# Game Development: Making an Icon File

FILE CONVERSION: This activity demonstrates one procedure to convert (or change) a file of one type to another. The process is called **exporting**. As a result of this procedure, you will have a special desktop icon to click on for launching your game. In order for your game program to recognize the graphic as an icon, it must be converted into an icon (*.ico*) file type. You will select a *.jpg* or *.png* asset from your game assets folder and convert it to an *.ico* file. The executable game file that you create can then include this file type in its programming. Complete every step of this activity exactly the way it is stated in the procedure (DON'T BE CREATIVE WITH THIS). Your icon (*.ico*) file should be placed in your game assets folder when you are done, as shown in the last graphic of this procedure.

LOOK FOR THESE FILE EXTENSIONS IN THIS TUTORIAL: .jpg or .jpeg (Joint Photographic Experts Group), .png (Portable Network Graphic), .ico (Icon)

Selecting an asset

1) Open your assets folder and click to open different graphical assets in the Windows Photo Viewer. They are likely to be *.png* or *.jpg* (or *.jpeg*) type files.
2) Study each asset and choose an asset that would make a great icon to launch your game. DO NOT SELECT ANIMATED STRIPS.
3) Write down the file name that you selected and close the assets folder and photo viewer.
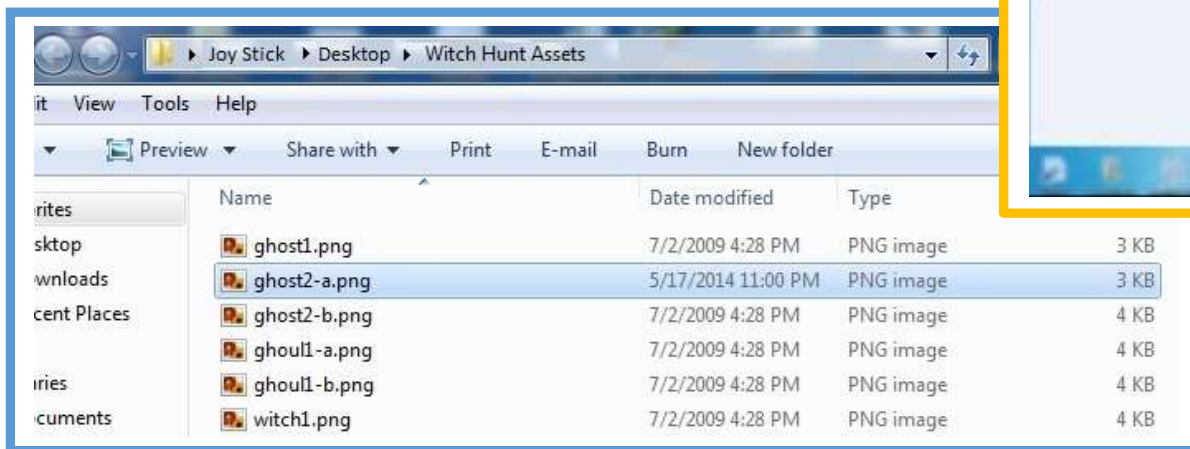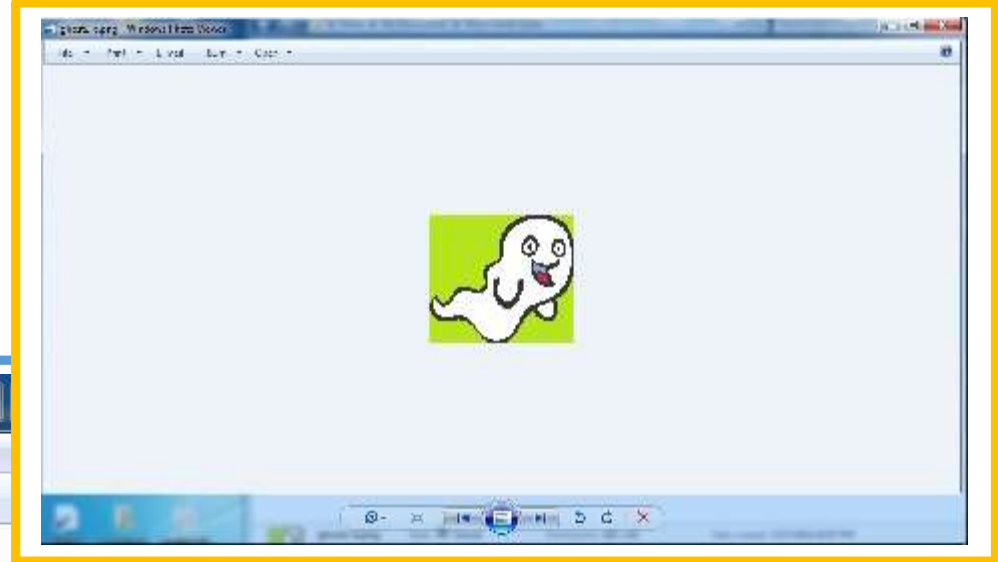

Opening your file in Gimp 2.8

1) Find the **Gimp** icon on the desktop and click to launch it.
2) From the **File** drop down menu select **Open**.
3) Find the file you graphical asset you selected, click to highlight it and then click the **Open** button at the bottom of the window.
4) Your image should open in **Gimp**.
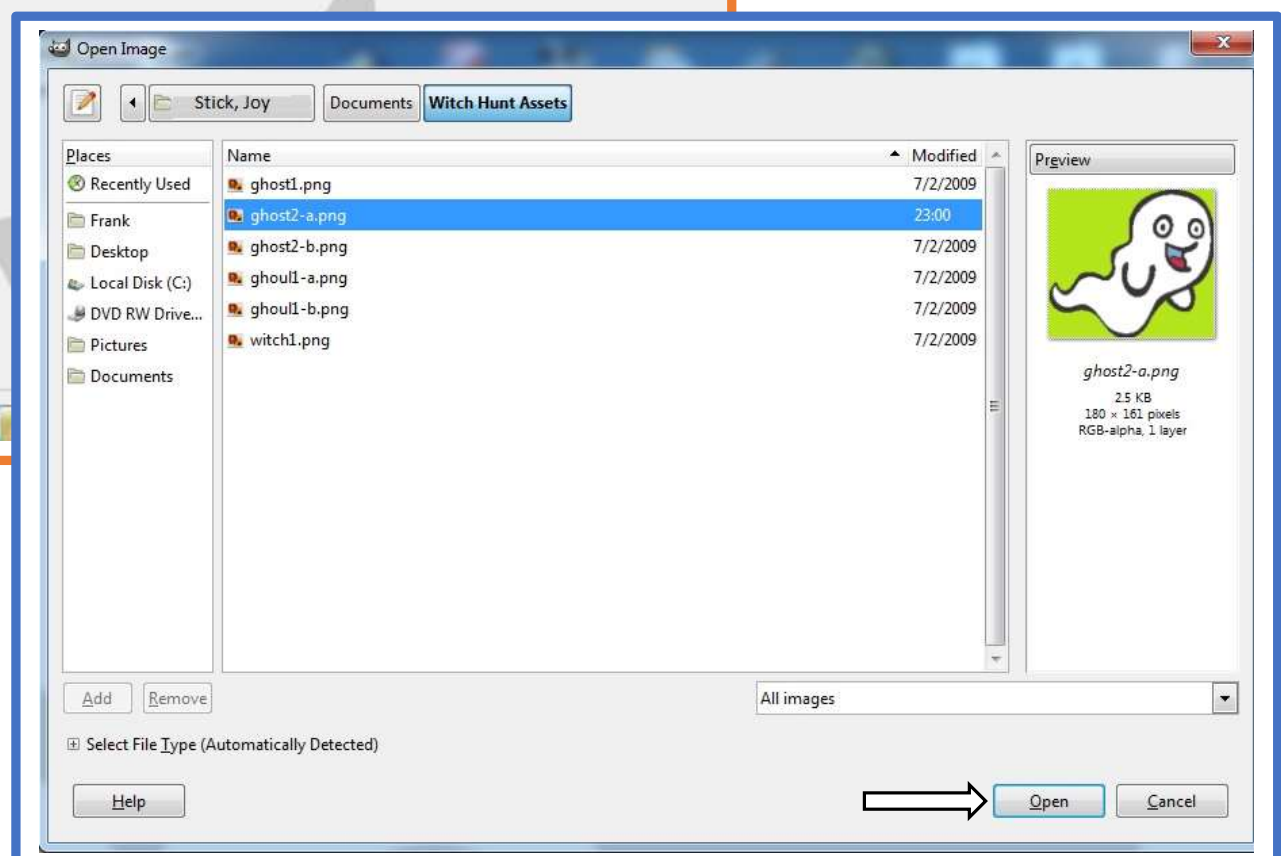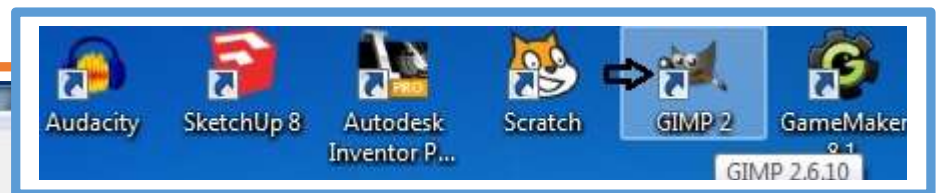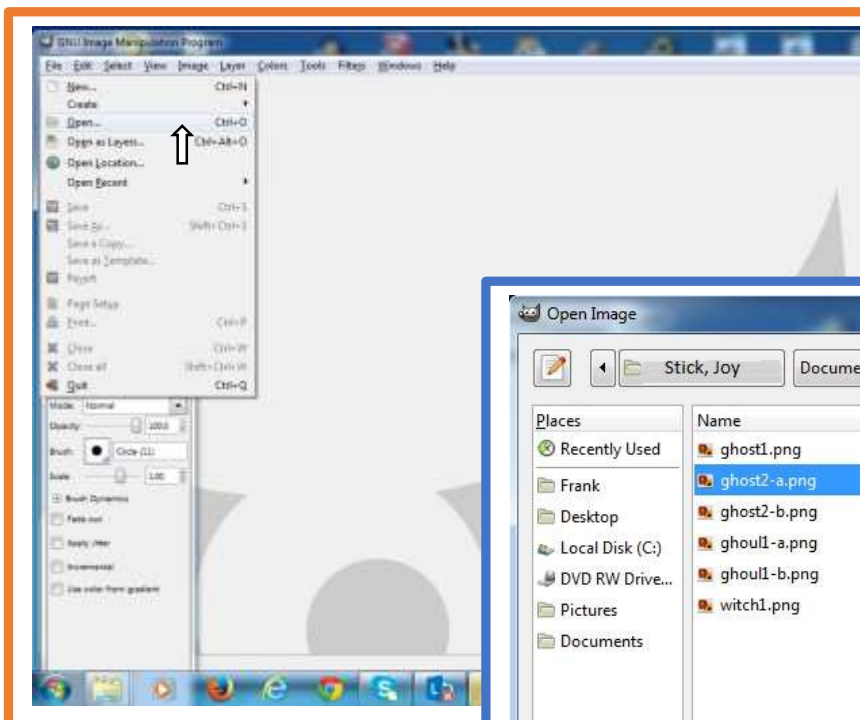
Making backgrounds transparent

NOTE: If you see a checkerboard pattern around your image, the background is already transparent and you can skip this procedure.

1) From the **Layer** menu tab highlight **Transparency** and then click on **Add Alpha Channel**.
2) Find and select the **Wand (Fuzzy Select Tool)** in the **Toolbox** palette.
3) Use the wand to select background colors that you want to remove to them transparent. Move the wand to that region of the image and **click to activate that area.**
4) Press the **delete key on your keyboard**. You should see the background color disappear and be replaced by the checkerboard pattern. This pattern shows the area that will be made transparent.
5) Repeat steps 3 and 4 to clear other regions of the background for transparency.
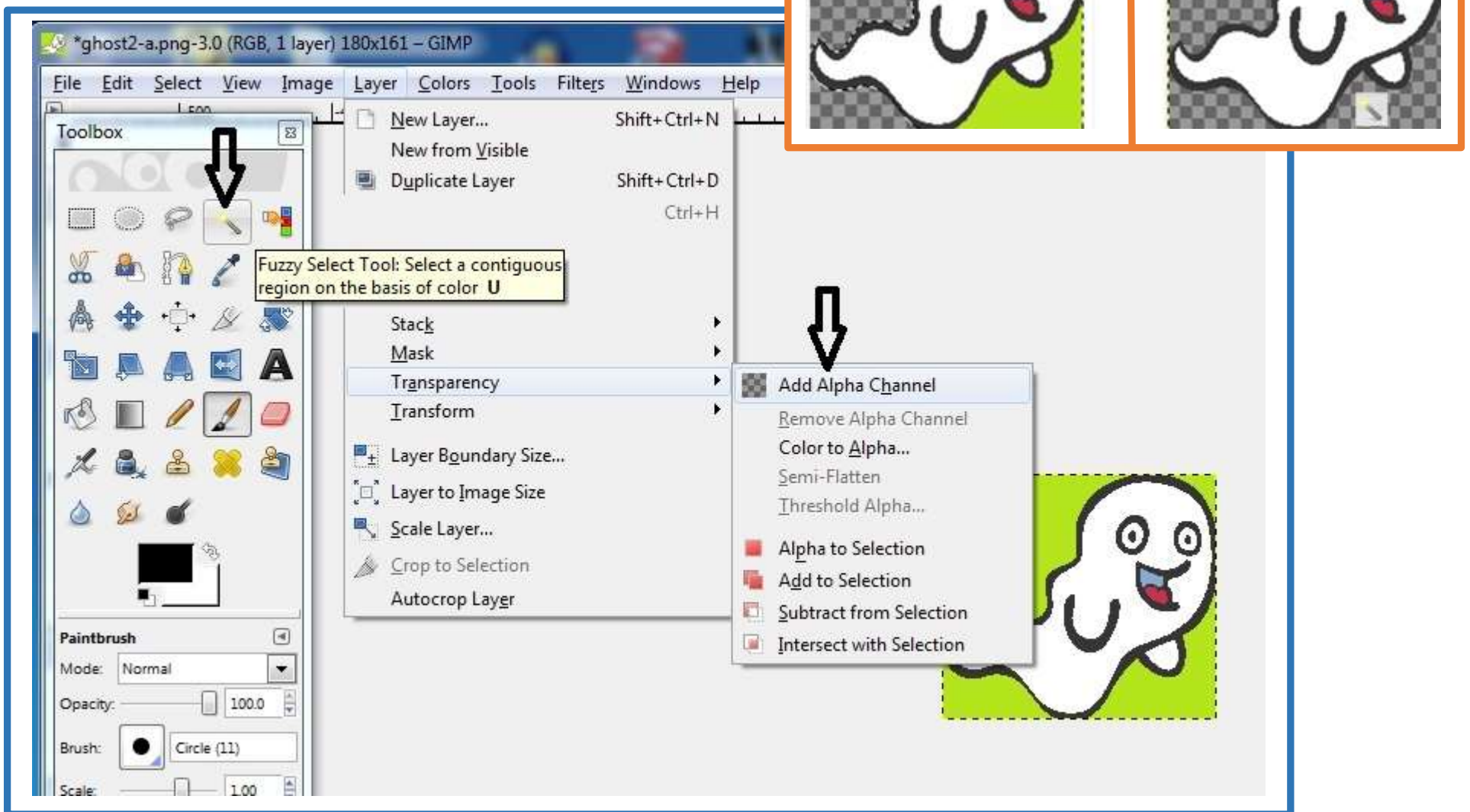
Erase "fuzzy edges"

You may notice that a few edges around your image are a little fuzzy and still hold some of the old background. Follow this procedure if you want to clean them up. If your edges are already clean, you can skip this step too.

1) From the **View** menu tab highlight **Zoom** and select a percentage zoom large enough to do your work. This may be as large as 400%.
2) Use the **Eraser** tool (the little pink box) from the **Toolbox** pallet to carefully erase any of these "fuzzy" edges around your image.
3) When You are done, go back to **Zoom** again and click **Revert Zoom (100%)** to return your image to the Starting scale.

Convert your asset file by exporting it to an icon file (.ico)

Now it is time for the file conversion to create a file that your game program can recognize as an icon.

1) From the **File** menu tab select **Export**.
2) The **Export Image** box should open. Make sure it shows the name of your assets folder to the far right of the **Save in folder** near the top of window. Click on the plus symbol **(+)** with the label **Select File Type (By Extension)** in the lower left corner above the Help button.
3) Scroll down to **Microsoft Windows icon** and highlight it. Once that has been done click the **Export** button (lower right corner).
4) A box will open labeled **Export Image as a Windows Icon**. Click the **Export** button again.
5) Select **File** then **Quit** or click the **"red x"** in the Gimp window. If you get another box click **Close without saving** (you already converted the file). Your image file has been exported to your
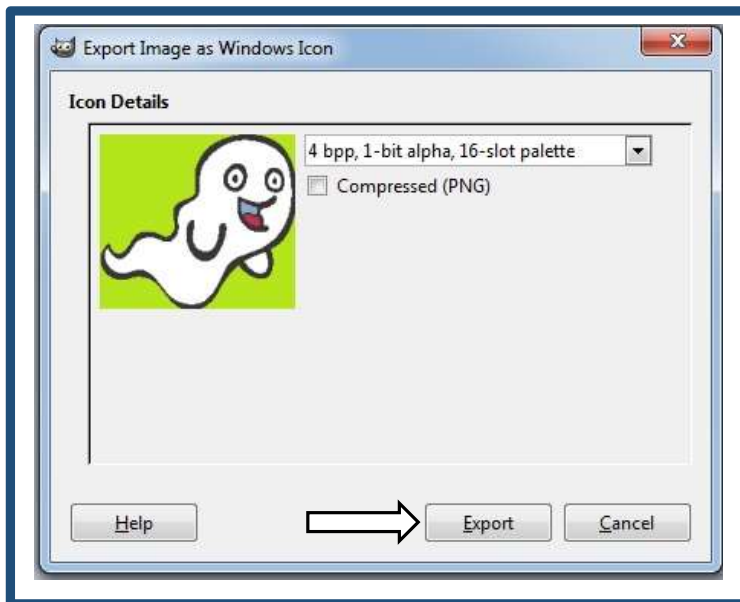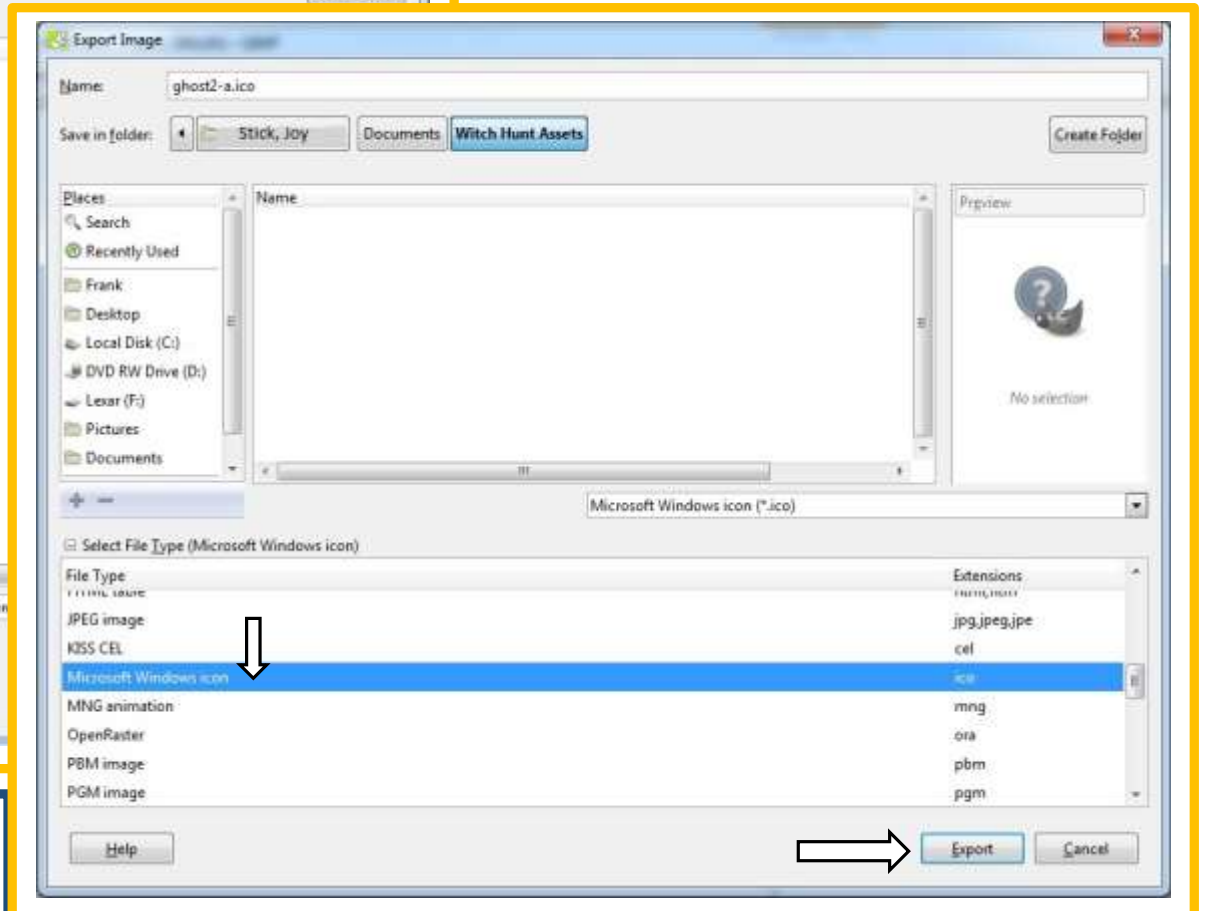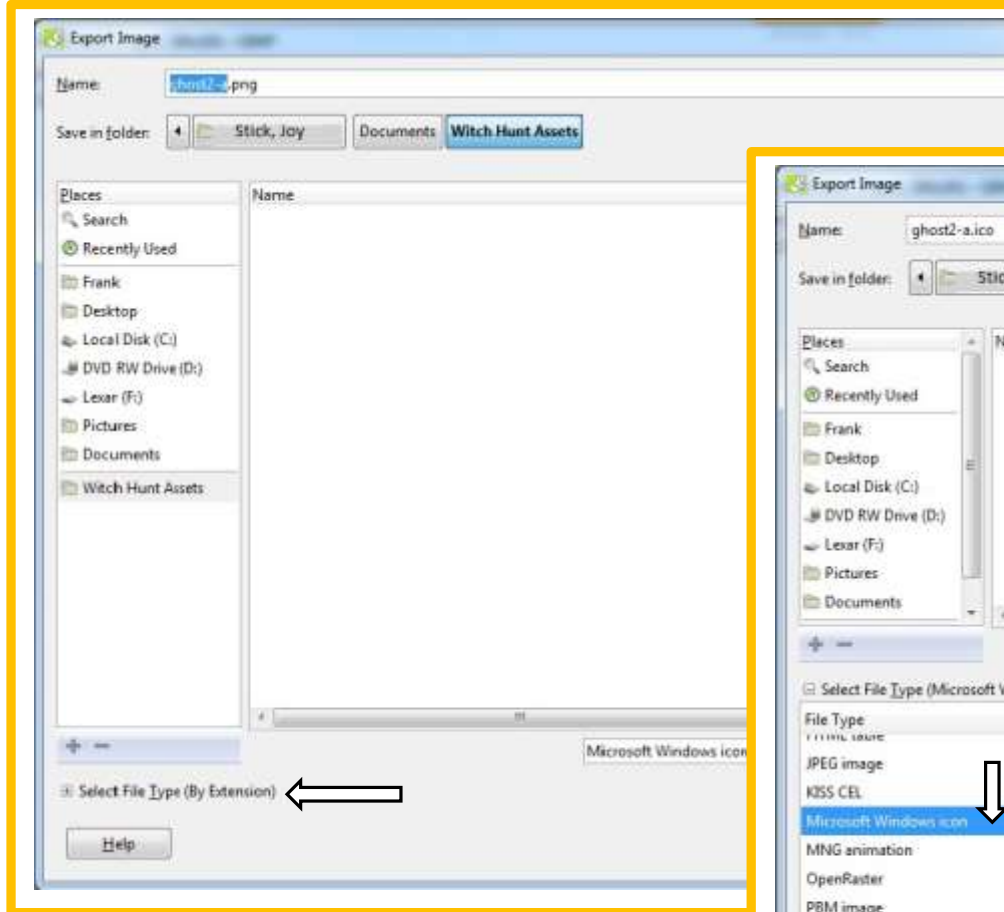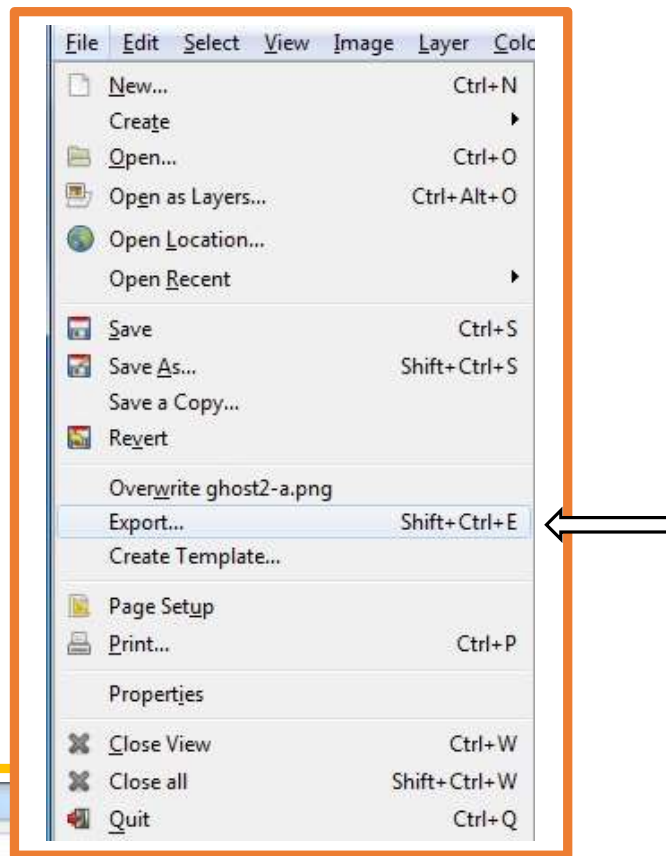
Make sure your file conversion (export) was successful

1) Open your assets folder. You should see an .ico file with the same name as your original image file. If you can't see a file extension in the file name, **right click the file and select properties**. You should see the file identified by **name followed by the .ico extension**.

NOTE: If your icon file exported to your documents folder, just drag and drop it to your assets folder. You can also move it by right clicking on it to copy, then paste it in your assets folder.