Laser Cutter DIY Project

Description: Now that you've completed the laser cutting modules and secured your permit upgrade, it's time to design and create a unique project. You can create anything you choose as long as it satisfies the requirements listed below. (Remember, you will have to pay the materials costs for this project.) Most importantly, the project must have a purpose. It can't just be a piece of material with each of the requirements on it.

This is your time to create! Have fun with it.

Requirements: Your project must include the following,

- ❏ At least one raster engraved component
- ❏ At least one vector engraved component
- ❏ At least one vector cut
- ❏ A bend/corner
    - ❏ Choose 1 of 2:
        - ❏ Use the strip heater for acrylic
        - ❏ Use MakerCase/your own design for other materials
- ❏ Some aspect of functionality

What is Good File Design?

- Your Gravit file should include layers for each method that contain all of the corresponding design elements.
- Your file should reflect the size of the design, not the material size or an arbitrary size.
- Your file is submitted with appropriate stroke widths and colors.
    - RGB Red at 0.001"
    - RGB Blue at 0.001"
    - Grayscale at any width
- All included images and/or text are vectorized.
- The file was exported to PDF properly (i.e. at the correct resolution, etc.).
- When opened in Adobe Illustrator, no changes need to be made.

Deliverables: Submit a PDF of your design on Canvas along with a picture and/or video of the completed project (include as many angles as necessary to demonstrate its functionality, appearance, features, etc.) and a short description of its purpose (300 words or less). If you modified a downloadable design from a website, link the design and give credit to the creator.

Grading: You will be graded as followed.

	1 pt	2 pts	3 pts
Completeness 1	Has only 1 of the laser processing requirements	Has 2 of the laser processing requirements	Has all 3 of the laser processing requirements
Completeness 2			Contains a bend/corner
Functionality	Has limited or broken functionality	Functional, but not useful	Completely functional and useful
Creativity	Downloadable, open-source project with no upgrades/customizations	Downloadable, open-source project with minimal changes	Very creative implementation of the learned skills
File Design	The file includes one of fewer elements of 'Good File Design.'	The file includes some 'Good File Design' elements.	The file includes all elements of 'Good File Design.'

Examples:

Laptop Stand by AP Laser

Jewelry Box on Etsy