

Hexamods

A modularskirt

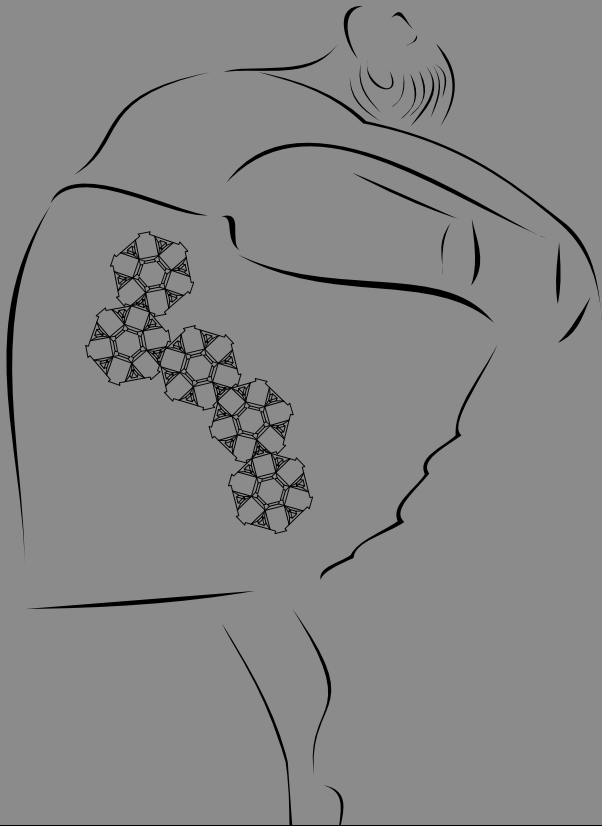


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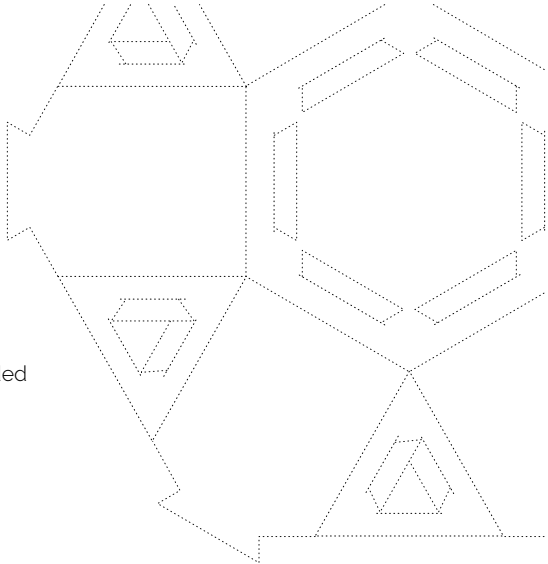
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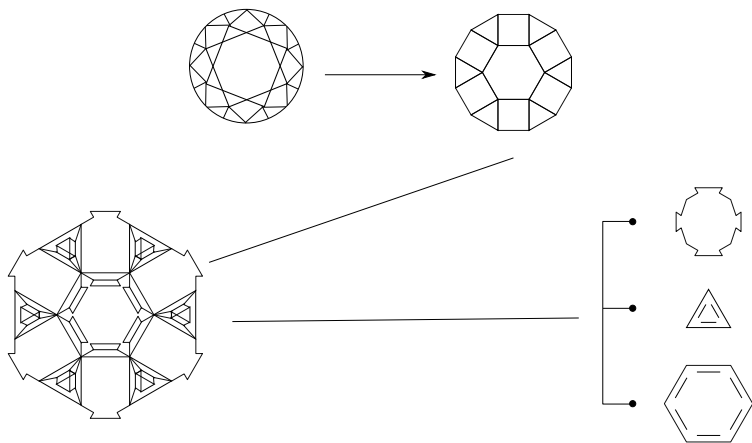


Good luck !

The modules

Design process

The modules are inspired by a common shape : the diamond. For the well being of the project, that shape has been simplified to develop a module that has a maximum of 3 shapes to make it.



The prototype

Concept

The model is strongly inspired by the two different styles of dance. First, by it's rigidity to the ballet tutu but also, by it's shape, to the swing movement. In fact the shape is created with a circular skirt pattern that allows to have a large skirt that'll generate great movement.

The prototype was plan to be make with low cost prototyping fabric added to a low cost interlining. It is still very thin to be as strong as it should. A lining, a finished waisline and a hem.

A little note !

The project has been planned to be made with a laser cutter Trotec Speedy300 60 watts. All the nestings files and settings that are proposed are perfect for this specific machine. Any kind of lasercutter can be use, but the files and settings will have to be adapt.

Tools ans machines needed



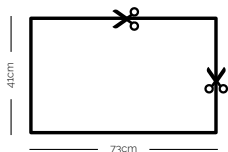
Bill of materials*

Cotton	1.5 meters on a 160cm wide material	7.99\$ / meter	11.99\$
Interlining	1.5 meters on a 160cm wide material	4.99\$ / meter	7.49\$
Lining	2.00 meters on a 160cm wide material	5.99\$ / meter	11.98\$
Thread	100% cotton,, 1 bobin	3.49\$ / unit	3.49\$
Total			34.99\$

* Prices are indicative and in Canadian dollars

Preparation

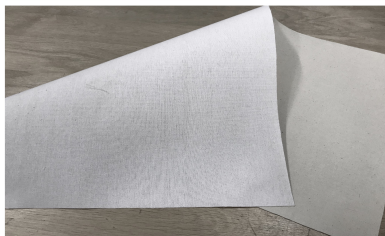
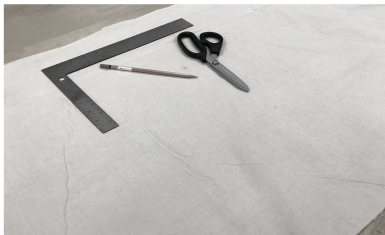
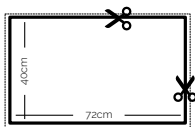
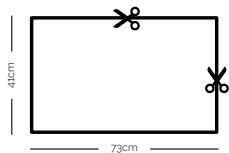
1. The first step to prepare the fabric sheets the right size so they fit the laser cutter perfectly.



X 11 in wool AND interlining.

2. Thermofix the interlining on the prototyping cotton with an iron and using a lot of steam.

3. Once well fixed, cut it again to the right size. It's important to recut it because the edges have a tendency to unglue themselves.

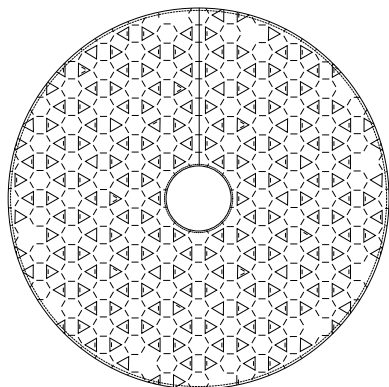


4. It's now time to lasercut the pieces. Here are some settings for the Trotec Speedy300 60 watts. All the nesting files are available in my website*.

Power 50

Speed 5.00

Frequency 500



Waistline



Hexagone = 6 + 1 extra



Connectors = 6 + 1 extra

Body



Hexagone = 78 + 5 extras



Connectors = 253 + 5 extras



Triangles = 169 + 5 extras

Hem



Hexagone = 6 + 1 extra



Connectors = 6 + 1 extras



Triangles = 6 + 1 extras



Connectors = 6 + 1 extras



Triangles = 6 + 1 extras



Hexagone = 6 + 1 extra



Connectors = 6 + 1 extras

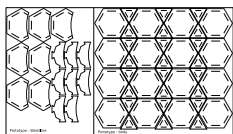


Hexagone = 6 + 1 extra

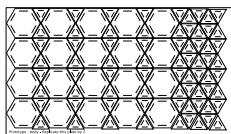


Connectors = 6 + 1 extras

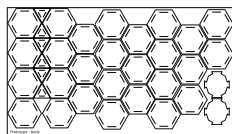
*<http://mathoo.fabcloud.io/fabricademy2017/week3.html>



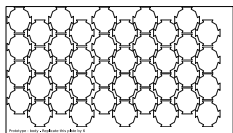
x1



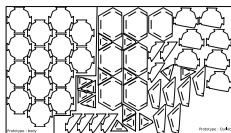
x2



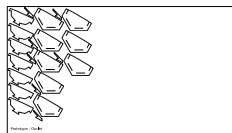
x1



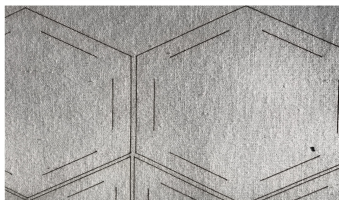
x6



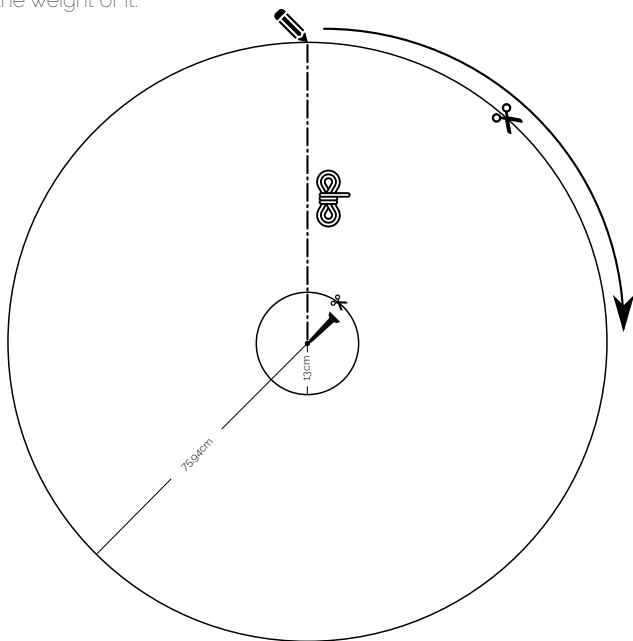
x1



x1



5. It's time to prepare the lining. In principle if the model is made with a thick fabric, there won't be no need for a lining. Even with a strong interlining, the prototyping cotton is too soft to hold a whole skirt. At some point it'll detach itself with the weight of it.

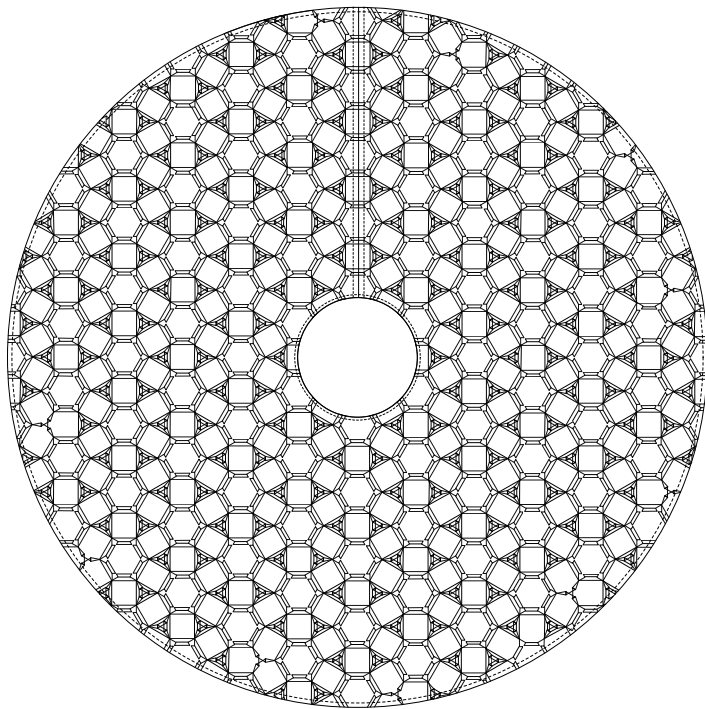


Assembling process

1. At this point, all the pieces needed are prepared. The best way to assemble the model easily, is to follow the drawing showed at the page 12. This, making circle clockwise from the waistline til the hem.
2. Put the lining underneath and put pins to make it stay. Sew everythin together at the waist line and the hem. Make it small because they were not planned in the prototype (max 1cm.).
3. Then last step is to cut a small part so it's possible to enter the skirt or all the way and put some smal clips.

Good luck !





Contact

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Find us !



A special thank you to échoFab, the local
Fab Lab that made it possible.

www.echofab.quebec

Also to Fabricademy, the program in which this objects as
been thought.

textile-academy.org

