FLOSS
MANUALS

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Alchemy

Alchemy is software for sketching or drawing using a computer. Unlike other paint programs, Alchemy is not necessarily about creating finished artwork, instead it focuses on using experimental interaction to come up with new ideas completely. 'Experimental interaction' in this case means things like, using your voice to control how lines are drawn on screen, generating random shapes, or drawing with symmetry to create a quick and dirty face or body.

You might use Alchemy to draw for fun and experiment with, or if your a more serious artist you might use it as a digital sketchbook - a place where you can experiment with new forms and drawing techniques. For example, like the image below, you can create a quick and chaotic silhouette in Alchemy then later move to a more conventional paint program to add the finishing touches.

First time users may notice that Alchemy is missing a lot of the features we expect paint programs to have: no undo, no colour, no selecting, and no editing! But don't worry, this is all part of the plan to output a great number of good, bad, strange, and beautiful shapes, rather than a single 'perfected' one. To keep track of all these sketches we will make, Alchemy has a recording function that can saves pages in a PDF (Portable Document Format) file either manually or automatically.

You can install and run Alchemy on **Mac OS X** and **Windows**. Drawing can be done with a mouse or laptop touchpad, but a pen tablet is the best choice.

Installing Alchemy on OS X

Software name : Alchemy
Homepage : http://al.chemy.org
Software version used for this installation : ALPHA 002
Operating System use for this installation : OS X (10.4)
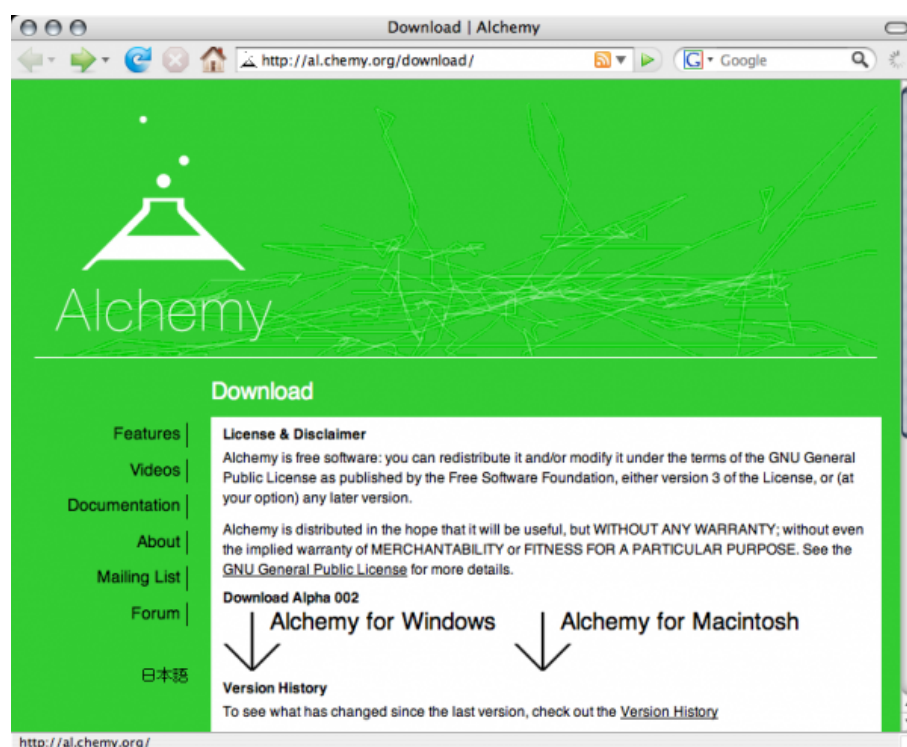**Recommended Hardware :**
Required Software : Java Runtime Environment Version 1.4 or above

Downloading Alchemy

The latest version of **Alchemy** for **OS X** can be downloaded from:
http://al.chemy.org/download/
The latest version at the time of writing this document is **Alchemy ALPHA 002**.

Click on the link labeled "Alchemy for Macintosh" to download.

Once the download is complete, you should see something like one of these files on your desktop or in the folder that your web browser is set to download into:


 If you see the .zip file, double-click it to extract the main .dmg disk image file. Next, double-click the .dmg file to mount the disk image, then open the disk image from your desktop like so:
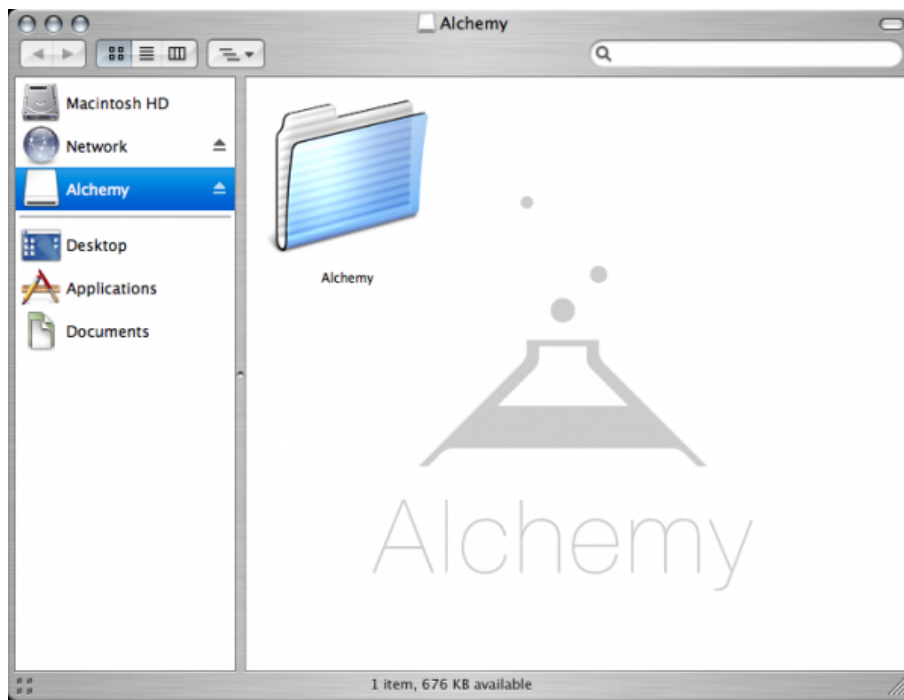
To install Alchemy, copy the "Alchemy" folder into your Applications folder simply by dragging the folder icon from in the Disk Image to your Applications folder.

That completes the installation of Alchemy and you should now be able to see the Alchemy folder inside your Applications folder.
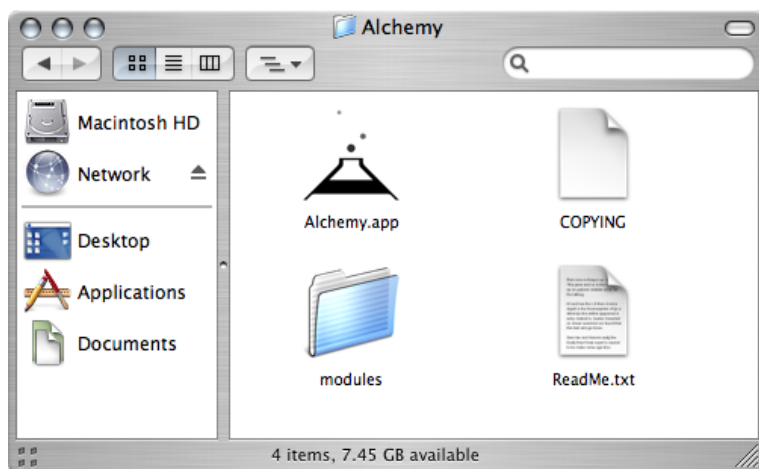
To open Alchemy simply double-click on the Alchemy icon inside the Alchemy folder.

Installing Alchemy on Windows

Software name : Alchemy
Homepage : http://al.chemy.org
Software version used for this installation : ALPHA 002
Operating System use for this installation : XP Service Pack 2
Recommended Hardware :
Required Software : Java Runtime Environment Version 1.4 or above

Downloading Alchemy

The latest version of **Alchemy** for **OS X** can be downloaded from:
http://al.chemy.org/download/
The latest version at the time of writing this document is **Alchemy ALPHA 002**.


Click on the link labeled "Alchemy for Windows" to download.

Once the download is complete, you should see something like this on your desktop or in the folder that your web browser is set to download into:

This is a compressed zip file and inside is the Alchemy application itself. Extract the files, use your favourite unzipping utility and inside will be a folder called "Alchemy". Copy this folder into your "Program Files" folder to install Alchemy.

That completes the installation of Alchemy and you should now be able to see the Alchemy folder inside your Program Files folder.
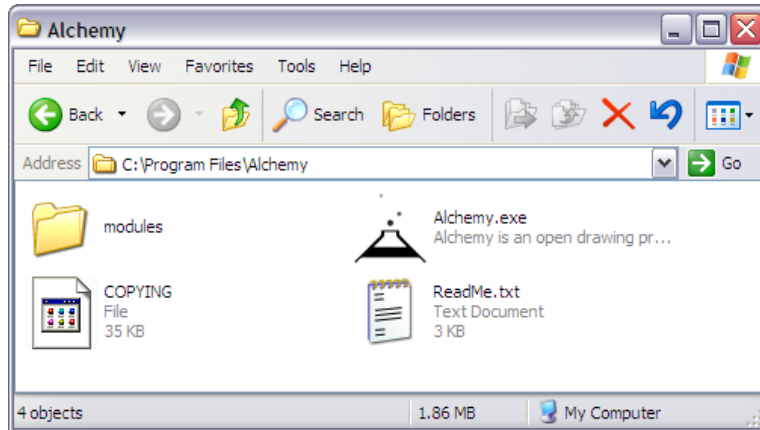
To open Alchemy simply double-click on the Alchemy icon inside the Alchemy folder.

If you see a warning message telling you "Java Install Required", be sure to follow the download link and install Java before using Alchemy.

Interface Basics

**Software name :** Alchemy
Software version : ALPHA 002

When you open Alchemy you will see the main window and little else. Why, you ask? The Alchemy interface is designed to stay out of the way, letting you can concentrate all your creative energies on just doing the drawing.

To reveal the interface, roll your mouse into the top part of the main window. It will magically appear like this on OS X:
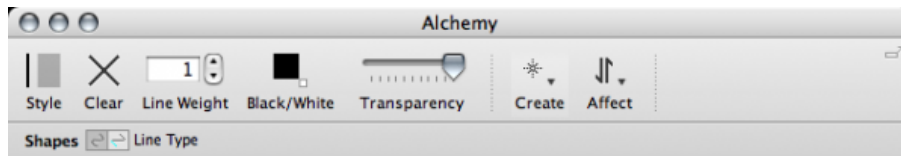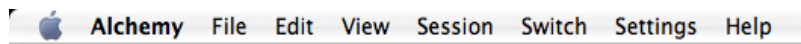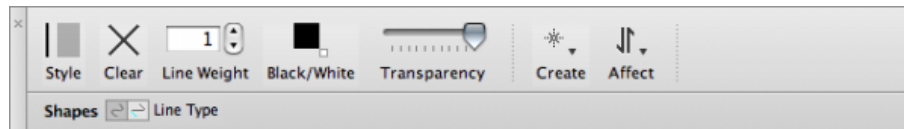

And like this on Windows:
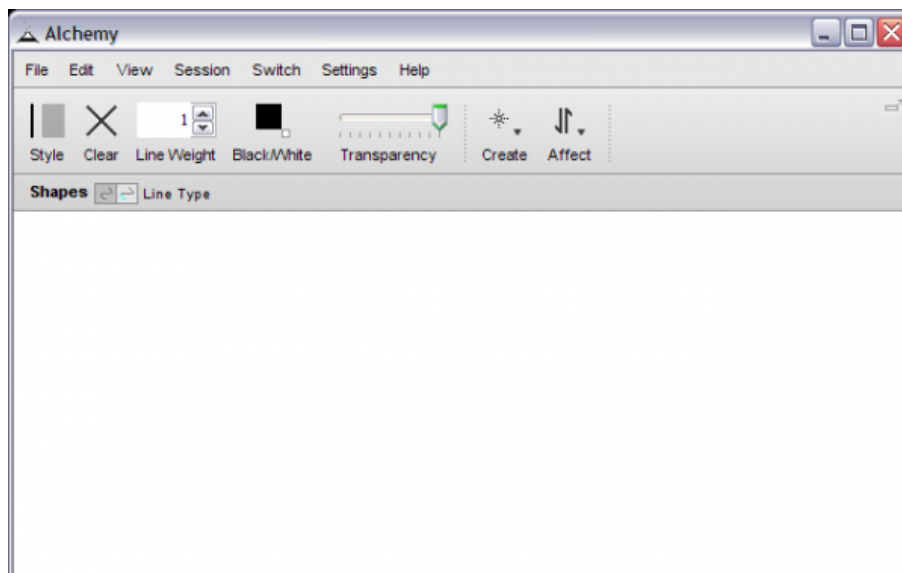
When you leave the interface area it will automatically disappear back where it came from.

The Alchemy interface has two main elements, the menu bar and the tool bar. On OS X, the menu bar is located in the main "Apple Menu" area.

On Windows the menu bar and the tool bar are by default grouped together and show/hide automatically.

On both systems it is possible to detach the tool bar into a separate floating window, by clicking on the detach button on the top left of the tool bar. This removes the tool bar from the main window and on Windows causes the menu bar to be behave a bit more normally, i.e. visible all the time.

Style   Clear   Line Weight   Black/White   Transparency   Create   Affect

Shapes   Line Type

To reattach the toolbar to the main window, simply click the close button on the floating toolbar window.

Menu Bar

The Alchemy menu bar provides access to basic functions such as printing, entering fullscreen mode, and accessing the Alchemy help. More advanced features such as automatic saving and 'switching' to another application can also be accessed from the menu bar.

Lets go through the menu bar one item at a time. Keep in mind that the menu bar looks different on each operating system, but the basic functionality is very much the same.

• File

♦ **New**

Clears the canvas.

♦ **Export**

Exports the canvas as a single page PDF file.

♦ **Page Setup**

Define the page settings for printing.

♦ **Print**

Print the canvas.

♦ **Exit**

Exit Alchemy (Windows only).

• Edit

♦ **Copy**

Copy the canvas to the clipboard as a bitmap.

• View

♦ **Fullscreen**

Enter fullscreen mode. To exit fullscreen mode, hit the ESCAPE key.

• Session

The session menu controls how a Alchemy 'session' is recorded. When using the session menu a multi-page PDF file is created, with pages saved either manually or at timed intervals. The file is saved to the session directory with an automatically date-stamped filename.

♦ **Save Page**

Manually save a page to the session PDF file.

♦ **Save Page & Clear**

Manually save a page to the session PDF file, then clear the canvas.

♦ **Auto Record**

Start/stop timed recording.

♦ **Record Interval**

Set a timed interval to automatically save pages into the session PDF file.

♦ **Record on Startup**

Begin recording a new session when Alchemy is started.

♦ **Auto Clear Canvas**

Automatically erase the canvas when 'Auto record' is turned on.

♦ **Restart Session**

Begin a new session. Creates a new session file when saved next.

♦ **Set Session Directory...**

Set the directory where the session PDF file will be saved.

Switch

The switch menu allows you to quickly open the current Alchemy canvas in another user-defined application. The idea is to be able to quickly continue working in a more 'conventional' software application without loosing the creative 'flow'.

♦ **Switch Vector**

Open the current Alchemy canvas as a vector graphic in an external application.

♦ **Switch Bitmap**

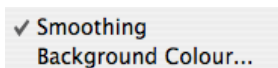Open the current Alchemy canvas as a bitmap graphic in an external application.

♦ **Set Vector Application...**

Choose an external application to open the Alchemy canvas in vector format.

♦ **Set Bitmap Application...**

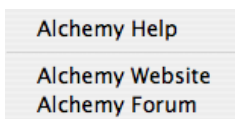Choose an external application to open the Alchemy canvas in bitmap format.

Settings

♦ **Smoothing**

Turn smoothing on/off. Turning smoothing off, can result in better performance.

♦ **Background Colour...**

Set the background colour of the canvas.

Help

♦ **Alchemy Help**

Open the Alchemy help

♦ **Alchemy Website**

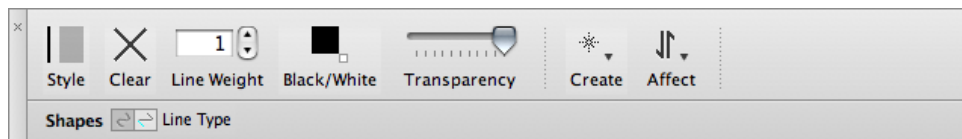Open the Alchemy website in the default browser.

♦ **Alchemy Forum**

Open the Alchemy forum in the default browser.

♦ **About Alchemy**

Open the about window (Windows only).

Tool Bar

The Alchemy tool bar is used to control how shapes look when created. For example, you can change the style of the shape, the transparency, the line width and so on.

Lets go through the main controls on the tool bar one by one.

•Style

Toggle between drawing with a line or solid fill.

•Clear

Clear the entire Alchemy canvas.

•Line Weight

Increase/Decrease the line weight.

•Black/White

Toggle between black and white

•Transparency

Adjust the transparency

The last two buttons on the tool bar control the currently selected Alchemy 'module', and also the controls that appear in the bottom part of the tool bar. But what is a module you ask? Let me explain...

What is a Module?

Alchemy consists of the main or 'core' application, along with a series of independent plugin 'modules'. At startup, the core application searches and loads modules located inside the 'modules' folder. Alchemy modules each perform a specific and different function and they represent the main functionality of Alchemy itself. Modules determine the type of shape that is created and how that shape is affected (changed) when you draw. Modules are divided into two categories:

> • **Create modules** produce shapes, and can be selected one at a time.
> • **Affect modules** affect or change existing shapes, and can have more than one selected at a time.

Modules can be selected using the 'Create' and 'Affect' buttons in the tool bar. When you click on one of these buttons, a menu pops up like this:
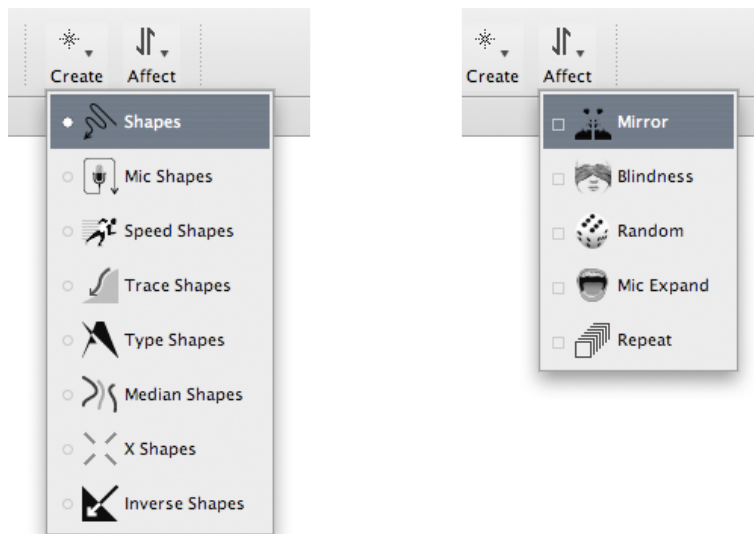
Listed here are all the currently installed 'Create' modules on the left and 'Affect' modules on the right.
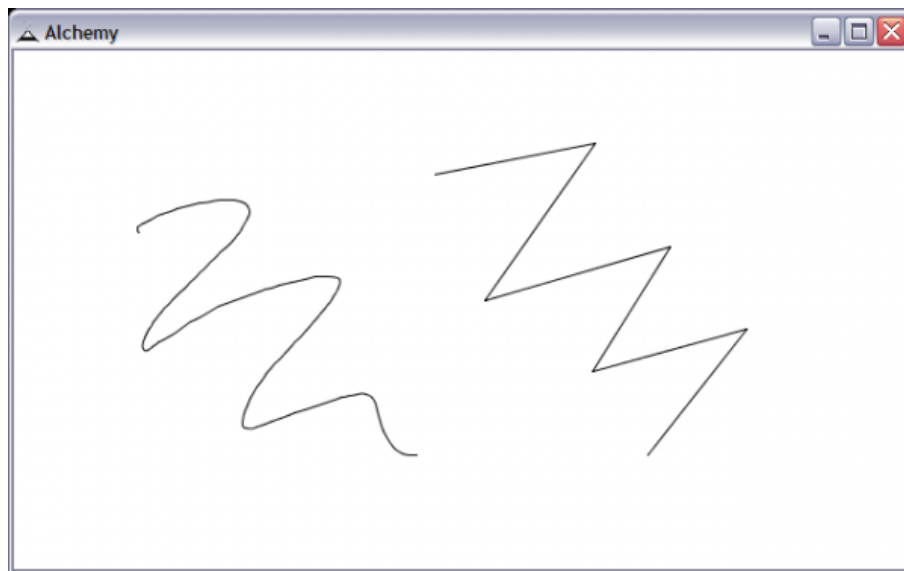
Create Modules

Software name : Alchemy
Software version : ALPHA 002

Alchemy comes with a range of different modules that do quite varying things. 'Create' modules are for creating shapes, and can be selected one at a time using the 'Create' popup menu in the tool bar.

Lets go through the 'Create' modules one by one.

Shapes

The Shapes module draws like a regular pen in freeform mode or straight lines in straight mode. When drawing straight lines, a double click will allow you to start a new shape.

Mic Shapes

The Mic Shapes module uses the sound level from your computers microphone to change how shapes are
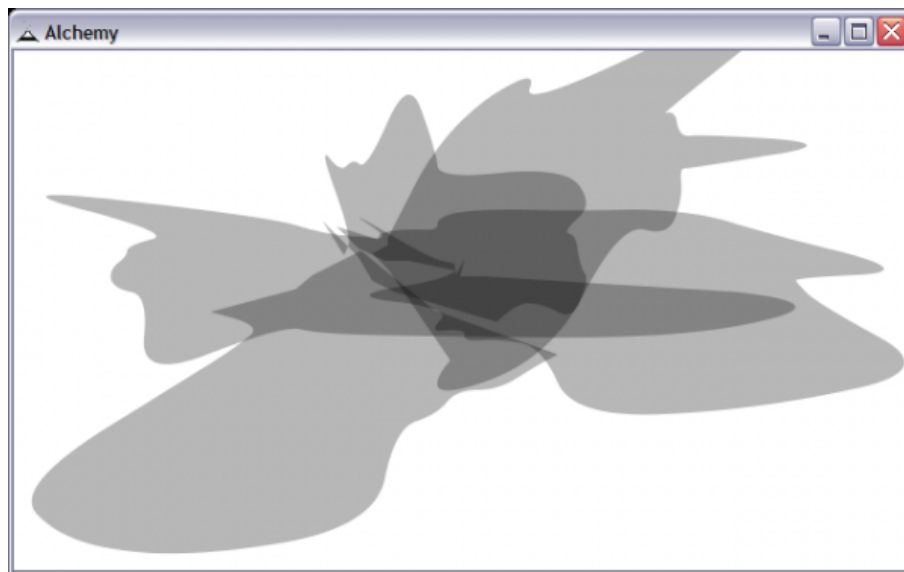
created.

In 'fatten' mode the thickness of the line is determined by the microphone sound level. More noise creates a fatter line and vice versa.

In 'shake' mode the location of the line is changed according to the microphone sound level. More noise creates a more 'shaken up' line.

The volume slider can be used to control the level of noise required to â fattenâ or â shakeâ the shape.

Speed Shapes

The Speed Shapes module accentuates the pen speed to create shapes that throw the line beyond the actual pen position. Faster movement of the pen will result in shapes extending well beyond the pen position and possibly off the screen itself.

The speed slider can be used to control how much â speedâ is applied. The line type can also be toggled between drawing straight lines and curved lines.
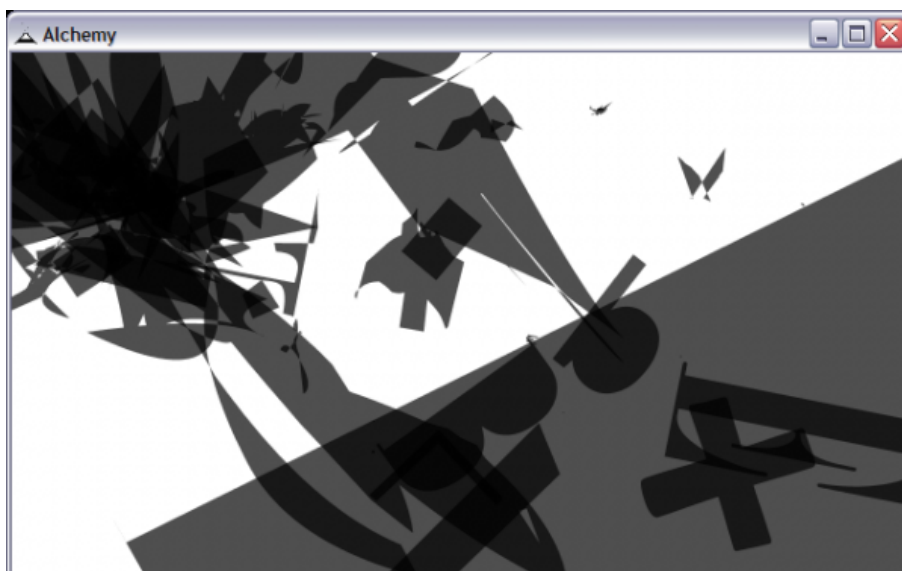
Trace Shapes

The Trace Shapes module downloads a random image using Flickr and loads it hidden behind the canvas. The pen then snaps to the edges of the hidden picture, creating unknown forms.

Display of the image can be turned on and off using the â Display Imageâ button. A new image can be loaded by clicking on the â Load Imageâ button.

The â Snap Distanceâ slider allows you to set the maximum distance at which snapping occurs.

The â Toleranceâ slider determines how â hardâ the edge must be for the line to snap.

Type Shapes

The Type Shapes module creates random shapes from type forms. It looks for fonts on your computer then layers and distorts them to create abstract shapes. These shapes that can be used as a starting point for characters, spaceships, or whatever shape you see in the 'clouds'.

The â Distortionâ slider determines how much distortion is applied to the shapes.

The â Auto-generateâ button creates more complex shapes by layering and joining multiple type-forms together, then placing them on the canvas.

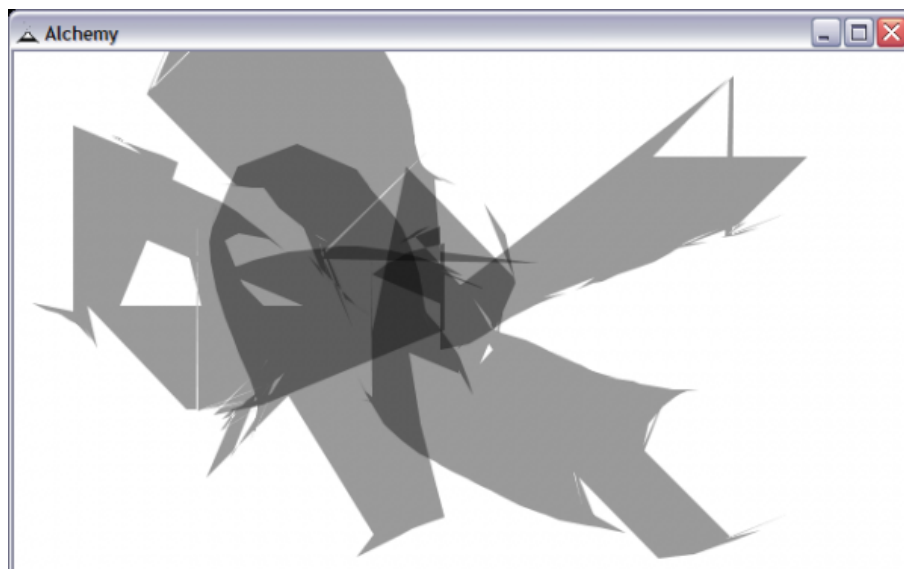The â Sizeâ slider changes the size of the shapes created.

The â Key Drawingâ button lets you draw with the keys of your keyboard, placing shapes on the canvas according to the keys pressed.

Median Shapes

The Median Shapes module draws a 'median' line between the last line and current line.

X Shapes

The X Shapes module creates hard and sharp edged shapes that move erratically according to the line duration and pen speed.

The â Distanceâ slider controls the maximum distance from the pen where shapes are created.

Inverse Shapes

The Inverse Shapes module draws like a regular pen except inverted. When the pen is up it draws, and when down it does not.
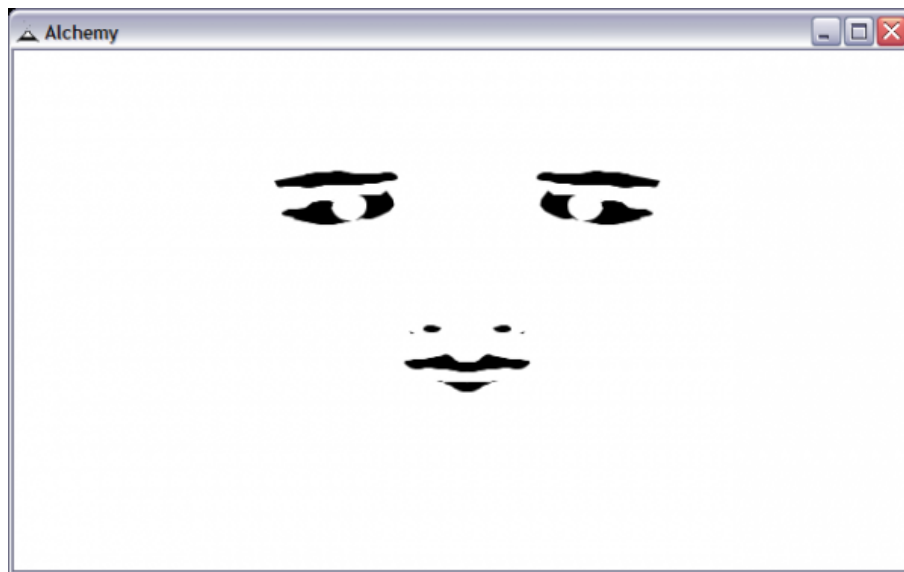
Affect Modules

Software name : Alchemy
Software version : ALPHA 002

'Affect' modules are for affecting (changing) existing shapes. You can have more than one selected at a time by using the 'Affect' popup menu in the tool bar. Having several selected at once can lead to quite strange behaviour! Thats a good thing!

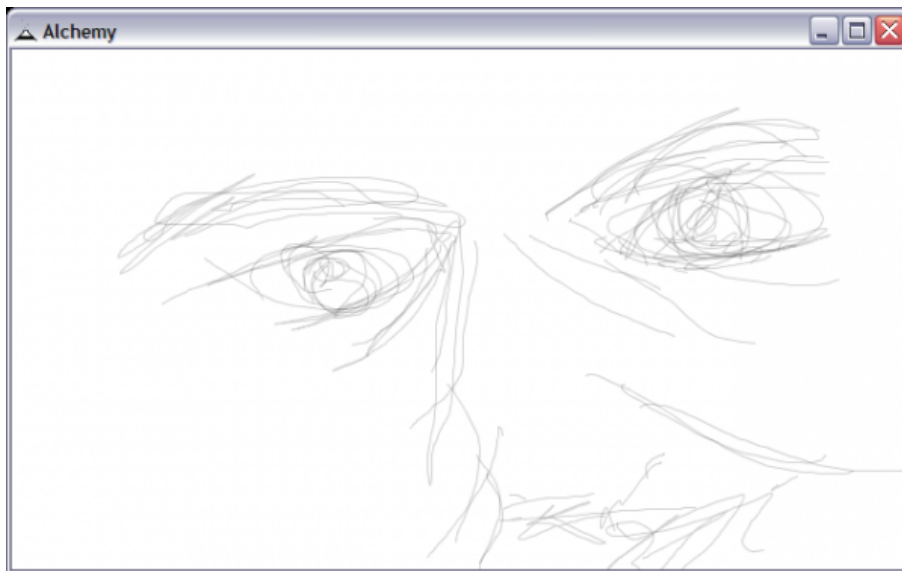Lets go through the 'Affect' modules one by one.

Mirror

The Mirror module reflects shapes along a vertical and/or horizontal axis in real time.

Use the 'Horizontal' and 'Vertical' buttons to turn mirroring on and off.

Use the 'Move' button to set the location of mirroring.

Use the 'Reset' button to reset the location of mirroring to the middle of the canvas.
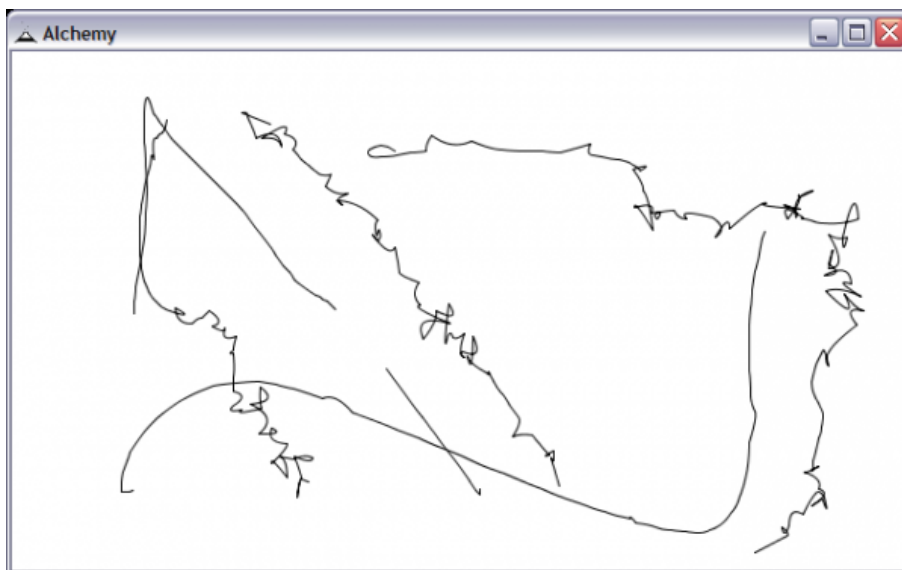
Blindness

Drawing 'blind' is an exercise used in conventional drawing, and is implemented here in the Blindness module by stopping the canvas display being updated.

Update the canvas display using the 'Redraw' button.

Allow the automatic redrawing of shapes each time the pen is lifted by toggling the 'Autoredraw' button.
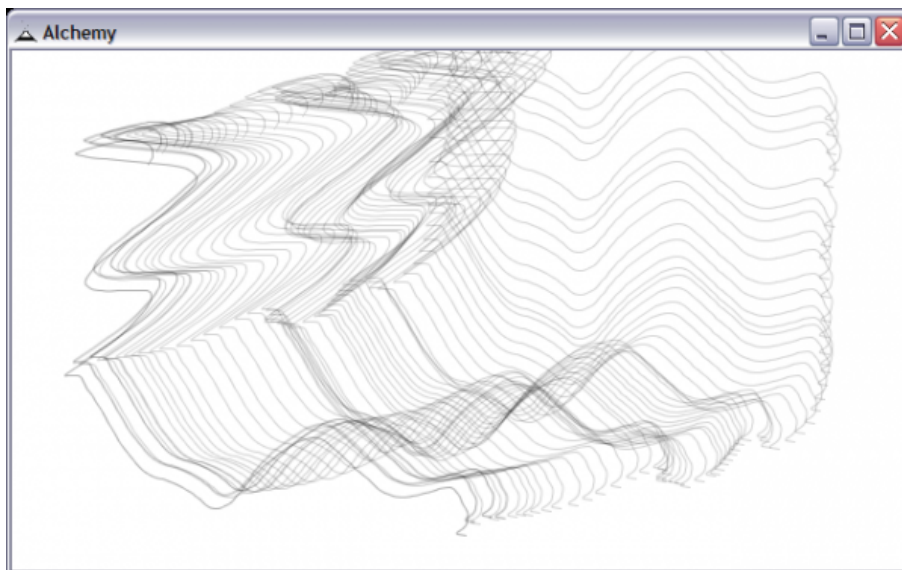
Random

The Random module allows you to distort and change shapes. When rolling over a shape, the area around the mouse will have its points randomised.

Mic Expand

The Mic Expand module uses sounds from the microphone to expand, contort, and change shapes. When rolling over a shape, the microphone is opened and the shape is changed according to the incoming sound wave.

Repeat

The Repeat module duplicates shapes on rollover. This module can be used in combination with other affect modules such as 'Random' and 'Mic Expands' to create slightly different shapes in multiple.

Use the 'Repeat Interval' slider to change the rate at which shapes are duplicated. A smaller interval produces more shapes.

Additional Help

For more help with **Alchemy** you can try these avenues:

Alchemy Documentation

You should first look at the documentation on the official Alchemy site:

http://al.chemy.org/documentation

Also on the Alchemy site are a range of demonstration videos that can give you a good picture of how Alchemy works:

http://al.chemy.org/videos

Online Forums

You can also try searching through the forums for information.

http://al.chemy.org/forum

The forums contain a lot of postings from users on many topics. You can use the search system to locate topics or just browse the categories. If you don't find what you want then try subscribing to the forums and posting your question to the relevant category. There are a few things to keep in mind when asking a question in a forum or to a mailing list. First, be as clear as you can with your question and provide any information that you might think would help some to try to help you. You might, for example, include information about the operating system you are using, or various specifics that relate to what you are trying to achieve. Additionally, it is always good practice to also post back to any forum or mailing list if you manage to solve your query and include clear information on how you solved the puzzle. This is so that someone else that may have the same issue can resolve it using what you have found out. If possible post back to the same thread (discussion topic) so that anyone searching through the forum can follow the discussion including the solution.

Web Search

Searching the web is always useful. If you are looking for problems arising from errors reported by the software then try entering the error text into the search engine. Be sure to edit out any information that doesn't look generic when doing this. Some search engines also enable you to try searches of mailing lists, online groups etc, this can also provide good results.