

This article is archived because it is not considered relevant for third-party developers creating commercial solutions today. The article is believed to be still valid for the original topic scope.

## Contents

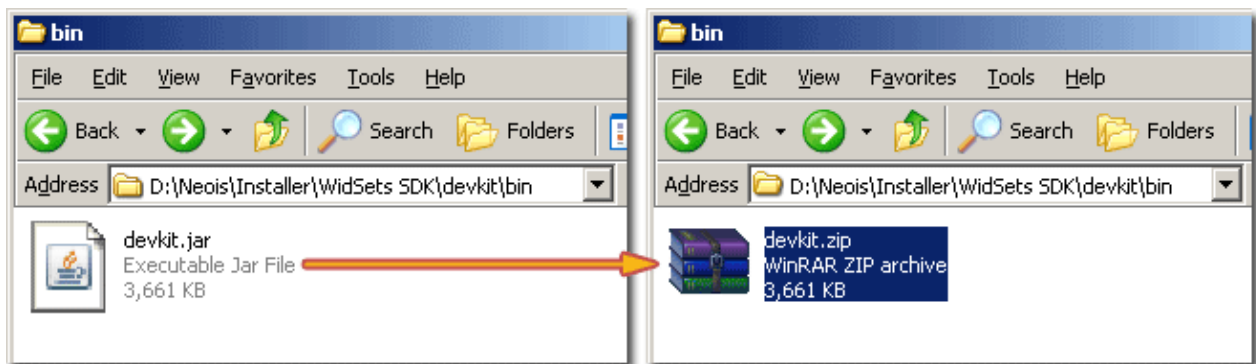
- [1 Introduction](#)
- [2 Browse for embeded skins files](#)
- [3 Skin Structure](#)
- [4 Create your own skin](#)
- [5 Test it](#)
- [6 Example Custom Skin \(Nokia N95 8GB\)](#)
- [7 See Also](#)

## Introduction

You might already know that WidSets support skin changing and there are 4 skins embeded with WidSets SDK 3.1.0 (from [WidSets SDK Tips : Emulator Skin Changing](#)). **Furthermore, you are also able to create your custom skin for WidSets SDK too!** This article will show you how to do that.

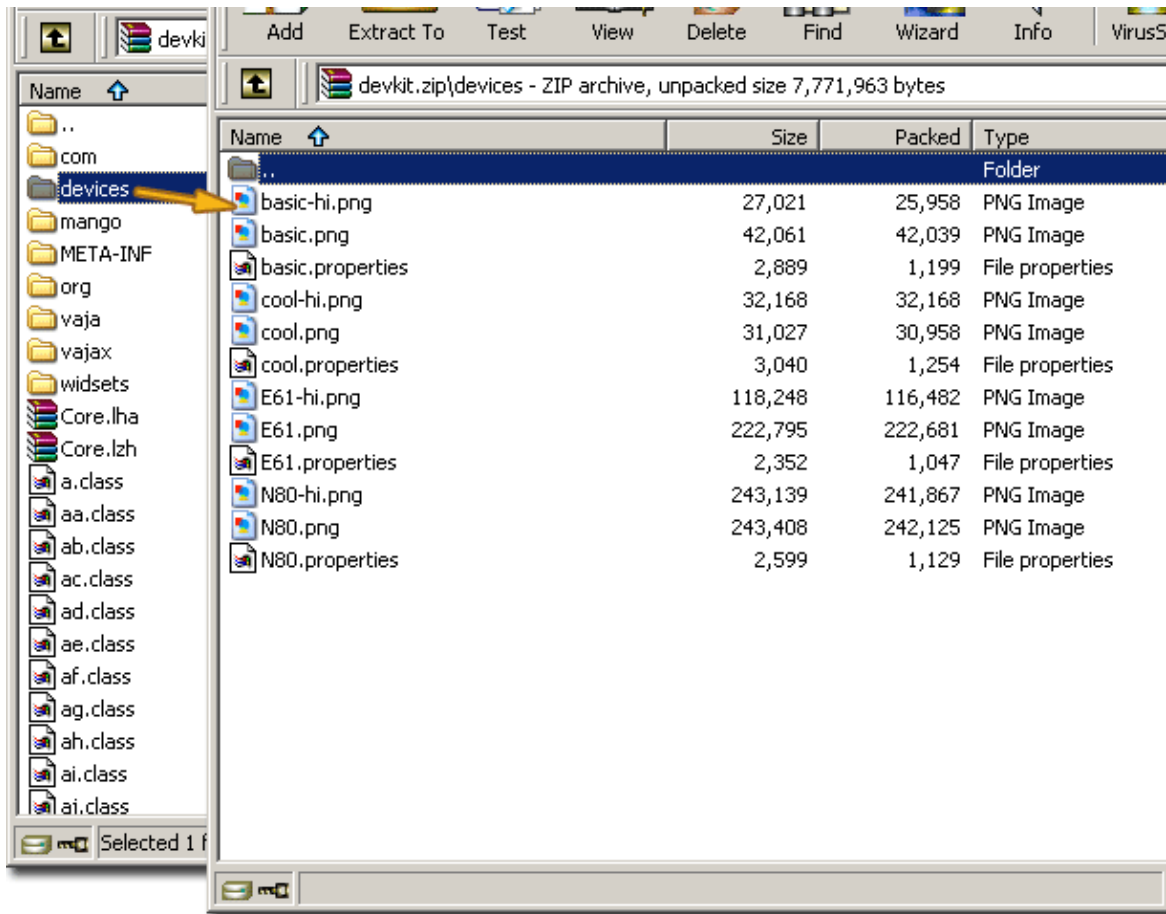
## Browse for embeded skins files

First, browse to **bin** folder under WidSets SDK root folder. You will see **devkit.jar** inside. Rename it to **devkit.zip**. (I suggest you to backup it somewhere first)



Open that zip file with any zip file manager. And then browse to **devices** folder.

## WidSets\_SDK\_Tips : Add\_Custom\_Emulator\_Skin

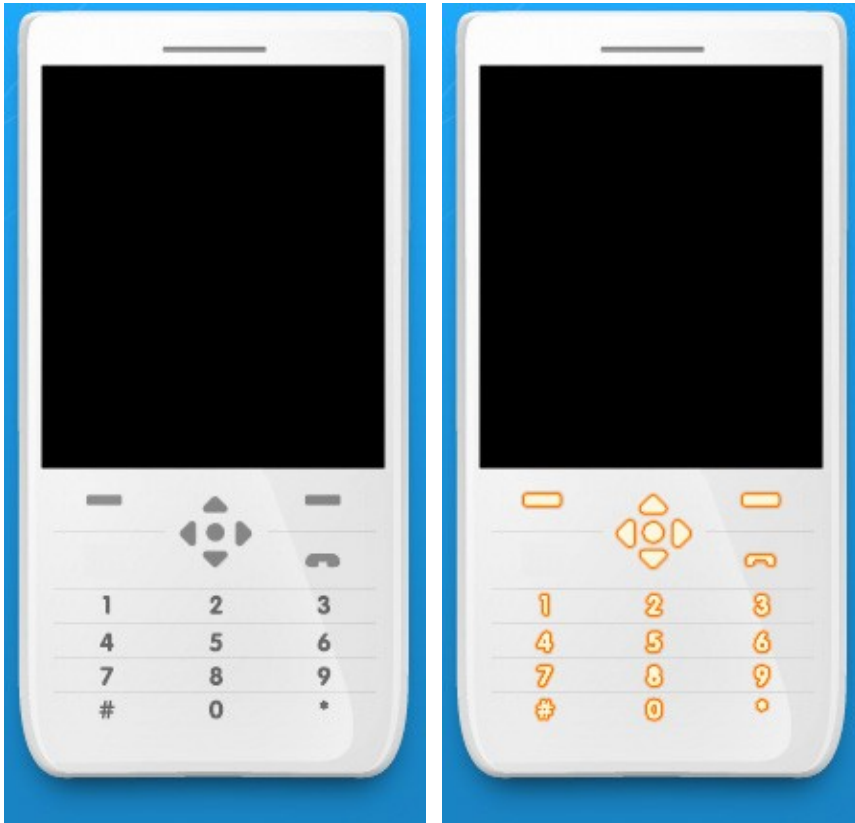


These are skins files for WidSets SDK Emulator. Notice that each skin consists of 3 files, **skinname.png**, **skinname-hi.png** and **skinname.properties**. Let's see what they are.

## Skin Structure

In this article, **cool** skin will be used for being skin template. Extract **cool.png**, **cool-hi.png** and **cool.properties** to anywhere you want.

Let's open **cool.png** and **cool-hi.png** with any image viewer.



**cool.png**

**cool-hi.png**

As you see, **cool.png** is the skin image file in idle state while **cool-hi.png** is the skin image file in mouseover state.

Next, open **cool.properties** with any text editor. Here is the content inside.

```
#
# Record store
#
rms.provider = vajax.microedition.rms.file.FileRMS
rms.limit = 1000000

#
# Record store delays
#
rms.delay.store.open    = 0
rms.delay.store.delete = 0
rms.delay.store.close  = 0

rms.delay.list    = 0
rms.delay.get     = 0
rms.delay.put     = 0
rms.delay.delete = 0

#
# Procotols
#
#protocol.socket = vajax.microedition.io.SocketProxy
#protocol.http   = vajax.microedition.io.HttpProxy

protocol.socket = vajax.tools.TunneledSocketProxy
protocol.http   = vajax.tools.HttpClientProxy
```

## WidSets\_SDK\_Tips\_:\_Add\_Custom\_Emulator\_Skin

```
protocol.localmsg = vajax.microedition.io.local.LocalConnection
protocol.sms = vajax.wireless.messaging.DummyMessageConnection
protocol.file = vajax.microedition.io.file.FileConnectionImpl

env.fileconn.dir.memorycard = file:///MemoryCard/
env.fileconn.dir.photos = file:///Photos/

#
# Dimension of emulator image
#
device.width = 220
device.height = 430
device.name = WidSets

#
# Background image
#
display.image = /devices/cool.png
display.image.pressed = /devices/cool-hi.png

#
# Position and size of actual midlet display
#
display.x = 20
display.y = 33
display.width = 178
display.height = 210

#
# Key bindings, multiple keys may produce same keycode
#
# key.<informativeName> = <keyCode>, <x>, <y>, <width>, <height>
#
# keyCode 27 will close the client
#
key.ok = -6,25,244,60,32
key.back = -7,138,244,60,32

key.green = -10,25,277,56,29
key.red = 27,138,277,56,29

key.fire = -5,103,270,14,14

key.up = -1,101,254,18,15
key.down = -2,101,284,18,15
key.left = -3,89,268,13,19
key.right = -4,118,268,13,19

key.1 = 49,37,307,35,17
key.4 = 52,37,325,35,17
key.7 = 55,37,343,35,17
key.hash = 35,37,361,35,17

key.2 = 50,93,307,35,17
key.5 = 53,93,325,35,17
key.8 = 56,93,343,35,17
key.0 = 48,93,361,35,17

key.3 = 51,148,307,35,17
key.6 = 54,148,325,35,17
key.9 = 57,148,343,35,17
```

## WidSets\_SDK\_Tips\_: Add\_Custom\_Emulator\_Skin

```
key.star = 42,148,361,35,17

#
# AWT to Midlet keycodes.
# Available VK_* codes are listed at java.awt.event.KeyEvent.
#
# Following negative keycodes are used by client:
#
# KEY_UP      = -1;
# KEY_DOWN    = -2;
# KEY_LEFT    = -3;
# KEY_RIGHT   = -4;
# KEY_FIRE    = -5;
# KEY_DELETE  = -8;
# KEY_OK      = -6;
# KEY_BACK    = -7;
#
# Keycode 27 (ESCAPE) will close the client
#
keycode.ESCAPE = 27

keycode.UP = -1
keycode.DOWN = -2
keycode.LEFT = -3
keycode.RIGHT = -4

keycode.DELETE = -6
keycode.END = -5
keycode.PAGE_DOWN = -7

keycode.F1 = -6
keycode.F2 = -5
keycode.F3 = -7

#
# Font families
#
font.system      = dialog
font.proportional = sansserif
font.monospace   = monospaced

#
# Font sizes
#
font.small  = 10
font.medium = 12
font.large  = 14

#
# java.lang.System.getProperty environment variables.
#
# env.<key> = <value>
#

#
# MMAPi - players.
#
# player.<locator> = <classname>
#
player.capture\://video = vajax.microedition.media.dummy.DummyCamera
player.audio/midi = vajax.microedition.media.MIDIPlayer
player.audio/basic = vajax.microedition.media.WavePlayer
```

## WidSets\_SDK\_Tips\_: Add\_Custom\_Emulator\_Skin

```
player.audio/x-wav = vajax.microedition.media.WavePlayer  
player.audio/x-aiff = vajax.microedition.media.WavePlayer
```

There are many interesting lines in this file. First part is used for linking to the skin image file.

```
#  
# Background image  
#  
display.image = /devices/cool.png  
display.image.pressed = /devices/cool-hi.png
```

Next part contains image file resolution and Emulator caption for this skin.

```
#  
# Dimension of emulator image  
#  
device.width = 220  
device.height = 430  
device.name = WidSets
```

This part contains screen position (top left) in skin image and screen resolution.

```
#  
# Position and size of actual midlet display  
#  
display.x = 20  
display.y = 33  
display.width = 178  
display.height = 210
```

The last, this part contains keys position in image file.

```
#  
# Key bindings, multiple keys may produce same keycode  
#  
# key.<informativeName> = <keyCode>, <x>, <y>, <width>, <height>  
#  
# keyCode 27 will close the client  
#  
key.ok = -6,25,244,60,32  
key.back = -7,138,244,60,32  
  
key.green = -10,25,277,56,29  
key.red = 27,138,277,56,29  
  
key.fire = -5,103,270,14,14  
  
key.up = -1,101,254,18,15  
key.down = -2,101,284,18,15  
key.left = -3,89,268,13,19  
key.right = -4,118,268,13,19  
  
key.1 = 49,37,307,35,17  
key.4 = 52,37,325,35,17  
key.7 = 55,37,343,35,17  
key.hash = 35,37,361,35,17  
  
key.2 = 50,93,307,35,17  
key.5 = 53,93,325,35,17  
key.8 = 56,93,343,35,17
```

## WidSets\_SDK\_Tips\_:\_Add\_Custom\_Emulator\_Skin

```
key.0    = 48,93,361,35,17
key.3    = 51,148,307,35,17
key.6    = 54,148,325,35,17
key.9    = 57,148,343,35,17
key.star = 42,148,361,35,17
```

Each key position is defined in this form.

```
key.<informativeName> = <keyCode>, <x>, <y>, <width>, <height>
```

## Create your own skin

Create your skin image files both normal one and mouseover one. And then save them in any skin name you want, for example, **N958GB.png** and **N958GB-hi.png**. (Use your Photoshop skill!!!). After that, rename **cool.properties** file name to your skin name.

Open properties file with any IDE and do the following step.

1. Change **display.image** and **display.image.pressed** value to your file name.

```
#
# Background image
#
display.image = /devices/N958GB.png
display.image.pressed = /devices/N958GB-hi.png
```

2. Modify **device.width**, **device.height** and **device.name** to the right value.

```
#
# Dimension of emulator image
#
device.width = 334
device.height = 744
device.name = Nokia-N95 8GB
```

3. Modify **display.x**, **display.y**, **display.width** and **display.height** to the right value.

```
#
# Position and size of actual midlet display
#
display.x = 46
display.y = 84
display.width = 240
display.height = 320
```

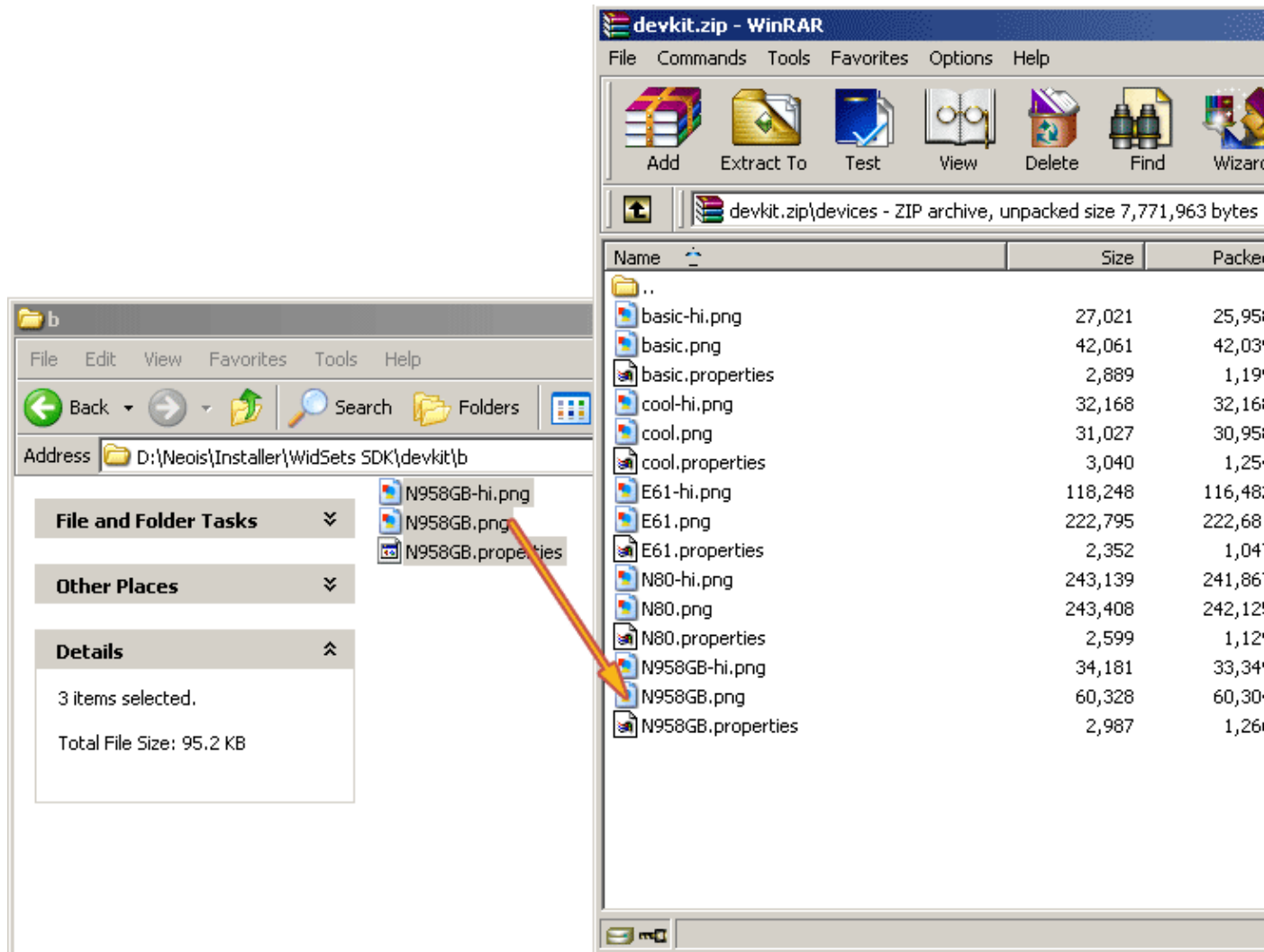
4. Last, the most tired part. Change **<x>**, **<y>**, **<width>** and **<height>** of each key in the Key Binding section.

```
key. <informativeName> = <keyCode>, <x>, <y>, <width>, <height>
```

Please note that **DON'T** change **<informativeName>** and **<keyCode>** or your skin will not work properly.

## Test it

Add edited files to the **devices** folder in devkit.zip



Rename devkit.zip back to devkit.jar and launch emulator using this command.

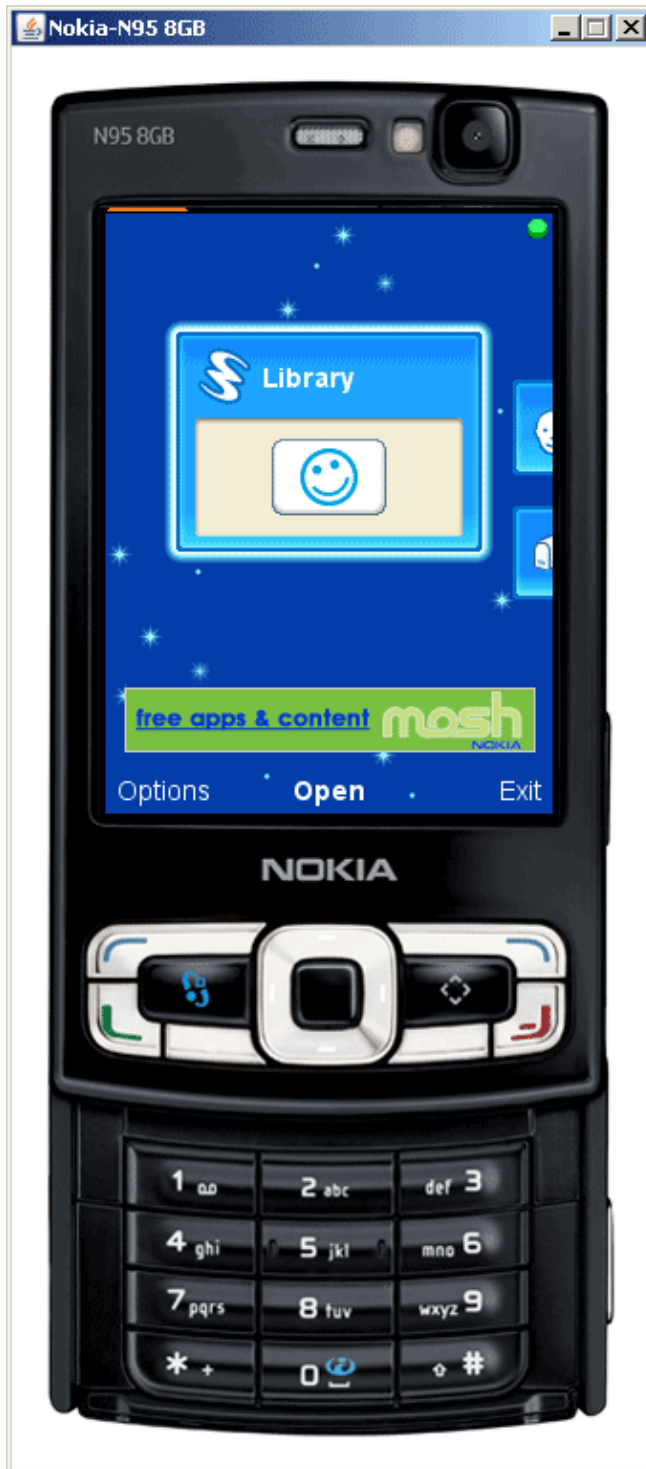
```
devkit --skin <YOUR_SKIN_NAME> runw
```

If everything goes fine, you will see your custom skin on WidSets emulator. Enjoy!

## Example Custom Skin (Nokia N95 8GB)

You can download Nokia N95 8GB skin from <File:WidSets Skin n958gb.zip>

Here is the result.



## See Also

- [WidSets for Rookie EP 1 : First Step to WidSets SDK](#)
- [WidSets for Rookie EP 2 : First Compilation with WidSets SDK](#)
- [WidSets for Rookie EP 3 : Understand Hello World](#)
- [WidSets for Rookie EP 4 : Fasten WidSets Development](#)

## WidSets\_SDK\_Tips\_:\_Add\_Custom\_Emulator\_Skin

- [WidSets for Rookie EP 5 : EditPlus Integration](#)
- [WidSets for Rookie EP 6 : Softkey Menu](#)
- [WidSets for Rookie EP 7 : Standard UI](#)
- [WidSets for Rookie EP 8 : Canvas](#)
- [WidSets for Rookie EP 9 : Timer](#)
- [WidSets for Rookie EP 10 : Key Handling](#)
- [WidSets for Intermediate EP 1 : HTTP Request](#)
- [WidSets for Intermediate EP 2 : HTTP with XML Filter](#)
- [WidSets for Advance EP 1 : Life Pictures Project](#)
- [WidSets SDK Tips : Emulator Language Changing](#)
- [WidSets SDK Tips : Emulator Skin Changing](#)
- **WidSets SDK Tips : Add Custom Emulator Skin**