Camera switches to Perspective Mode

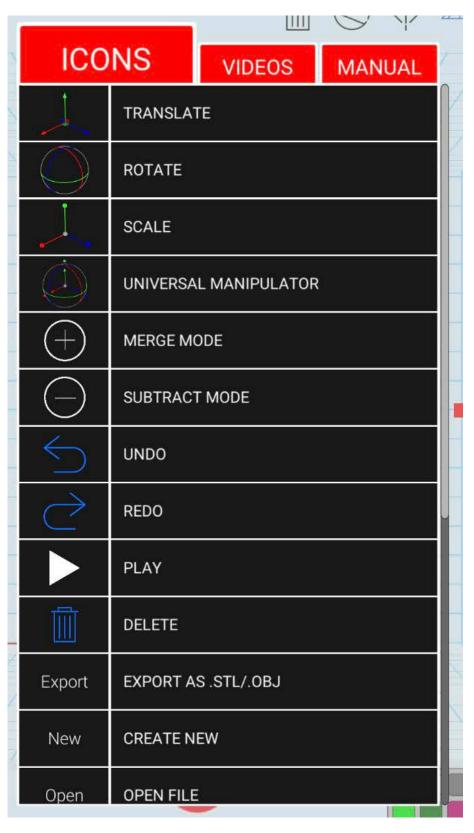Camera switches to Orthographic Mode(no optical perspective)

Activates the rotation snap function. When enabled, the rotation will move in increments of 5°. When disabled, the rotation will move smoothly
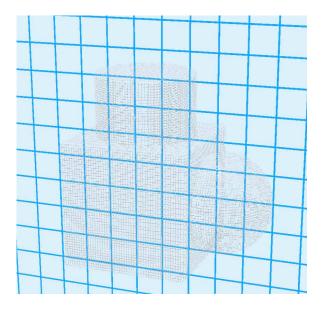
?

Shows the help panel.

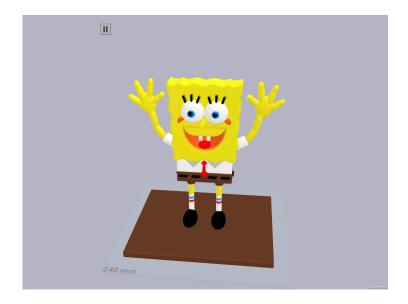|	
ICONS	VIDEOS MANUAL
	TRANSLATE
	ROTATE
	SCALE
	UNIVERSAL MANIPULATOR
+	MERGE MODE
−	SUBTRACT MODE
	UNDO
	REDO
▶	PLAY
	DELETE
Export	EXPORT AS .STL/.OBJ
New	CREATE NEW
Open	OPEN FILE

X-RAY MODE

Scene switches to transparent objects so user can see complex structures.
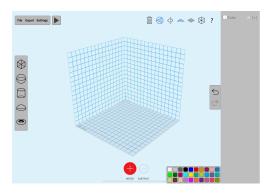

Turn-Table Mode

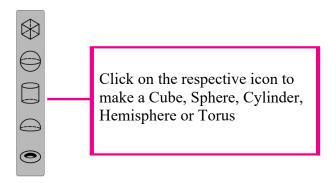Model is rendered with specular highlights and is put into a turntable animation

240 mm
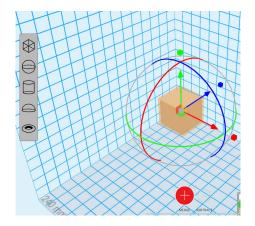
MODELLING BASICS

1. Workspace

The cube shaped grid is the user's workspace and user can only create or modify in that space. Anything out of that space will be out of bounds and will not be visible.

2. Add Primitives

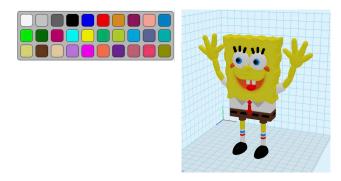Click on the respective icon to make a Cube, Sphere, Cylinder, Hemisphere or Torus

Click on an icon in the Primitives Toolbar to add a Cube, Sphere, Cylinder, Hemisphere or Torus
The scene will briefly switch to X-Ray Mode so user can see the location of the created primitive
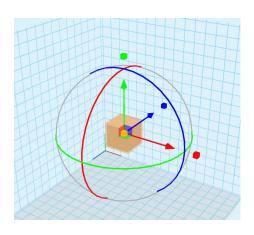

Color Palette
Select a color swatch to change the active object's color

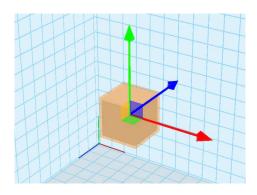# 3. Double Tap on Manipulators for Translate, Scale, Rotate and Unievrsal

By default, a universal manipulator is switched on in which the user can translate, scale and rotate using the same manipulator. Double Click on the manipulator handle to switch between Translate, Rotate, Scale or Universal manipulator.
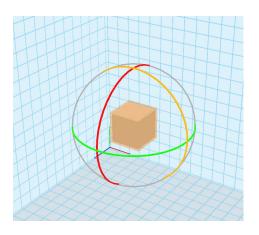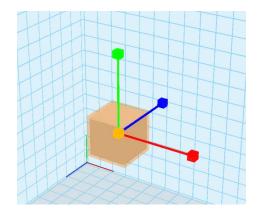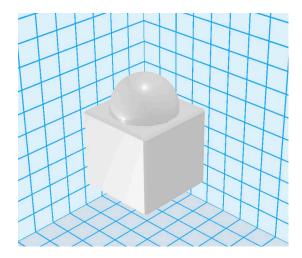
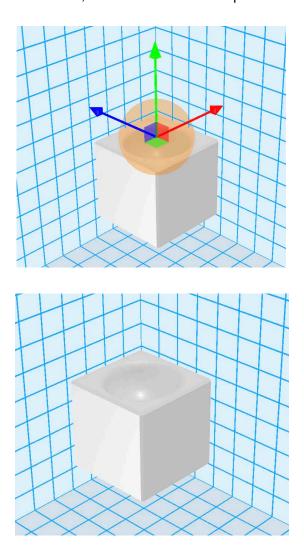**Universal Manipulator**

Translate

Rotate

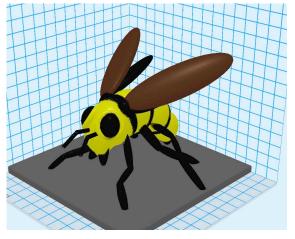**Scale**

5. Merge and Subtract Mode

Claydo will merge or subtract from its existing mesh depending on the mode you are in.
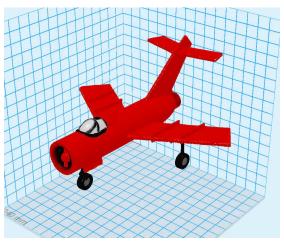If it is in "Merge" mode, the two primitives will combine into a seamless mesh

If the selected mesh is in "**Subtract**" mode, it will remove its shape from the other mesh.
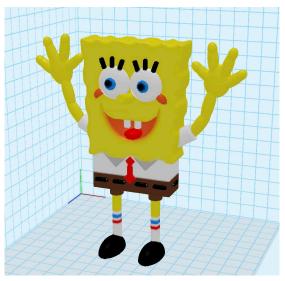

Using the above methodology, user can create complex, organic and mechanical objects swiftly and easily. Some screenshots of models created using this method are below, and watching the instructional videos will also give users an idea on creating meshes using Claydo.

Feedback/Queries:suppport@appymonkeys.com

ADDITIONAL RESOURCES

https://en.wikipedia.org/wiki/3D_printing
https://en.wikipedia.org/wiki/3D_modeling
https://www.makerbot.com/

WEBSITE

https://claydo.app/