

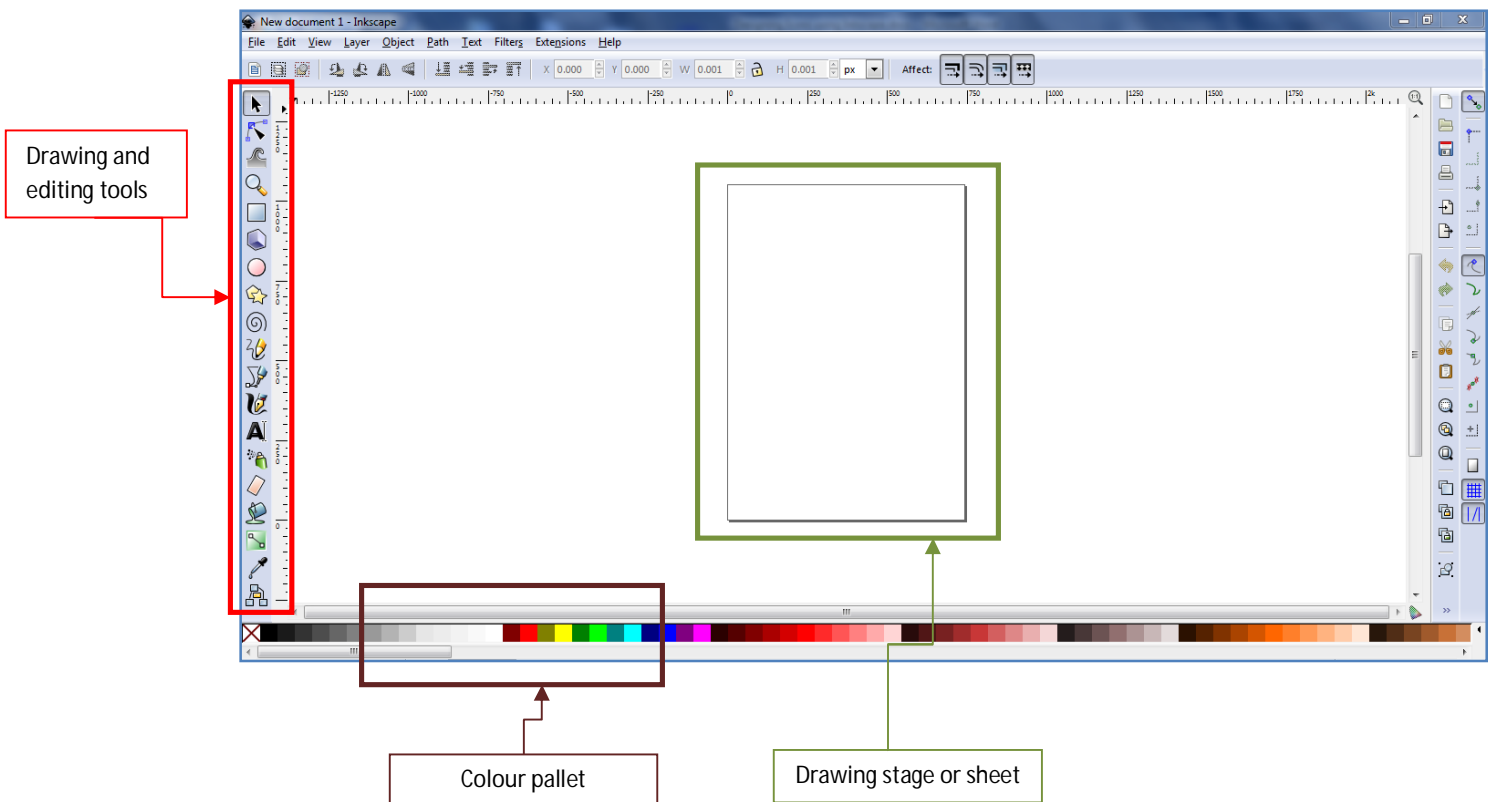
Designing icons using Inkscape

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Inkscape is a vector-drawing tool that is extensively used in graphic design, especially in designing logos and icons. One of the major advantages of using Inkscape is that it is very light and free, therefore, anybody can download and start using it. This tutorial aims at introducing you to Inkscape and its tools used in icon design. Note that we are not teaching the ways to design icons, instead this tutorial focused at teaching techniques of Inkscape to design logos digitally.

1. Introduction to Inkscape workspace:

This section will walk you through the workspace of Inkscape. Here I shall introduce you to the basic toolbar, drawing stage and other salient features, which are essential to know for your practice. Given below is a screen shot of Inkscape window, which you will encounter as soon as you run the application.



The drawing and editing tools are used for drawing shapes, lines, curves et cetera. These are the most rudimentary elements of your icons. With Inkscape, you can draw regular geometric shapes such as squares, circles, triangles, rectangles, polygons and even stars. However, Inkscape is not limited to regular shapes; it also allows you to explore various curves and sporadic drawings. Using the pen tool, you can draw your own custom curves known as bezier curves. Drawing and editing toolbar also consists of colouring and spraying tools. With these tools, you can change the stroke and fill colours of your shapes or drawings. You must be wondering, what about three-dimensional figures.

Well ... yes, Inkscape can do that too for you. Inkscape's 3-D box tool enables you to draw 3-D shapes and figures taking your icon designing skills to a higher level. In coming sections, I shall explain how to utilize inkscape in designing icons using an example.

2. What is an Icon?

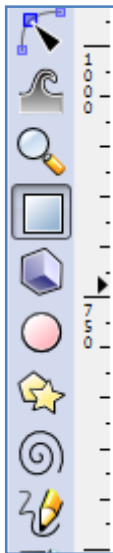
Webster dictionary suggests that an "icon" is a symbol whose form suggests its meaning. We encounter countless number of icons around us. If you are reading this document on your pdf reader, then you can see numerous of icons in the window. Just take a second and have a look at your desktop, you can see several icons there as well. Now using inkscape you can design such icons instantly.

In this short tutorial, we will together try to design the following icon:

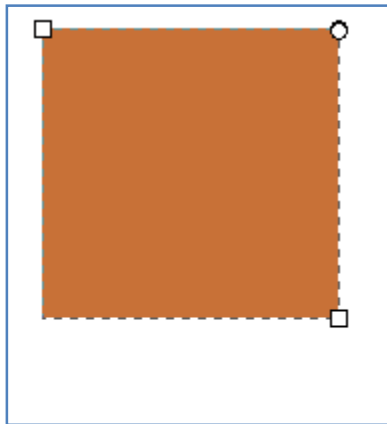


This is the home icon, the icon that most of you have already come across in web pages, mobile apps etc. It may seem a little complicated right now, but using Inkscape you can master designing such icons in a few minutes. All you have to do is, just run Inkscape on your computer and follow each step of this tutorial.

3. Drawing a square

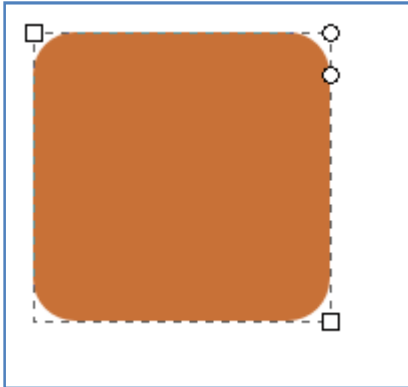


Click on the square tool and draw a square of the size of your choice. This option allows you to draw squares and rectangles. Therefore, click on this icon and draw a square as given in the figure below:



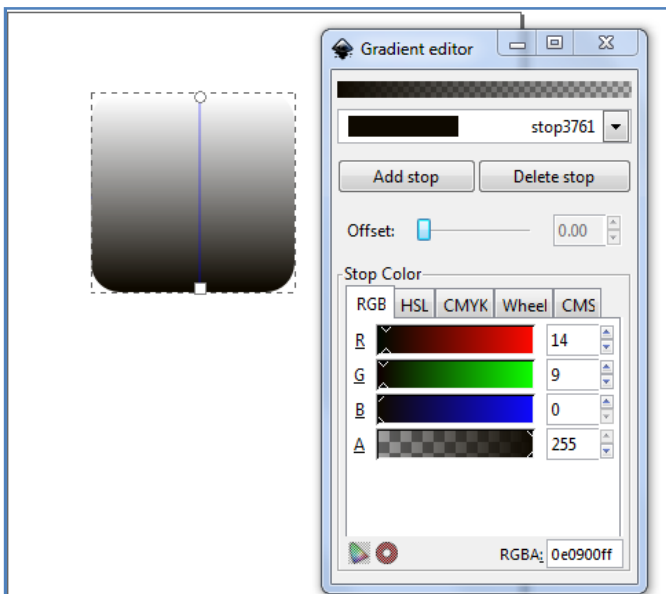
Here, in this figure, you can notice three highlighted points of our orange square. The square points are to resize the square. All you have to do is, just click on the point and drag it in the direction you want to expand or compress the size. The circle is a special tool, which allows you to create fillets at the corners. When you drag this circle, the square attains rounded corners. That is what exactly

we are going to do for our home icon. I have just dragged the circle slightly downwards so that I can give this square some rounded corners. Once dragged, you should get a result similar to the picture given below:



As you can see, the circle has shifted downwards and the square now has smooth rounded corners.

4. Change colour and gradient:



Changing colour and gradient in Inkscape is very easy. The following image illustrates how to get a good gradient in your icon. Gradient editor enables you to change the direction of the colour gradient. In addition, it allows you to change the colours of the gradient. Here we have selected grey colour for our icon's background. Gradient also adds a three dimensionality to a 2-dimensional image. You can select gradient editor tool from the main toolbar.

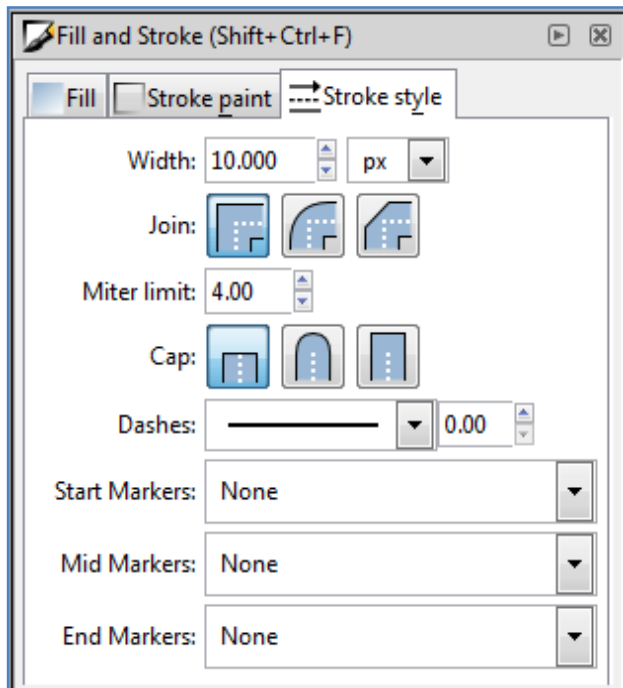
5. Draw another grey square:

Now we will draw another square in the drawing area. Since, now you know how to draw a square, this is equally easy for you. Now place this square in the middle of our older square.



If you have noticed, we have actually created nice 3-D graphic using 2-D tools. Now, that is the power of gradient in icon design. Now this icon also looks like a button, isn't it? As I mentioned creating graphics with Inkscape is very easy. Now let's see how do we fit our little house in it.

6. Draw another white square and a triangle:



Our friend "Square" is not going to leave us this easily. Now, just draw one more square with white stroke and no fill. White stroke means, border in white colour. With stroke style setting options, you can change the width of the stroke, its joints and the way it has to be represented: dashed, dotted et cetera. Once drawn your square should look something like this:



Now, let us step aside from drawing squares all the time and try drawing a triangle. How do we that? Very simple, Just use the polygon tool. To draw a triangle just set the number of sides to three. In addition, draw a rectangle and place it inside the white square. This should result in something like this:



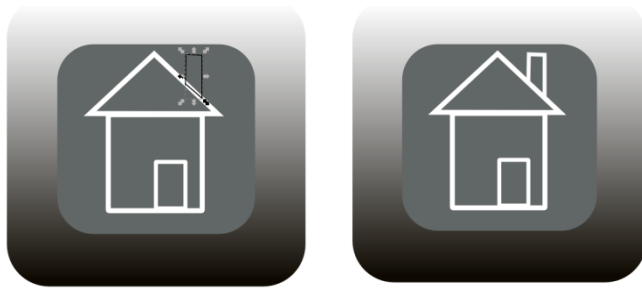
7. Use pen tool to draw chimney:

We will use Inkscape's pen tool to draw the chimney of our little house.



Pen tool is slightly complicated at times, however, on practice you can master this tool as


well. Now to draw chimney, first place your first point from where you want to start the drawing. Now, place the second point vertically above it at some distance of your choice. Next, place a point horizontally at a small distance away from your second point. The last point will fall vertically downwards of the third point and will meet the house at a certain point on the triangle drawn earlier. The figure given below explains the usage of pen tool in drawing custom shapes:



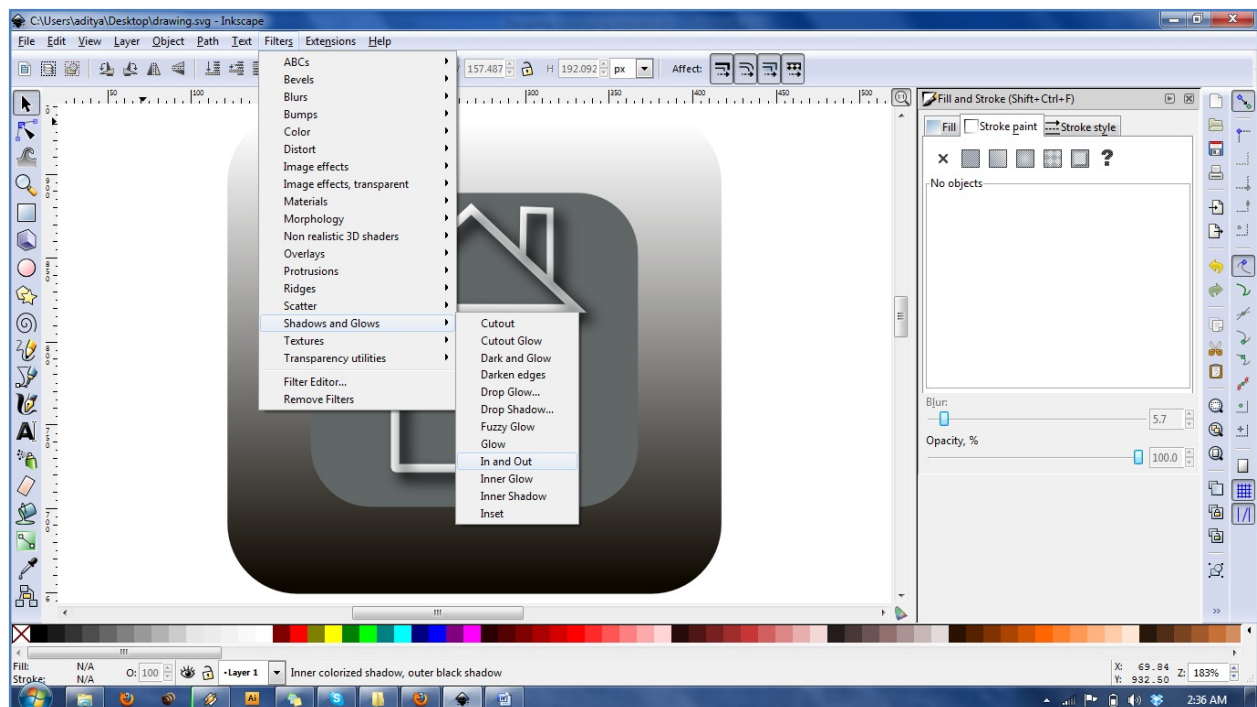
Now we are close enough to our target design. This does look like a house, but we should garnish it with some effects. This way I can show you how some Inkscape effects make your icon look better.

8. Grouping and adding effects:

Before going into effects, first its required to group all the shards of the “white-house” namely, polygon, triangle, rectangle and the square. Grouping is a way of combining all the shapes so that, the changes can be applied at once to all the members of the

groups. 

Clicking on the group icon or Ctrl+G, can enable you to group a set of selected objects on your drawing stage. Now, once you have grouped let us give a shot to the effects.



In this icon we are trying to add glow effect to the white-house. Therefore, we will go Filters menu->Shadows and Glow->In and out. This effect will result in our final design as follows:



This way we can use the facilities of Inkscape in designing icons instantly.

9. Saving your files:

Inkscape saves its files in .svg format, which is one of the most widely accepted formats for vector images. However, it also allows you to save them as either .png or .jpeg formats. The type of image format depends on your project requirements.

10. Some useful resources:

I hope all of you have found this tutorial helpful. If you have any suggestions or feedback regarding this tutorial, you are cordially welcome. You can write your mails to a.ponnada@iitg.ac.in or aditya1990.p@gmail.com . If you have any doubts regarding Inkscape, please feel free to contact me through email or at my contact number 09678883618.

Cheers!