

Hello everyone...

This time I created a basic & simple 'Glow K3D 2.0 Logo in Glowing Hexagonal Case'.

I used my 'basics' knowledge about sketching, designs, electronic circuits, cutting & glue.

Only 6 main steps I did for realisation this project :

1st, I made some coffee (as usually i did ☺) and I'd permitted to the founder of my community 'Kampoeng 3D (K3D 2.0)' to use the logo in this project.

2nd, I sketching the design then prepare the measure, proportion & composition in 3ds max.

3rd, I prepare the tools and materials that what i need. I used my old tools & waste materials from my last projects.

4th, Then I cutting the acrylic board with following the design.

5th, Assembling all of parts and setup the lighting.

6th, DONE and make some coffee again ☺

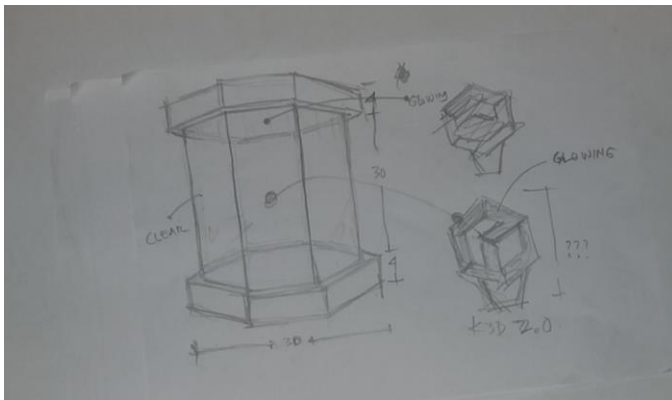
And here are some details of this project and documentation

1st ... Coffee of course



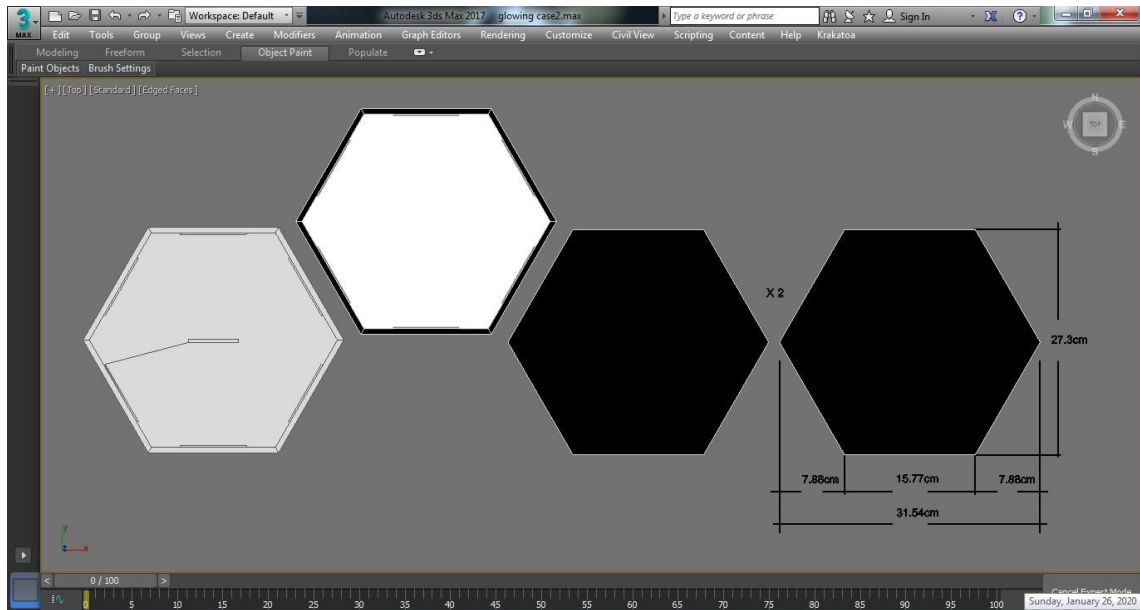
and I'm sorry about detail permitted to the founder of K3D 2.0 I cannot exposed in here but I can share the community in <https://www.facebook.com/groups/kampoeng3dcommunity/> ...

2nd ... Sketching the concept



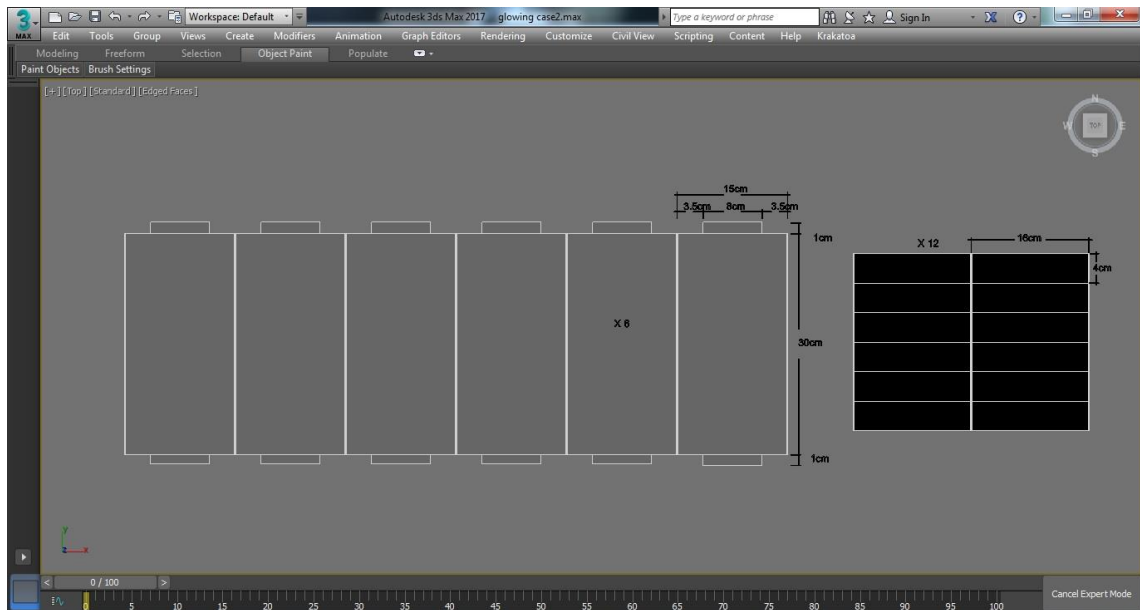
Making the details in 3ds Max

1. Pieces for Top and Bottom

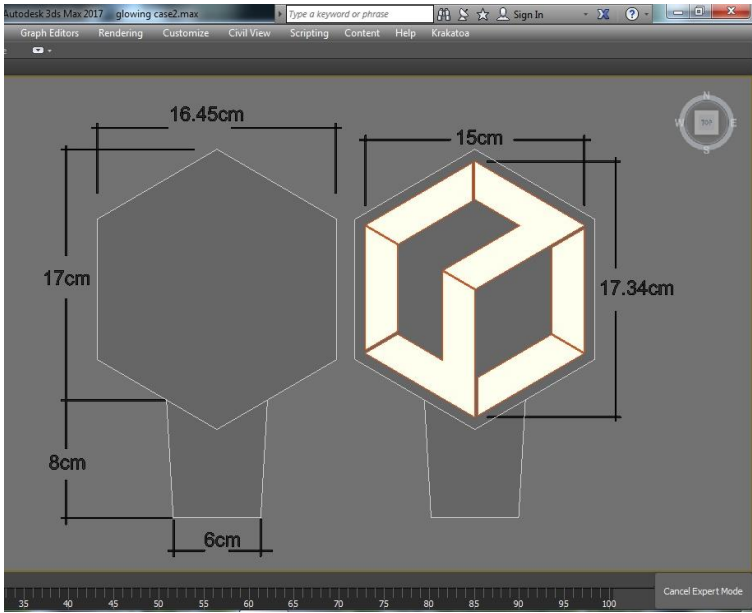


2. Pieces for side

*Correction, in progressed, parts of 16cmx4cm (12x) I replaced with 96cmx4cm (2x) and I bended it with Electric Hair Straightener



3. Pieces For Logo



More less this is stuff what I want to create 😊



Done in 3Ds Max , Render in Corona

3rd Preparing the tools and materials



Tools are :

1. Calculator
2. Elbow Ruler
3. Ruler
4. Pencil
5. File/Needle
6. Acrylic board Cutter Knife
7. Cutter Knife
8. Screw driver
9. Pliers
10. Electric Hair Straightener
11. Iron Solder & tin wires
12. Electric Hand Drill and 2mm drill bit
13. Sandpapers grid 80 & 240
14. Spray Paint, colour White

Additional tools :



1. Mini Circle Saw (DC 12V)
2. Electric Hair Dryer

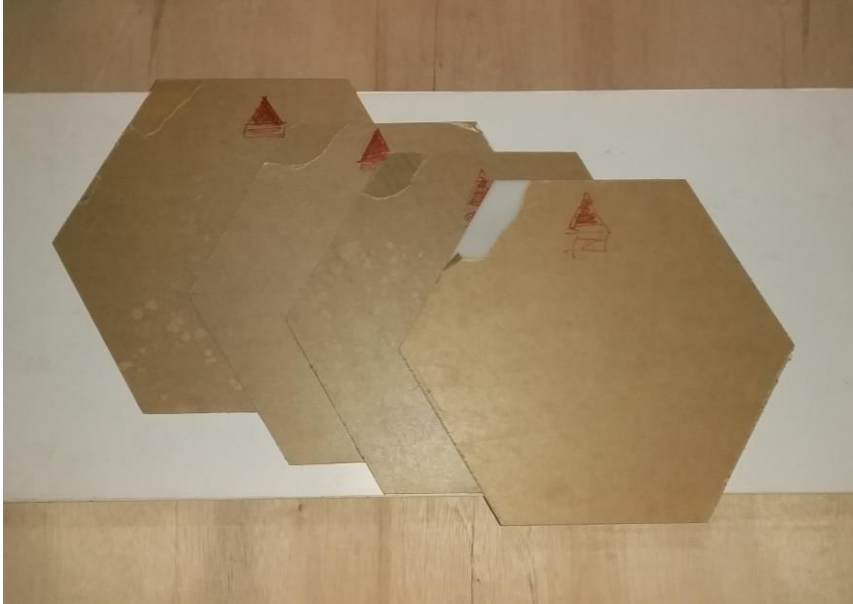
All materials are waste materials from my personal projects :

1. Clear and Milk Acrylic board 2mm for Hexagonal Case and 5mm for Logo
2. Acrylic glue (Cyanoacrylate Adhesive)
3. LED strip, color Warm White and White
4. LED Power Supply 3A with plugs
5. Jumper Cables (small and Lite Cables)
6. Alumunium plate
7. Electrical Tape (colour black) and 3M Double Tape (colour grey)
8. Some pieces of ½ inch Screw
9. Wax Paste

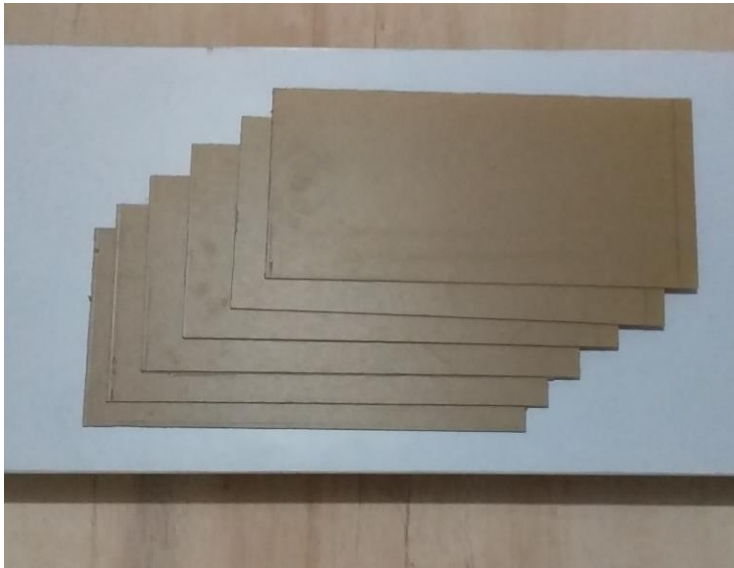
4th Cutting all acrylic board,

I drew all parts on Acrylic board with references design in my 3dsmax file then I cutting it, I used Acrylic board Cutter Knife for straight and long measure, for small parts and rectangle holes I used Mini Circle Saw

1. Pieces for Top and Bottom , 2 for top and 2 other for bottom



2. Pieces for side



*Correction parts 96cm x 4 cm (2x)



5th Assembling all parts

After I cut it then all I have to assembly all of parts and of course some parts need to be adjusted because every parts of this I only used manual system, I'm not using CNC machine, ScrollSaw machine or Bandsaw machine, why I didn't used all of that device? ... because ... I didn't have all of that :D. I used file/needle, cutter knife and sandpaper to remove parts that does not fit.

To created top and bottom parts, I bended part 96cmx4cm used hair straightener with following the base of 1 top & 1 bottom parts, then glue it, others of that parts will be on screwing system. Smoothing with sandpaper, cleaning up and then paint it with spray paint.

For the logo, I made scratching all the line looks like the design, smoothing all sides with sandpaper

Setting up the lite (glow) system

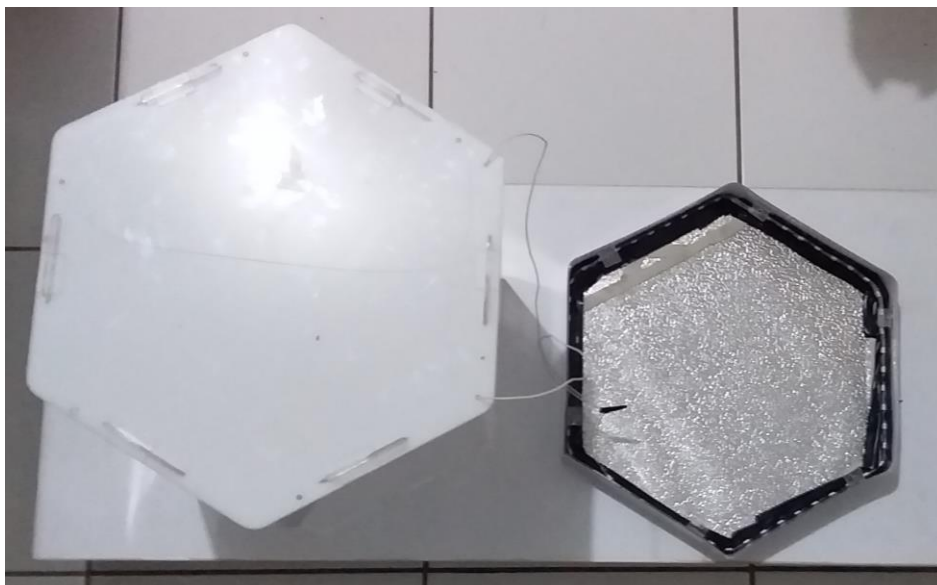
I positioning the power supply at bottom part and made 2 hole at the cover at back side for jumper cables that will supply power the top LED.

I place the Warm White LED at the middle of this bottom part.



I'm sorry I forgot to put the power switch 😊.

At top parts,I used alumunium plate for reflector then I put the white LED strip around at inside with 3M double tape and covering the rests with electrical tape.



After all are on set



6th DONE ...



Done in 7 days

Just for fun, I'd played with matte shadow in corona render to comparing the designed and product ☺



Note :

1. The Logo does not glow maximal because I used wasted material and there is a gap between connection part that touch the light with part of the logo. So the light will not lite maximal. Use full board to make something like this.
2. For the best and precision cutting will be better if I used CNC Machine

Thank u everyone for reading my project...

Bye..see ya in my next project 😊