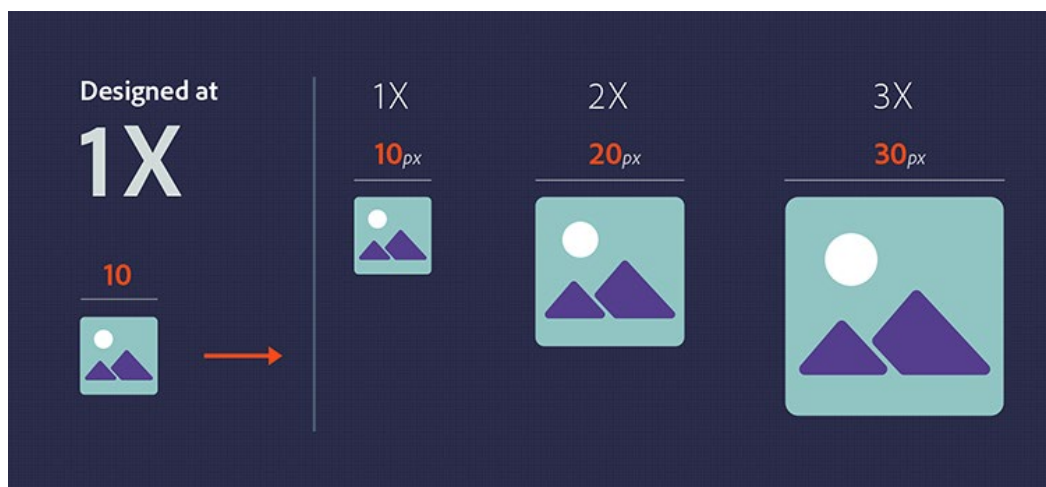# EXPORTING ICONS FOR MULTIPLE DEVICES

Why do we need to do this?

In the old days of the web, screens only came in one resolution: 72 pixels per inch. Many desktop monitors still have 72 ppi screens. It's somewhat blurry, but we have gotten used to it. However, when the iPhone was being created, Steve Jobs did not want to be limited to the standard 72 ppi. He insisted that Apple make better screens, with resolutions higher than 72ppi. They did, and the resolution revolution began (ok, I just made that phrase up).

Once the iPhone was able to make screens have 144 pixels per inch, which was twice as many pixels into the same amount of space, we started calling this "2x," because it is the standard 72 x 2. In successive updates, the resolution grew to 3x. Also, Android devices followed suit and had various resolutions that successively increased. But instead of calling them 2x and 3x, they used different names, like xdpi, xxdpi, and xxxdpi.
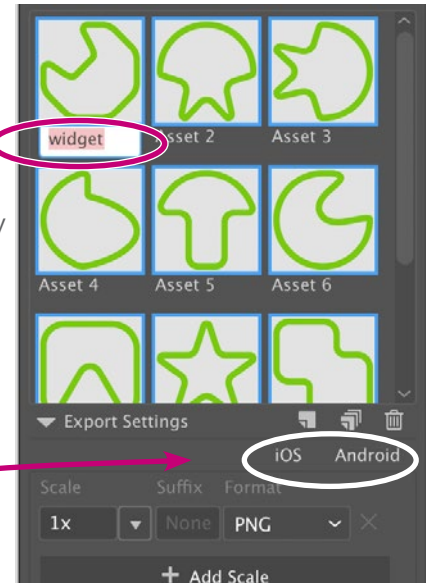
Now, people have a range of different phones and tablets from various updates. We want people with an older phone to be able to see the image correctly, while also letting the person with the newer higher-resolution phone to get all the benefits of crisp, non-blurry logos and icons. To do this, we save each icon at a bunch of different resolutions. Fortunately, Illustrator can save a whole set at once for us with just a few clicks.

As a designer, you make the assets, like logos and icons, and then you often export them into a neat folder to hand them off to the web and app developers, who do the rest. If you work for the campus App Factory, you'll do just that. All the instructions are on the next page.

Saving Icons at Device Resolutions:

1. Make a **folder** on your computer called lastname-icons. Inside of that folder, make two more folders—one called "ios" and the other called "android." See diagram at the end of this handout for questions.

2. In Illustrator, gather up the 32 px version of each icon, making sure to check the exact sizes.

3. Recheck all the stroke weights, this is the size at which they should be no less than 2 px.

4. If an icon has more than one piece, group it together.

5. Open the Asset Export panel. ⬀ Drag all of the icons into this panel. (Fortunately, you can export them all at the same time.)

6. Click on the text "Asset 1" to change the file name to a more meaningful name like "Contact." This is very important as no one would be able to work with hundreds of icons all named Asset. In the name, do not use any spaces—only hyphens or underscores. Don't put any suffixes on the file name—Illustrator is going to do that for us.

7. Make sure the icons are still selected (there will be a blue border around the thumbnails when they are selected).
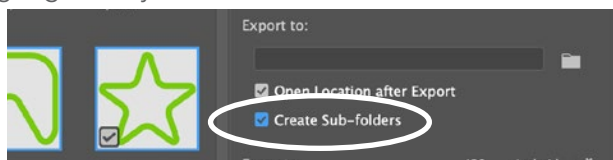
8. Under **Export Settings** (bottom half of panel), see two small buttons: iOS and Android.

9. First click on the **iOS** button. Each icon will be saved at each of the sizes listed here. These various sizes are for the different resolutions of iPhones. Notice that there is a suffix "@2X" and "@3X" there by default, which will be added onto the end of your file name. Leave this as is—it's a standard in web development that the code will be looking for.
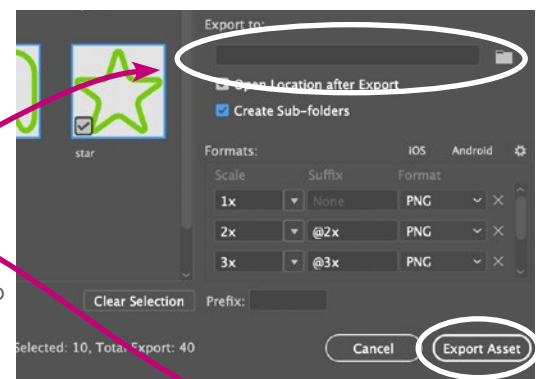
10. Before selecting Export, let's change one setting by clicking this icon:

    In the resulting pop-up, check the box for "Create Subfolders." (This setting organizes your icons into folders for 1x, 2x, 3x, etc.)
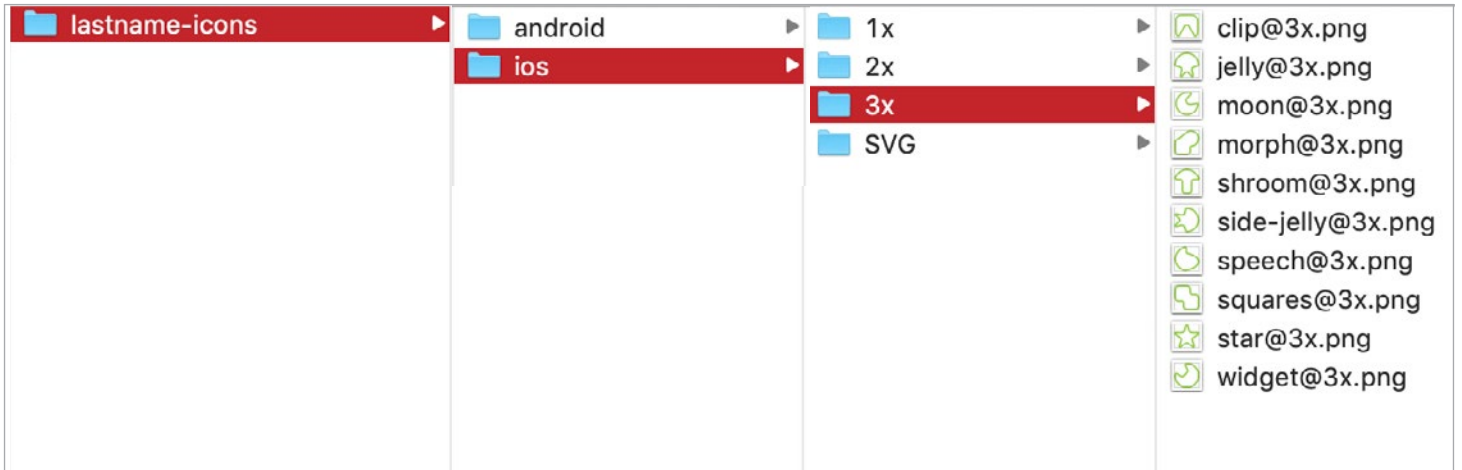
11. We'll go ahead and export from this window. *(Next time, the checkbox will still be selected, and we can just hit Export in the first window without using the popup for settings.)* First, navigate to the folder you want them to be saved in: **lastname-icons > ios**.
    Make sure the icons are still selected, & click on **Export Asset**.

12. Repeat steps 8–11, but select Android instead and save those to your android folder.

    Now, check that your files are organized like the example on the next page.

Make your file structure like this:

lastname-icons ▶	android ▶	1x ▶	clip@3x.png
	ios ▶	2x ▶	jelly@3x.png
		3x ▶	moon@3x.png
		SVG ▶	morph@3x.png
			shroom@3x.png
			side-jelly@3x.png
			speech@3x.png
			squares@3x.png
			star@3x.png
			widget@3x.png

Still Confused?
Here's a helpful video: https://www.youtube.com/watch?v=CPa-GA4h94A