Elective 1: Media Specialisation

Interactive Architecture

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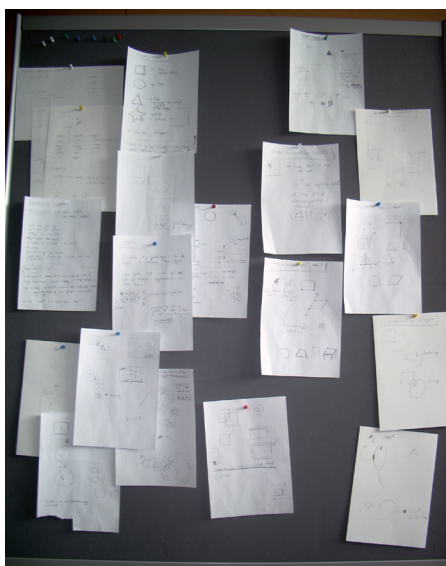Mona Seiffert
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Gimp: path- and shape-tool

Vision

We decided to extend the already existing path-tool. As it is now, it only gives the user the possibility to make free paths, stroke them ore use them as a selection-tool. Our idea was to add basic shapes, which the user can choose.

Idea

As the path- and shape-tool is selected, they should appear at the tool-menu below the tool-bar, as simple icons showing a circle (or ellipse), a rectangle and a triangle. The Triangle will have another extension, where the user can choose how much corners/point the shape should have – therefore the proper name for this tool is polygon-tool. The free-path-tool will be there as well.

The other big change will be, that the settings/properties of a given path can be changed in the tool-menu. Size, stroke, filling, colour etc.

Third idea was to collect the shapes and paths on a path- or vector-layer in the layer-stack, so that the position, relative to other pixel-layers can be changed easily. Additionally the shapes and paths on this vector-layer can be selected one by one and changed in their position by giving them a new value for the so called z-index (as in html, the z-index gives the position relative to the other objects on the same layer, which one is above, which below. The highest z-index is at the top). It will also be possible to change the position by selecting the path in the paths-menu and move it there up or down.


The last new function of this tool will be, that there will be a library where the user can store his own shapes. The idea behind this is, that GIMP as a high-end device addresses professional Graphic designers. These people should never use given fancy shapes like hearts or stars. They should always think about the forms they are working with and therefore constantly have to develop new forms and shapes. Every such shape is just a combination of the basic shapes, ellipse, rectangle and triangle (polygon). Working with those, the user can build up almost every shape he wants, without using the free-path-tool, just by overlaying and merging. Once such a new shape is created, the user wants to save and reuse it whenever he likes. So we will offer him the possibility to store his own shapes in a library.
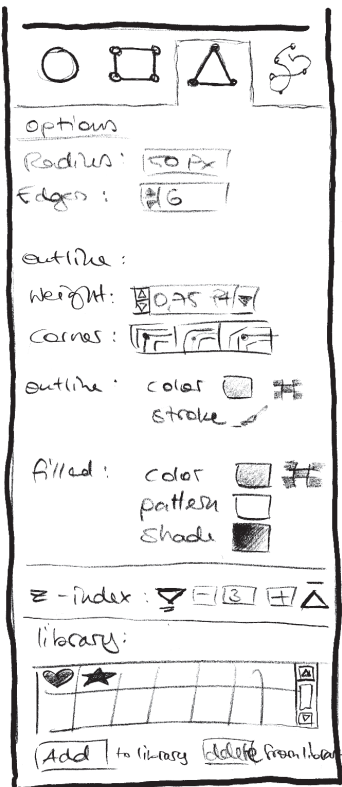
LAYER

Workflow

First step will be the create a new vector-layer, by choosing:
create new-layer and there select a check-box:
new vector-layer.
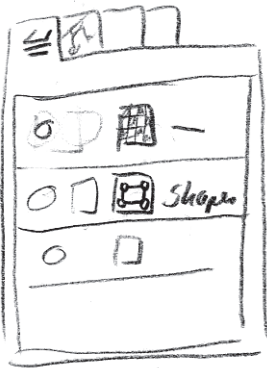
special Icon
or
name
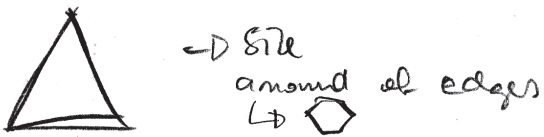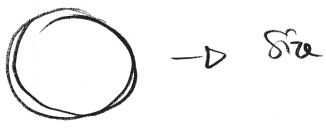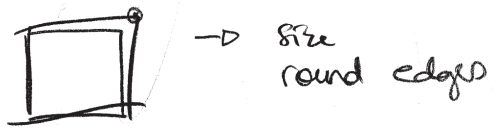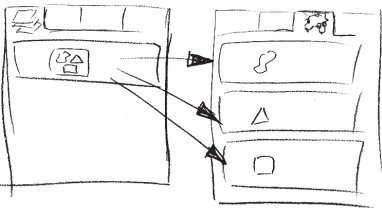"Shapes"
(picture of the
actual layer layout)

SHAPE TOOL

Second step is to choose the paths-tool in the tool-bar, and
then choosing which shape, ellipse, rectangle or polygon.
In case of an polygon the user has to choose the amount of
corners/points.

→ size
round edges

→ size

→ size
amount of edges

options

Radius: 50 Px
Edges: 6

outline:
weight: 0.75
corners:

outline: color
stroke

filled: color
pattern
shade

z-index:

library:

Add to library | delete from library

Exception
Size:
Width: 20 Px
height: 30 Px

Free shape

Third step is to pull open the chosen shape in the canvas,
respectively drawing the freehand-shape he wants. After that
the user can change different settings by either go to the
setting-menu on the left side, typing in numbers, or move and
transform the shape as he likes, just as it is now possible with
the path-tool.
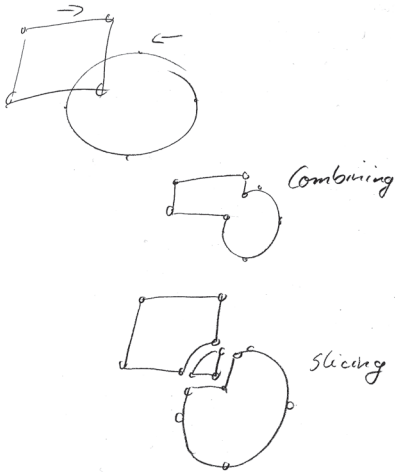
When all the shapes are in the right position for the user, he has the possibility to combine them by merging the paths in the paths-menu. The shape will act after that as one whole, having the same settings etc.

Library

If the user wants to save that shape. The simplest way to do so is selecting the shape by clicking on it, then go to the setting-menu, where the library is found at the bottom and click on "add to library". The shape is now stored as a vector-path with special settings. To use it again, the user choose this shape again from the library, by clicking on it in the library window and then pulling it open on the canvas (just as a basic shape), the path of the shape and all its settings can be changed again and it will appear in the paths-menu.
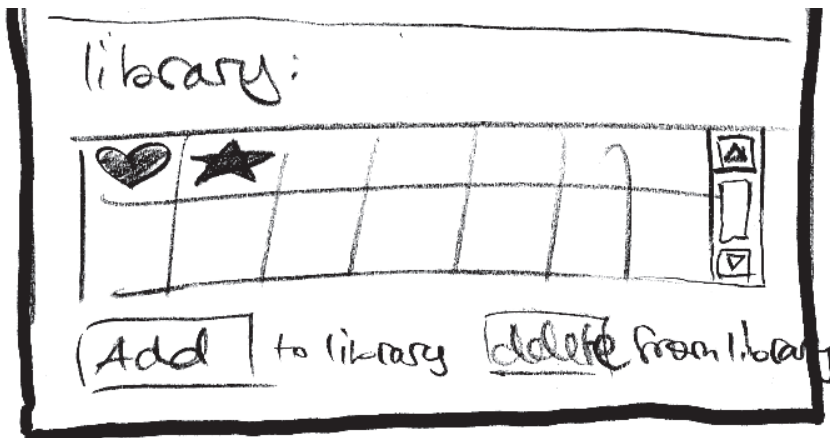
Changing the settings for a single shape will be done by clicking on it on the canvas. The settings for the selected shape will appear in the setting-menu. They stay variable as long as the shape is not combined with another shape.