From the Collection:Child's Knock apart Furniture

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This workshop is the first in a prospective series that activates the collection through updating and parametisation

Try-it (Staff) Version

This version is intended to be trialed using the try-it process.

Rationale

Running workshops for SLQ staff is to:

- increase awareness and knowledge of The Edge programming
- invite feedback and participation

- include an introduction to Free and Open Source Software(FOSS) - Inkscape.
- include an introduction to parametric design

Outcomes

- Basic bitmap image processing using GIMP.

Tools

1. Gimp for image clean-up and processing

Materials and Resources

Workshop Outline

10min

FOSS

Intro to Preparing for Cutting using - *10min*

- What is FOSS.
- When to use FOSS
- When to use non-FOSS
- What is GIMP?
- What is Coreldraw?

Pick a Project

The workshop as a whole chooses a design **for all particpants** to work on.

Use theses rules to inform your choice.

Introduction to Gimp

Basic bitmap processing to produce a two colour image - 15 min

- Open chosen image in GIMP

- Selection and Navigation tools
    - crop
    - shear, cage or rotate
    - brightness and contrast
    - Blur and unsharp
    - convert to grayscale
    - export as a jpg.

Introduction to Fusion 360

Import to Fusion and Add to Sketch - 20 min

- Selection and Navigation tools
- Trace bitmap tool
    - select best single scan method
    - adjust options (speckles, corners and paths)
    - Process and close
- Export as PDF

Prepare for Cut in CNC

Editing - *20min*

- Trim the fat - be ruthless
    - small shapes won't drop out
    - complex shapes will break
    - complex shapes take too long to cut

Process

- Grab the file and open in Fusion360.
- create a sketch
- Get familiar with the selection and navigation tools
- Create a sheet of ply
- Scale your artwork to fit
- Select one shape to work on.
- Use the lines tools to trace
    - access individual points to correct glitches
    - **reduce nodes** (in the menu bar)
    - use the curve **smoothness slider** (in the menu bar)
- Drag your artwork to a panel

CNC Ready checks

Check all …

- Check
- Save your design as a DXF file onto the facilitators USB stick.

Cutting and Assembly

1. Your facilitator will cut your design on the CNC Router
3. Take home and enjoy!

Files

CNC Router Settings