

Fancy Widgets Skin Developer's Guide

Android Does

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Welcome to the Fancy Widgets Skin Developer's Guide!

This document provides important information to help you create skins for Fancy Widgets. It describes how to design a skin so it fits graphically with the widgets. Following these guidelines will help you create skins that look polished and work properly with the widgets.

1 Overview

Fancy Widgets currently supports three types of skins: clock skins, weather skins, and battery skins. Clock skins contain graphics for the widget background as well as the numbers (*i.e.*, 0 through 9) and indicators (*i.e.*, am and pm) used in the clock. Weather skins contain all the weather icons used both on the widgets and on the forecast screen. Battery skins contain different battery icons used on the (1x1) battery widget.

To get started creating your skins more quickly, you can download the following sample skins:

Crystal LED Clock <http://www.anddoes.com/download/CrystalLED.zip>

Comic Weather <http://www.anddoes.com/download/ComicWeather.zip>

Simple Battery <http://www.anddoes.com/download/SimpleBattery.zip>

After you finish your skin designs, you need to organize the graphics and conform to a special naming convention so that the widgets can properly detect and use the skin. The following guidelines apply to all types of skins.

- Create a directory named `<SkinID>` to hold all the files. The `<SkinID>` is a unique identifier of your skin, such as `CrystalLED` or `ComicWeather`. Since the skin ID is also the name of the directory, you should NOT use special characters (including spaces). It is recommended to use only alphanumeric characters in your skin ID.
- Create a text file named `<SkinID>.txt` to hold required meta information for your skin. The text file contains the name of the skin, author information, and some skin specific properties. The format of this file will be described later in this document. You may refer to `CrystalLED.txt` and `ComicWeather.txt` in the sample skins as examples.

- Create a skin preview named `<SkinID>.jpg` to give the user an idea of what your skin looks like. The preview file should be 320×200 in dimension (or 195×150 for battery skins) and should **not exceed 10KB** in size. For clock skins, the preview file can be a mockup, but a screenshot of the skin in action is highly recommended. For weather and battery skins, the preview file can be a feature graphics showcasing your designs.
- Include an empty file named `.nomedia` in your skin directory (note the dot prefix in the filename). This will prevent Android's media scanner from reading the skin files and including them in the Gallery application. In case you have trouble creating this file (e.g., under Windows), you may copy the `.nomedia` file from the sample skins.
- Follow the naming conventions described in the next three sections. Although recommended, it is not required to provide every single image file in your skin. If a certain image file is missing in your skin pack, the image from the default skin will be displayed. For example, you may reuse the default widget background image so you do not need to provide your own background image. In this case, just omit the `base` files so that the default background image is used with your skin.
- Except the preview JPG file, final art must be exported as transparent PNG files.
- Do not include unused files (e.g., `Thumbs.db` and `.DS_Store`) in the skin.
- Try to keep your image files small.

2 Clock Skin

Clock skins allow you to customize the look of the widgets by replacing the default graphics files. However, you cannot specify or change the location of each element on the widget. The layout of elements is controlled by widget styles.

Table 1 lists the names, descriptions and recommended image dimensions for each file in a clock skin.

The `<SkinID>.txt` file holds important skin meta information and it uses a custom format like the following:

```
title = Crystal LED
developer = Android Does
website = http://www.anddoes.com/
email = support@anddoes.com
style = classic
color = #ffffff
```

The first line provides the name of your skin, such as *Crystal LED*. Note that the skin name can be different from the skin ID, so you can use special characters (e.g., spaces) in the skin name. The next line specifies the author of the skin, which can be your name, organization, etc. The following two lines are for author contact information. Please note that the website field must start with the `http://` (or `https://`) prefix. While it is not required to include both a website URL and your email address, you need to provide at least one of them. The style property declares which widget style your skin is designed for. It can be either `classic`, `new`, or `flip`. Finally, the color attribute is a hex coded value that specifies the color for the text on the

File	Dimension (px)		Description
	Digital Clock	Flip Clock	
.nomedia	-	-	empty file to prevent Gallery listing
<SkinID>.txt	-	-	skin meta information
<SkinID>.jpg	320 × 200	320 × 200	skin preview picture
base.png	452 × 272	452 × 272	2 × 4 widget background (portrait)
base_small.png	452 × 140	452 × 140	1 × 4 widget background (portrait)
base_land.png	340 × 133	340 × 133	2 × 4 widget background (landscape)
base_small_land.png	340 × 72	340 × 72	1 × 4 widget background (landscape)
base.9.png*	-	-	stretchable widget background
n0.png	100 × 140	82 × 146	number 0
n1.png	100 × 140	82 × 146	number 1
n2.png	100 × 140	82 × 146	number 2
n3.png	100 × 140	82 × 146	number 3
n4.png	100 × 140	82 × 146	number 4
n5.png	100 × 140	82 × 146	number 5
n6.png	100 × 140	82 × 146	number 6
n7.png	100 × 140	82 × 146	number 7
n8.png	100 × 140	82 × 146	number 8
n9.png	100 × 140	82 × 146	number 9
am.png	60 × 45	24 × 15	indicator AM
pm.png	60 × 45	24 × 15	indicator PM
dots.png	36 x 140	-	separator symbol :
tab.png	-	197 x 216	left clock tab background
tab_alt.png	-	197 x 216	right clock tab background (optional)
tab.9.png*	-	-	stretchable clock tab background

Table 1: Summary of files in a clock skin.

widgets (location, condition, etc.) to better match your clock skin. When a skin is applied, the widgets would automatically switch to the declared widget style (when applicable) and change the text on the widget to the specified color.

As you have probably noticed, there are two different recommended dimensions for certain images. This is because different widget styles require different image aspect ratios. Although each clock skin should work under both the digital clock style (classic and new) and the flip clock style, you can choose to optimize your skin for one of these two styles. For instance, the *Crystal LED* clock skin is optimized for digital clock, so it looks better when used with the digital clock style. Note that `dots.png` is only used in digital clock and `tab(_alt).png` is only used with flip clock. It is recommended that you include both `dots.png` and `tab(_alt).png`, and try to make sure your clock skin is compatible with both widget styles.

The widget background image is used across all widget sizes (e.g., 1×4 , 2×4) and screen orientations (e.g., portrait and landscape). Stretching background images to fit widgets may lead to distortion and thus a less appealing look. To address this issue, Fancy Widgets supports nine patch graphics for the widget background in clock skins.

A nine patch graphic is a stretchable image, which Android will automatically resize to accommodate the contents. You can define stretchable regions that Android scales when the image is resized. An example use of a nine patch image is the background used by Android's standard buttons, which must stretch to accommodate the text (or image) inside them. A nine patch graphic is a standard PNG image that includes an extra 1-pixel-wide border. Figure 1 illustrates how the stretchable area is defined. If you decide to use a nine patch image for the widget background, you must name it `base.9.png` instead of `base.png`. Since a nine patch image contains stretchable area, the dimension of the image is not specified in the table.

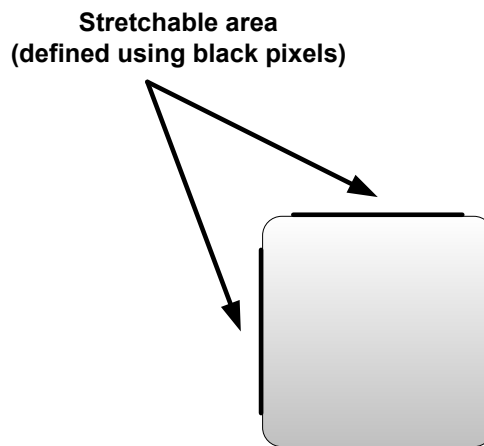


Figure 1: An Example of Nine Patch Image.

The Draw 9-patch tool from the Android SDK allows you to easily create a nine patch graphic using a WYSIWYG editor. If you use this tool to create the background image, you only need to define the stretchable area but not the padding box. However, you may also use an image editing tool of your choice to create your nine patch background. If you would like to learn more about nine patch graphics and the Draw 9-patch tool, please read the following references on the Android Developer's site:

<http://developer.android.com/guide/developing/tools/draw9patch.html>

<http://developer.android.com/guide/topics/graphics/2d-graphics.html#nine-patch>

Using a nine patch background is recommended but not mandatory. If you decide to use a nine patch background, no other background images are necessary. Otherwise, you need to provide four background images of different dimensions and aspect ratios: `base.png`, `base_land.png`, `base_small.png` and `base_small_land.png`. The recommended dimension for each background image is given in Table 1. Please make sure that you test the background image thoroughly in different environments and try to ensure a consistent look.

When you design the flip clock tab background, you may provide different images for the left (hour) tab and the right (minute) tab. If you want to use the same image for both tabs, simply leave out `tab_alt.png` and provide `tab.png`. In this case, both tabs will use `tab.png` and thus look the same. Similar to stretchable widget background, clock tabs may also be provided as a nine patch image. When `tab.9.png` is present, it will supercede `tab(_alt).png`.

3 Weather Skin

Weather skins allow you to replace the weather icons on the widgets as well as on the detailed forecast/moon-phase screens.

Table 2 lists the names, descriptions and recommended image dimensions for each file in a weather skin.

The `<SkinID>.txt` file for weather skins uses a similar format as that for clock skins. Here, the style and color attributes do not apply, because weather skins work with all widget styles and normally do not require a specific text color. The `ComicWeather.txt` from the *Comic Weather* skin is listed below as an example.

```
title = Comic Weather
developer = Android Does
website = http://www.anddoes.com/
email = support@anddoes.com
```

For weather skin previews, it is preferable to create a feature image by putting together multiple weather icons than providing a screenshot. This will give the user a better idea of the weather skin at a glance.

The images with the `_n` suffix are displayed at night (after sunset). Note that certain weather conditions do not have corresponding night icons. In this case, the same icon will be shown both in the day and at night.

Optionally, a weather skin may also contain images for different moon phases. Table 2 lists eight images with the `moon_` prefix. These images will be presented on the moon phase screen at the same time; therefore, for consistency, please either provide all eight moon phase images or none of them in your weather skin. If you decide not to include these images, the default ones would be used on the moon phase screen.

When you design a weather icon, please do not fill up the whole image. You should center the icon and size it a little smaller than the actual image. The icons would look better on the widget if you leave a few pixels as margins. Please refer to the images in the *Comic Weather* sample skin as examples.

File	Dimension (px)	Description
.nomedia	-	empty file to prevent Gallery listing
<SkinID>.txt	-	skin meta information
<SkinID>.jpg	320 × 200	skin preview picture
weather_sunny.png	160 × 160	icon for Sunny , etc.
weather_sunny_n.png	160 × 160	night icon for Clear , etc.
weather_mostlysunny.png	160 × 160	icon for Mostly Sunny , etc.
weather_mostlysunny_n.png	160 × 160	night icon for Mostly Clear , etc.
weather_cloudy.png	160 × 160	icon for Cloudy , etc.
weather_mostlycloudy.png	160 × 160	icon for Mostly Cloudy , etc.
weather_mostlycloudy_n.png	160 × 160	night icon for Mostly Cloudy , etc.
weather_rain.png	160 × 160	icon for Rain , etc.
weather_lightrain.png	160 × 160	icon for Light Rain , etc.
weather_icyrain.png	160 × 160	icon for Freezing Rain , etc.
weather_snow.png	160 × 160	icon for Snow , etc.
weather_storm.png	160 × 160	icon for Storm , etc.
weather_windy.png	160 × 160	icon for Windy , etc.
weather_fog.png	160 × 160	icon for Fog , etc.
weather_fog_n.png	160 × 160	night icon for Fog , etc.
weather_chancerain.png	160 × 160	icon for Chance of Rain , etc.
weather_chancerain_n.png	160 × 160	night icon for Chance of Rain , etc.
weather_chancesnow.png	160 × 160	icon for Chance of Snow , etc.
weather_chancesnow_n.png	160 × 160	night icon for Chance of Snow , etc.
weather_chancestorm.png	160 × 160	icon for Chance of Storm , etc.
weather_chancestorm_n.png	160 × 160	night icon for Chance of Storm , etc.
weather_unknown.png	160 × 160	icon for unknown weather conditions
moon_new.png	160 × 160	icon for New Moon
moon_waxingcrescent.png	160 × 160	icon for Waxing Crescent
moon_firstquarter.png	160 × 160	icon for First Quarter
moon_waxinggibbous.png	160 × 160	icon for Waxing Gibbous
moon_full.png	160 × 160	icon for Full Moon
moon_waninggibbous.png	160 × 160	icon for Waning Gibbous
moon_lastquarter.png	160 × 160	icon for Last Quarter
moon_waningcrescent.png	160 × 160	icon for Waning Crescent

Table 2: Summary of files in a weather skin.

4 Battery Skin

Battery skins allows you to replace the battery icons on the battery widget.

Table 3 lists the names, descriptions and recommended image dimensions for each file in a battery skin.

File	Dimension (px)	Description
.nomedia	-	empty file to prevent Gallery listing
<SkinID>.txt	-	skin meta information
<SkinID>.jpg	195 × 150	skin preview picture
battery_10.png	195 × 150	icon for level ≤ 10%
battery_10_c.png	195 × 150	icon for level ≤ 10% when charging
battery_20.png	195 × 150	icon for 10% < level ≤ 20%
battery_20_c.png	195 × 150	icon for 10% < level ≤ 20% when charging
battery_30.png	195 × 150	icon for 20% < level ≤ 30%
battery_30_c.png	195 × 150	icon for 20% < level ≤ 30% when charging
battery_40.png	195 × 150	icon for 30% < level ≤ 40%
battery_40_c.png	195 × 150	icon for 30% < level ≤ 40% when charging
battery_50.png	195 × 150	icon for 40% < level ≤ 50%
battery_50_c.png	195 × 150	icon for 40% < level ≤ 50% when charging
battery_60.png	195 × 150	icon for 50% < level ≤ 60%
battery_60_c.png	195 × 150	icon for 50% < level ≤ 60% when charging
battery_70.png	195 × 150	icon for 60% < level ≤ 70%
battery_70_c.png	195 × 150	icon for 60% < level ≤ 70% when charging
battery_80.png	195 × 150	icon for 70% < level ≤ 80%
battery_80_c.png	195 × 150	icon for 70% < level ≤ 80% when charging
battery_90.png	195 × 150	icon for 80% < level ≤ 90%
battery_90_c.png	195 × 150	icon for 80% < level ≤ 90% when charging
battery_100.png	195 × 150	icon for level > 90%
battery_100_c.png	195 × 150	icon for level > 90% when charging
battery_charging.png	195 × 150	icon for any battery level when charging

Table 3: Summary of files in a battery skin.

The <SkinID>.txt file for battery skins follows exactly the same format as that for weather skins. The SimpleBattery.txt from the Simple Battery skin is listed below as an example.

```
title = Simple Battery
developer = Android Does
website = http://www.anddoes.com/
email = support@anddoes.com
```

The images with the _c suffix indicate the charging status. If you decide not to provide a charging icon for each battery level range, you may include battery_charging.png, which will be used for all battery levels while charging. Conversely, battery_charging.png is not necessary if you include the other 10 charging icons.

5 Testing and Submitting Your Skin

Before you publish or submit your skin, you should test it on a device and make sure it looks exactly the way you expect it to be. To test your new skin, you need to manually install the skin by placing it in the following directory on your SD card:

```
/Android/data/fancywidgets/<SkinType>/<SkinID>
```

Create any directory if necessary. The `<SkinType>` directory corresponds to the type of your skin, which can be `clockskins`, `weatherskins` or `batteryskins`. `<SkinID>` is the name of the directory you created to hold your skin files. For example, in order to test the three sample skins, you need to put them in the following directories respectively:

```
/Android/data/fancywidgets/clockskins/CrystalLED/:  
.nomedia, CrystalLED.txt, CrystalLED.jpg, ...
```

```
/Android/data/fancywidgets/weatherskins/ComicWeather/:  
.nomedia, ComicWeather.txt, ComicWeather.jpg, ...
```

```
/Android/data/fancywidgets/batteryskins/SimpleBattery/:  
.nomedia, SimpleBattery.txt, SimpleBattery.jpg, ...
```

Now turn off USB storage on your phone and launch the Fancy Widgets settings screen. Navigate to clock/weather/battery skins and apply your new skin. You will see the changes on the widgets when returning to the home screen.

Make sure that you test the skin with different widgets and screen orientations. If you are designing a clock skin and you optimize it for one widget style, please also test it with the other style to ensure it is compatible. Make any changes and repeat the testing steps if necessary.

When you finish testing your skin, you are ready to publish it either on a website/forum of your choice or in the Fancy Widgets Market. Please put the `<SkinID>` directory containing all the files in a ZIP archive and name it `<SkinID>.zip`. If you would like your skin listed on our website or in the Fancy Widgets Market, please submit it to support@anddoes.com.

6 Notes

Currently, Fancy Widgets does not support paid skins. By submitting your skins, you provide Android Does the entire rights to redistribute your artwork without compensation. Although your skins are distributed to end-users for free, you may accept donation from users by adding the `donate` property in the `<SkinID>.txt` of your skin, like the following:

```
donation = http://www.paypal.com/donation_link
```

After the skin is installed, a donation option will appear when the user taps on the skin. Choosing the donation option will then launch the browser and take the user to your specified donation page. If you do not include any donation information, this option will be hidden.

Please contact us if you would like to have your skin removed from our website or the Fancy Widgets Market.

For more information, please consult the Android Does website at

<http://www.anddoes.com/>