

Create SVG Files

What is a file format?

A file format is a standard way that information is encoded for storage in a computer file. It specifies how bits are used to encode information in a digital storage medium. File formats may be either proprietary or free and may be either unpublished or open. - Wikipedia

What are common graphic arts file format?

.SVG	Scalable Vector Graphics Files – a standard format for displaying vector graphics on the web.
.PNG	Portable Networks Graphics
.JPEG	Joint Photographic Experts Group
.GIF	Graphics Interchange Format. Low resolution and small files, easy to display on the web. Can be animated.
.PDF	Portable Document Format – a “universal” file type readable by many applications, including web browsers on all computers and devices. Not easily editable.
.studio3	Silhouette software – vector-ish based images which can be sent to a Cameo printer to cut out stickers.
.PSD	Photoshop document, can contain photos, text, often has layers.
.AI	Adobe Illustrator – vector files, can have layers. Used by commercial printers for billboards, silk screen t-shirts, and corporate branding.
.EPS	Encapsulated Postscript – vector files similar to .AI

Graphic Arts programs

Adobe

Reader – a free program / app which is great for “reading” and printing .pdf files. Available with computers, phones, and other devices. Silhouette uses pdfs.

Creative Cloud (CC) is a collection of programs, need a monthly subscription which costs between \$20 and \$60, depending on the plan. The library has two Mac computers in the DML, available to Skokie Library card holders. For this class:

- Photoshop – great for “knocking out” (removing) the background of photos, color correction and merging multiple images.
- Illustrator – reads and creates .SVG files. Create / modify text.

Photoshop Express – a light version, available in the Classroom PCs

Photoshop clones

GIMP, Paint.NET, Photpea, Pixlr.Editor (web based)

Illustrator clones

Inkscape, GIMP, Affinity Designer

Web based file type converters

Zamzar.com

Learn more about Graphic Arts and SVG files:

Lynda.com – go to <https://skokielibrary.info/resources/online-training-tutorials/> and click on Lynda.com. Create a free account with your library card number and a password of your choosing. Enter a search term in the search bar and find an interesting class.

Websites for help and inspiration

Facebook.com groups:

- “Cricut and Silhouette FREE SVG Files, Fonts, and Digital Art”
- “Silhouette Cameo Design & Inspiration”

Reddit.com groups:

- Adobellustrator
- Silhouettecutter

Etsy.com to see other people’s SVG files and sell your designs or creations.

Free and inexpensive fonts. Pay attention to the font’s license restrictions if you are going to resell your design. These sites have tutorials how to install the fonts on your computers.

- Dafont.com
- Fontbundles.net

Free and inexpensive apps for your phone.

Adobe Draw

Adobe Capture

Imaengine

Pixlr

Tutorials

<https://www.youtube.com/watch?v=pi0xcvDy9Qw> tutorial for popup card

<https://www.leapoffaithcrafting.com/how-to-make-svg-files-to-sell/> Inkscape

Design, print, and cut a pop-up design to make a simple greeting card.

- 1) In Page tool, specify your paper size.
 - a. We will use 8.5" x 11" paper here because that's what the Library's printers use.
 - b. In Style, click on the drop-down menu and select Type 1 to display the registration marks
- 2) Drawing tools:
 - a. Make one box 8" tall, 6" wide, and in the left-most area of the paper, make a second box 4" tall, and 1" wide. This box shows us where the big box will fold.
 - b. Arrange it so the big box does not touch the registration marks. The large box is our virtual card – everything inside this box will be part of the finished card. The small box shows us the **fold line** of the card. We'll delete it right before we print the card.
 - c. Drag image into center of the card. Resize it to fit just a half inch or more inside the left and right sides so the pop-up will be stable.
 - d. Do any other drawing, text, etc to make up the card.
 - e. Print the image on a regular color or b&w printer.
- 3) Trace tool:
 - a. Move everything that won't be cut off to the work area. Including the little box, text, etc. Leave the pop-up image exactly where you printed it.
 - b. Select Trace area
 - c. Trace outer edge
 - d. Move colored image to work area.
 - e. Leave traced image in the center of page.
- 4) Offset tool:
 - a. Select Traced area.
 - b. Click Offset button
 - c. Drag Distance slider so the outline is fairly smooth but not too far from image area. Here we want to smooth out any jagged edges. Click apply.
- 5) Pop-up tool
 - a. Select the shape (the red-outlined thing)
 - b. Click on the left red dot and drag it to the end of the left margin, do the same to the right dot, and click to the right margin. These dots represent the fold line and you want them to be in the center of the vertical height of the card.
 - c. The double arrow in the center of your object controls how far out your object pops out. Click and drag.
 - d. Adjust base width (how much the base is connected to the paper) and the Min.Strut Width (how much the top is connected to the paper).
 - e. Dash Pitch controls the length of cut along the fold line. A small number will look like dots, a bigger number will be dashes.
 - f. Release Popup to convert the lines to standard cut lines that can be removed and manipulated individually.
- 6) Send to the Silhouette printer

How to create a vector image with your phone

Install Imaengine and / or Adobe Capture (free!, but you may need to create an Adobe account, which is also free.)

Allow access to your photos on you phone.

Take a picture, or find an image on your phone.

Process the image – both programs have many pre-set functions, some are attractive, Some are just weird. Try the black and white line drawings. Play with the Detail and Stroke sliders. Too much detail and it is hard for the Silhouette to cut too fine.

Save image as you desired file type, I recommend .jpg, or .svg if you are going to further edit it in Adobe Illustrator or Photoshop.

Tips on Adobe Illustrator to create and .svg file:

Do not use “Export for screens”, it will leave weird artifacts. Use “Save As...” SVG.

Try out Adobe’s tutorials first, and look at the shape generator, and pen tools.