

Making Jigsaw Puzzle Pieces

This is a short guide that will show you how to easily create Jigsaw puzzle pieces for your own Jigsaw puzzle games.

This guide was originally part of the *Roaming Gamer, LLC – Jigsaw Puzzle Game Template for Corona SDK*. I am now providing it free of charge to all.

Step #1 – Select Finished Puzzle Size (300x 240)

The first step to making puzzle pieces for your game is to select the size of your finished puzzle (as displayed on your target device.)

Because the puzzles in this game template are designed for a landscape screen resolution of 480 x 300, I have selected a puzzle size of 300 x 240. That is, when I select the images (next step) for my puzzle(s) they have to be at least 300 x 240 or I'll have to scale them up. Also, if you can select images with the same (or similar) ratio (4:3 in this case) you will get nicer results.

Step #2 – Select Image(s) For Finished Puzzle (Dogs & Stary Night)

Having selected the size of my finished puzzle, I searched the web for some non-copyrighted images (since this is just for practice) that were at least 300 x 240 pixels in size. I found two that would work nicely for this template:



A Cute Picture Of Some Dogs



A photo of Vincent van Gogh's Stary Night

Please note, that originally these images were not precicly 300 x 240. I had to clip them and scale them down to the right dimensions. Also, for any van Gogh lover's out there, I did have to clip a little bit of the picture because it didn't have an exact 4:3 ratio.

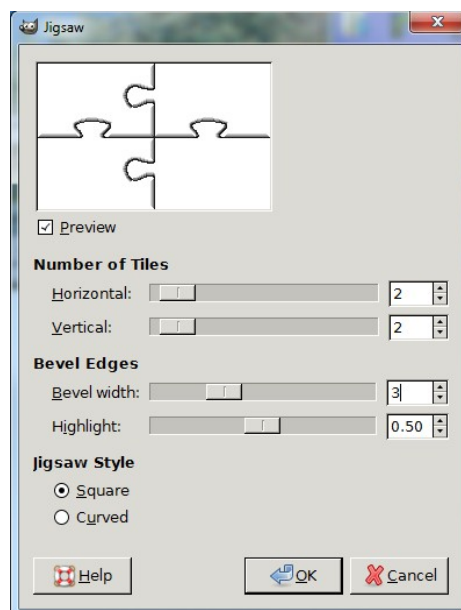
Step #3 – Create a Slicing Template (with Gimp)

(This step requires that you have Gimp 2.6 (or later) installed. If you do not have it, please get it here: <http://www.gimp.org/downloads/>)

Before we can slice our puzzle image up, we need a slicing template. The easiest way to get one is to use Gimp to create it.

For our puzzle, we will create a 2 x 2 jigsaw slicing template using Gimp 2.6 (or later). Please follow these steps exactly:

1. Open Gimp
2. Select: *File* → *New*
3. In the dialog that pops-up, fill in a Width of 300 and a Height of 240, and Click 'OK'.
4. Select: *Filters* → *Render* → *Pattern* → *Jigsaw*
5. In the dialog that pops up, select these attributes:
 - Horizontal: 2
 - Vertical: 2
 - Bevel width: 3 (You can experiment with this later for smoother edges.)
 - Highlight: 0.5 (You can experiment with this later for smoother edges.)
 - Style: Square (You can experiment with this later if you like.)
6. Click 'OK'
7. Save the file as jigsaw.png (must be a PNG).



Step #5

Step #4 – Slice the Image

Now that we have our images and our slicing template, we need to slice the images.

To achieve this, select your favorite image editor (as long as it has a image layering and 'magic wand' selection feature.), and slice away.

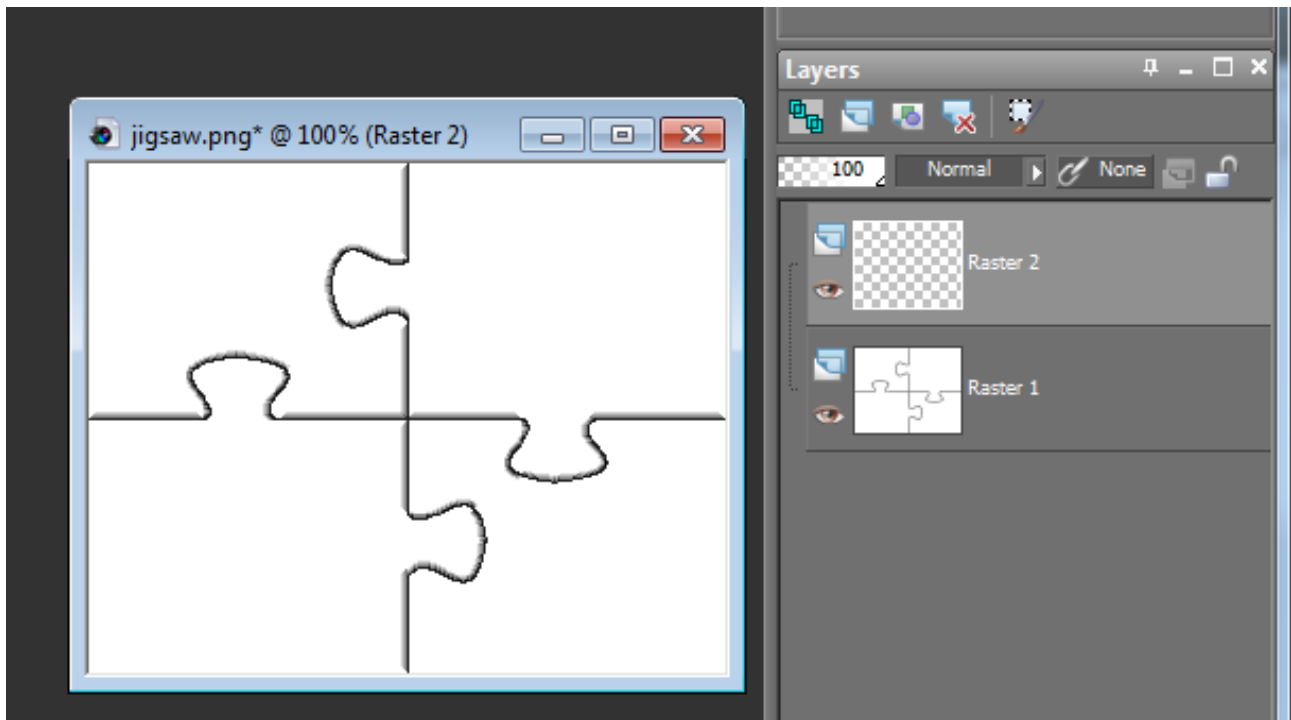
Tip: These image editors have the ability to layer images and select areas by color, alpha, etc. (e.g. magic wand selection.):

- Paint Shop Pro (I use this. See example below.)
- Photo Shop (For students and professionals with bigger budgets than I)
- Gimp (This is free: <http://www.gimp.org/downloads/>)

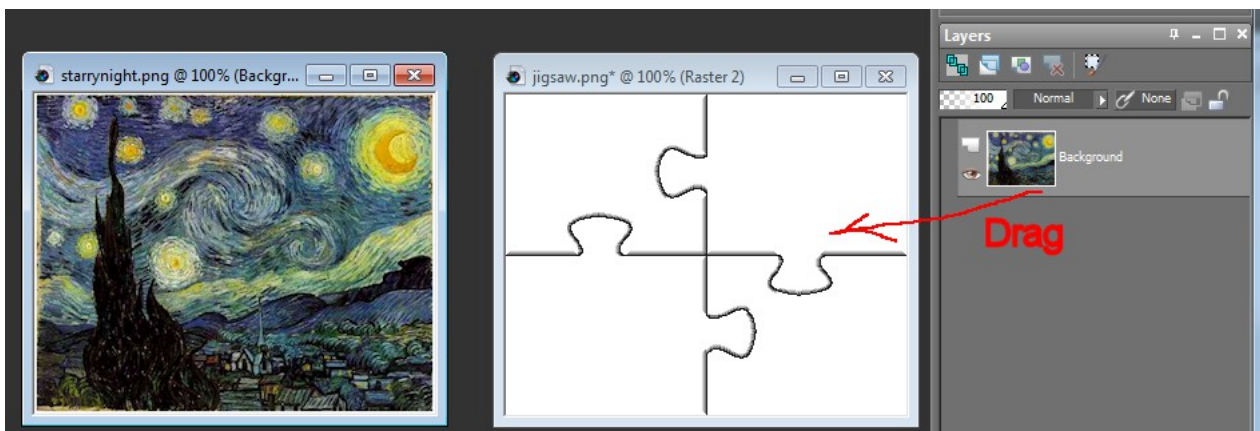
Slicing an Image With Paint Shop Pro X2 (PSP)

1. Load the image you want to slice into PSP.
2. Load the jigsaw.png file we created in step #3.
3. Create a new (transparent) layer in the jigsaw.png image, over the original. (Do not save.)
4. Select the image you are slicing.
5. Drag the image over
6. Save jigsaw.png as slicing.png.
7. Select the jigsaw slicing image layer.
8. Enable magic wand selection.
9. Duplicate slicing.png (Ctrl – D)
10. Click in the middle of the upper-left part of the image.
11. Expand the selection by 1 pixel.
12. Hide the jigsaw layer (in the duplicate image).
13. Select the puzzle image layer.
14. Invert the selection area.
15. Delete the selection. (Delete key)
16. Invert the selection area again.
17. Shrink the image to the selected area. (Shift-R)
18. Save the image as 1.png
19. Repeat steps 9..17 for 2.png, 3.png, and 4.png, where 2.png is the upper-right, 3.png is the lower-left, and 4.png is the lower-right.

At this point, you should have four image files (one for each corner of the puzzle), saved as PNG images and with transparent spaces where the cutouts are.



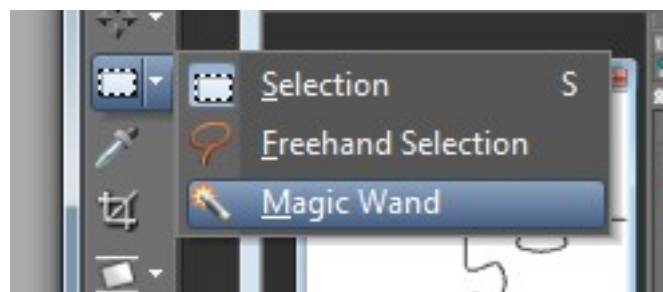
After Step #3



Step #4 and #5



After Step #7



Step # 8



After Step #10



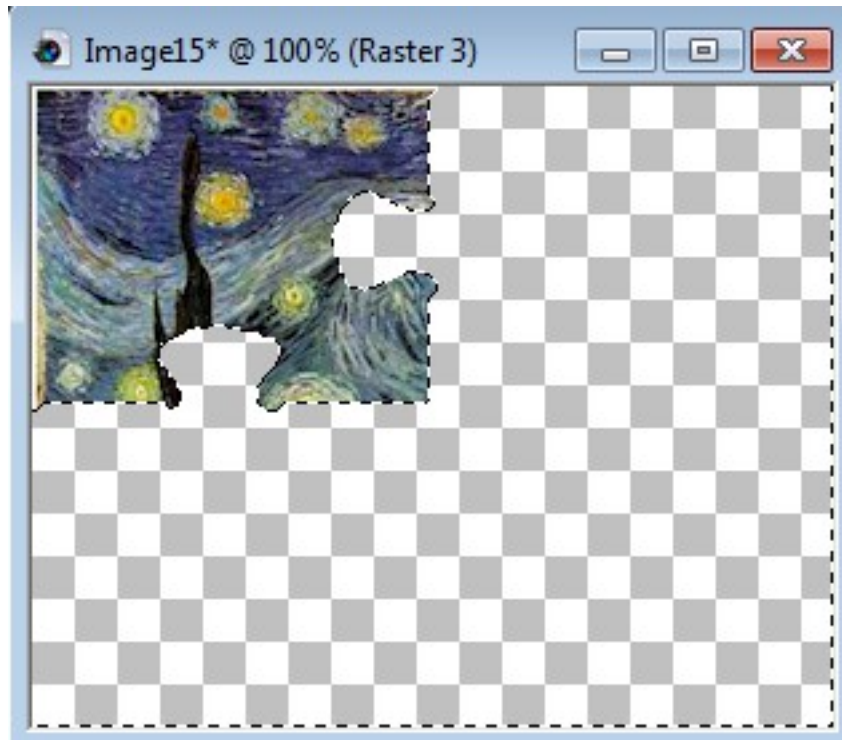
After Step #12



After Step #13



After Step #14



After Step #15



The End Result... now do it again 3 more times :)