Tabgen Papercraft Extension for Inkscape 1.1 by Obzerving

Use the tabgen extension to add tabs on pieces for assembling papercraft projects.
Please read the important setup info below.

After installing, it is available under Extensions->Papercraft->Tabgen

Using it is very simple and straightforward.
- Select the path that you want to put tabs on, ensuring that it is composed of straight segments.
- Run the extension.

It will generate a new piece with tabs along the outside edge, and/or any enclosed path (i.e. along the inside of cutouts.) Tabs have scorelines.   **The paths MUST BE COMPOSED OF ONLY STRAIGHT SEGMENTS**

OPTIONS / PARAMETERS

The **angle of the tab** is the angle used at the edges of the tab.

The **height of the tab** is how far away from the path the tab extends.

The l**ength of the dashline** is how large any one cuts making up the score line is. Making this number too large may result in missing score marks. If zero is used, the score line will be solid, and will not be part of the path, but will be a separate path grouped with it.
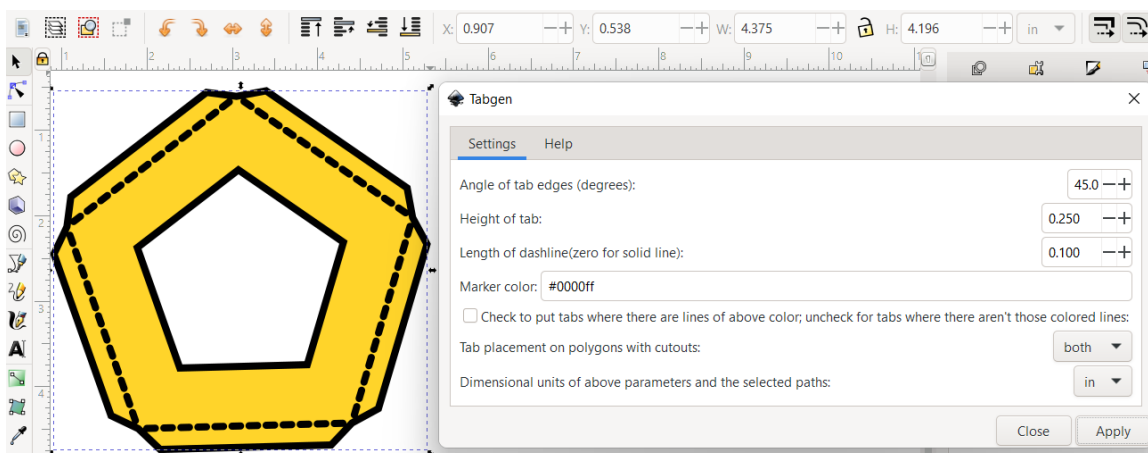
Marker color: Red (#ff0000) is the default selective tab marker color. You can change it here

Tabs checkbox: See the section below for information on the **selective tabs** feature.
  LEAVE UNCHECKED if you want the extension to put tabs on all (inside and/or outside) edges.

The choices for tab placement are outside, inside and both. This affects whether tabs are placed along the outer path, inner paths (holes), or both.

Dimension units are the units in which you specify your setting for height and length. Keep this consistent with your document parameters.
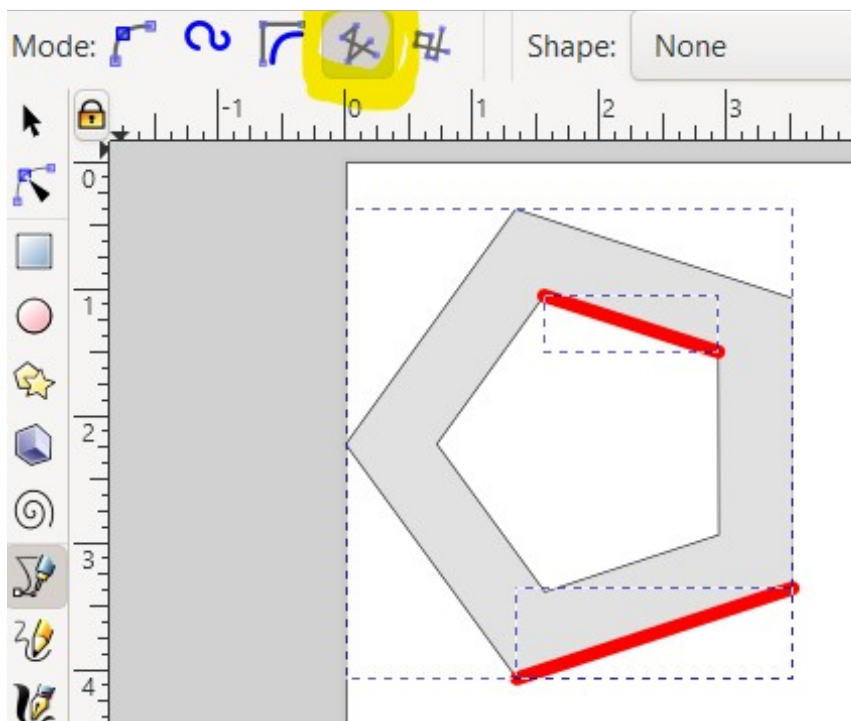

An example of tabs generated on both inside and outside paths.

Non-destructive

Tabgen is non-destructive on your original path. This means that if you no longer need your source path, you will need to delete it. The extension does not do so. This is actually quite useful where you want to create a tabbed piece and keep the original as a "cover" of patterned paper or the like.

SELECTIVE TABS

A Tabgen feature has been added that allows you to mark line segments where you want tabs (or where you want to omit tabs). The Checkbox on the extension dialogue lets you choose whether to select or omit tabs on those segments.

The source paths --the one(s) on which you will make tabs—must have a stroke color other than red

To use this feature you will use a red stroke to trace over the segments you are selecting.

Be sure you are using the straight segment bezier tool (see picture) to draw the segments.
*Note: You CAN change the selection color In the dialog if you need to, but the default is **red**, so that is how we will refer to it throughout this document.*

Consecutive segments can be drawn as a single path, and it is fine to have multiple segments selected on either the outer or inner "source "paths.

When you run the extension, **select both the source path and the red lines**, and use the checkbox to determine if you are putting tabs on those segments, or "omitting" putting tabs on those segments. Then click "Apply"

SETUP INFO

Prepare your path:
All selected paths (and red selector paths) MUST be composed of straight segments. Every segment will generate a tab on the side so eliminate unnecessary nodes -- specifically any extra nodes that lie on a straight segment. Your object must be a path, not a "Shape" and should not be grouped.

Some Inkscape actions -- for instance, inset or outset -- will generate paths with curves. **To insure that your path is composed of only straight segments, do the following steps before running Tabgen:**
1. Select your object.
2. Click on the node tool (F2)
3. Select all the nodes (ctl A)
4. Click on the node icon "convert to straight line segments"

If your path is inside a group, **ungroup** it.

Preferences Setup
There are a couple of setting that can affect this extension.
If you encounter problems, please insure that the following is set:

Edit->Preferences->Behavior->Transforms **Store transformation** should be set to "**Optimized**"

Troubleshooting:

The most common causes of errors with this extension:

1. Your path is not composed of straight segments

2. Your source path is not a completely closed path
        Select each path that you are putting tabs on. Use Path→Union to force it closed
        Note that if you have cutouts you should break your path apart and do them separately.
3. You don't have a stroke on your path – add one.
4. You used the same marker color for stroke color on your source paths, and on your marker paths
5. In at least some versions of the developer 1.2 release, you can get an error. It seems to go away when the source path is moved, so try that if you are on an unreleased version.

Download and Installation

Download the files for this extension at
https://github.com/obzerving/Tabgen

*click on the green CODE button and Download ZIP
*unzip the file you downloaded
* move the tabgen.inx and tabgen.py into your Inkscape extension folder
   The path for this can be found by looking at *Edit→Preferences→System→Sytem Info: User Extensions*
*(close and) Re-start Inkscape