Quick Usage

Download the ZIP file and extract to a location. Copy the *Example JSON file* below and save it as *test.json* using a simple text editor. To keep the things simple, save it at the same location as the executable.

To create your own JSON file, you can use our visual box designer, our online JSON Creator or refer to MIDILLI JSON Definition document to create your own from scratch.

Example JSON File

The following file generates all six sides for *MyPart*, placing one hole and one rectangle cutout on the *Top* side. The top size of the box is 5x5 cm and the components are placed at (x = 1, y = 1) and (x = 3, y = 3) respectively. The visible sizes of the components are the same as drill sizes and their texts are just placed above since they are zero degrees rotated, with a font size of 8 pixels.

```
{
  "Generic": {
    "width": 5.0,
    "length": 5.0
  },
  "MyPart_Top": {
    "myRoundComponent#1": {
      "location_x": 1,
      "location_y": 1,
      "drill_diameter": 1,
      "call_name": "Hello",
                  "visible_diameter": 0,
      "visible_length" : 1,
      "visible_width" : 1,
      "rotation": 0
    },
    "myRectangleComponent#1": {
      "location_x": 3,
      "location_y": 3,
      "drill_width": 2,
      "drill_length": 1,
```

```
□□□"call_name": "MIDILLI",
□□□"visible_width" : 1,
□□□"visible_length" : 2,
□□□"rotation": 0
□□}
□},
□"MyPart_Bottom": {

□},
□"MyPart_Back": {
□□
□},
□"MyPart_Front": {

□},
□"MyPart_Left": {

□},
□"MyPart_Right": {

□}
}
```

Depending on the command-line options, the other sides of the part will be created using different sizing. Read *Coordinate system and effect of sizing parameters* for more on different results of the arguments.

> **Note**: JSON syntax is very strict. Ensure that the last line before each '}' does **not** end with a comma, while all other lines **should**. Use an online validation tool to confirm correctness.

> **Note**: Use dot (.) if working with decimal numbers to separate the integer part.

Assuming that the JSON file is stored at the same location as the executable file, open a command window (Command Prompt, or PowerShell), then execute the following command:

```
.\SVGGenerator.exe --json-file .\test.json --output-directory . --material-thickness 3 --box-height-3d 30 --vectorize=false
```

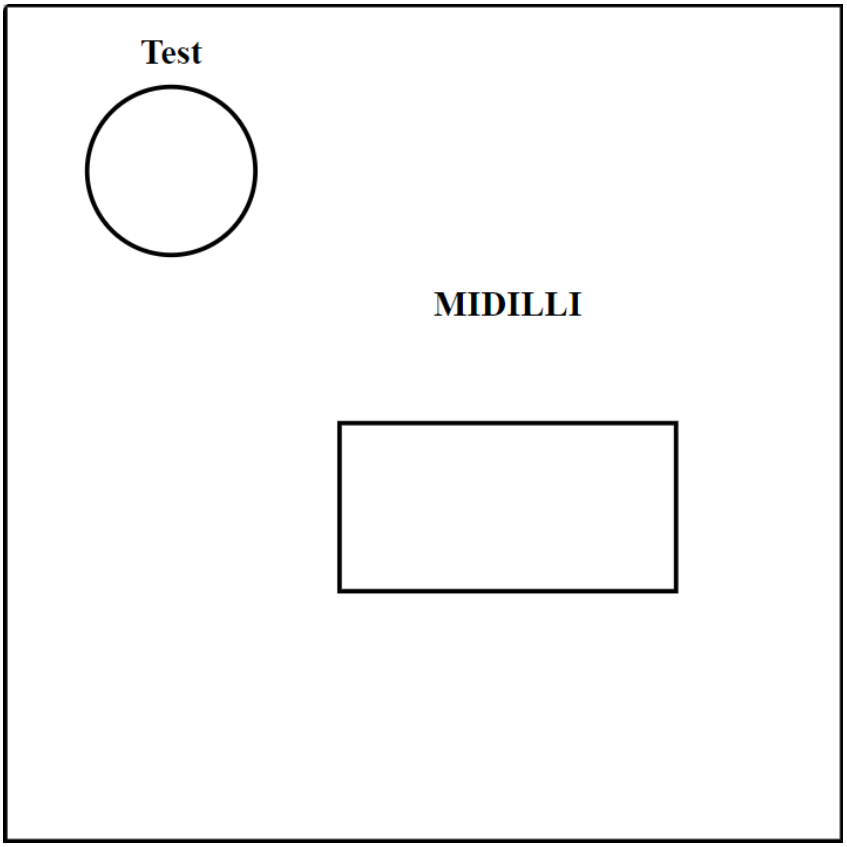
You will be provided with an output showing the current settings as following:

```
~~~~~ Settings ~~~~~
Laser kerf: 0 mm
Box height in 3D: 30 mm
Outer sizing enabled: No
Finger joints: No
Finger size: 3 mm (default: material thickness)
Finger count: Automatic
Finger clearance: 0 mm
Text enabled: Yes (Default font size: 8 px)
Components enabled: Yes
Side outline enabled: Yes
Recess for components enabled: No
Line per mm for recess areas: 1
Material thickness: 3 mm
Screw size top: 0 mm
Screw size bottom: 0 mm
Screw head diameter: 0 mm
Screw extra margin: 0 mm
Separate all output files: No
Vectorize enabled: No
Keep original files: No
Simulation enabled: No
Inkscape path: C:\\Progra~1\\Inkscape\\bin\\inkscape.com
```

Each setting on the console output can be customized with command line arguments.

Note: Use dot (.) if working with decimal numbers to separate the integer part.

After completion, 6 files starting with *MyPart_* and ending with *.svg* will be visible under *test* directory. Opening *MyPart_Top.svg* should display the following:



If you would like to directly vectorize the output, you can remove `--vectorize=false` option. As stated above, this will require the *Inkscape* to be installed.

For more customization, read the *Detailed usage* section.

Hint

Tip: If you want the overall size to be exactly as you specify in the JSON file, use the --outer-sizing option. If you want the usable inner area to be the same as you define, leave it as default.

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