

WIFI SDK package User Guide

1. Summary

This SDK package is for Android application, communicate the printer with wifi connections. It can be divided into 2 main types. One is wifi operation Type and other for Image printing and processing.

`com.zj.wfsdk`

Type WifiCommunication

`java.lang.Object`

`com.zj.wfsdk.WifiCommunication`

WifiCommunication Type for WIFI operation (e.g. wifi connection, data transmitting by tcp/ip etc.)

`com.zj.wfsdk`

Type PrintPic

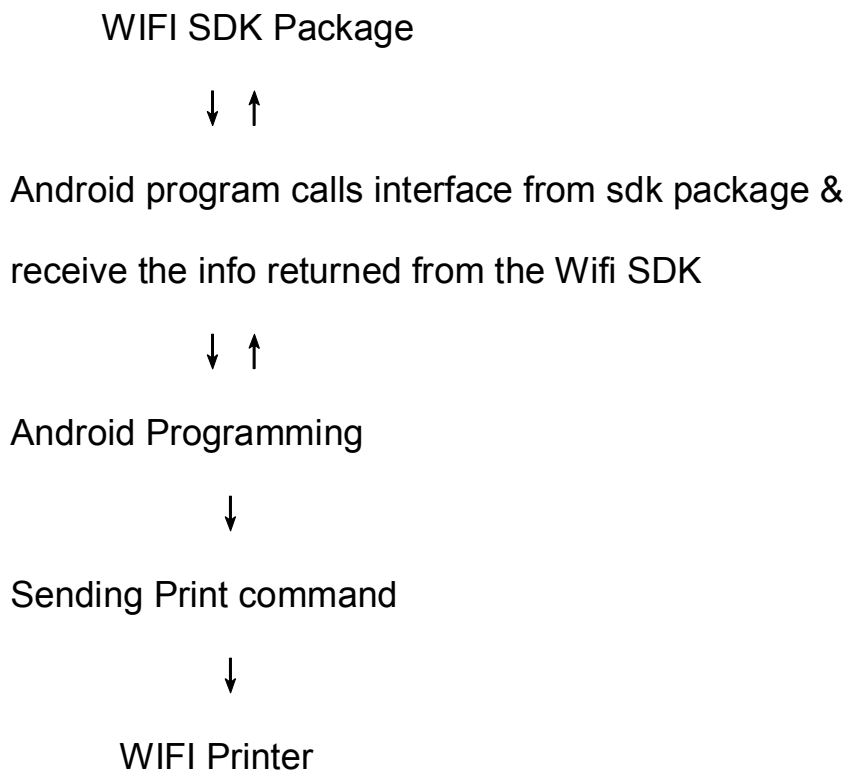
`java.lang.Object`

`com.zj.wfsdk.PrintPic`

PrintPic Type for image printing and processing (decompose the desired images into easily recognizable data stream)

2. Schematic Diagram

Android application programming calls the corresponding interface from wifi SDK package(e.g. connecting wifi interface), and meanwhile receiving the messages sent back from the wifi SDKpackage(e.g. connecting failure notice). Android application programming could calls the sending print function, and sending the printing command to Wifi Printer in one - way.



3. Description in detail for the interface type

Type WifiCommunication

Field description

Field	Description
WifiCommunication . WFPRINTER_CONNECTED	Returning the wifi connection info to Android programming
WifiCommunication . WFPRINTER_DISCONNECTED	Feed back the wifi disconnected info to android programming
WifiCommunication . WFPRINTER_CONNECTED_ERROR	Feedback the wifi connection failure to android programming
WifiCommunication . SEND_FAILED	Feedback the wifi data failure to android programming

WifiCommunication . **CONNECTION LOST** When sending data function called, detected at the other end of the connection is disconnected, will return this message to the android application for processing

Interface description

Constructed function

public WifiCommunication (Handler handler)

Function description:

Initialization of class field

Parameter description:

Handler: Afferent a Hander instance, used for SDK package return the messages to android application programming.

Ordinary function

a.initSocket

Function Prototype: **public synchronized void** initSocket (String AddressIp,int port)

Function Description:

Initialize the socket connection (create a thread to connect wifi printer)

Parameter description:

AddressIP: Ip address

Port: port

b. sendMsgDirect

The function prototype: **public synchronized void** sendMsg(String sndMsg,String charset)

Function Description:

The data into a charset encoding, and then sent to the printer for printing

Parameter description:

sndMsg :The data to be sent

charset: The target encoding of character

c. sndByte

The function prototype: **public synchronized void** sndByte(**byte[]** send)

Function Description:

In incoming byte data sent to the wifi printer for printing

Parameter description:

Send : The data to be came

d. close

The function prototype:

public void close

Parameter description:

Close the connection of WIFI

Type PrintPic

Ordinary function

a. initCanvas

Function Prototype: **public void** initCanvas(**int** w)

Function Description:

Initialize canvas

Parameter Description:

W: Value 384px for 58 series printer , Value 576px for 80 series printer

b. initPaint

Function Prototype: **public void** initPaint()

Function Description:

Initialize brush

c. drawImage

Function Prototype: **public void** drawImage (**float** x, **float** y, String path)

Function Description:

Painting the path specified image on the canvas

Parameter Description:

Path: Image path

(x,y): Left vertex coordinates

d. printDraw

Function Prototype: **public byte** printDraw

Function Description: returning of the image byte stream on the canvas (easily recognizable data stream for the printer)

e.g. :

```
byte[ ] sendData = null;
```

```
PrintPic pg = new PrintPic();
```

```
pg.initCanvas(384);
```

```
pg.initPaint();
```

```
pg.drawImage(0, 0, "/mnt/sdcard/icon.jpg");
```

```
sendData = pg.printDraw();
```

Finally forward the sendData to wifi Printer for image printing.

4. Demo Program

Please refer to PrintDemo for WIFI printer for Detail(Demo program for this SDK)

Development tool: Android Developer Tools (Build: v21.0.1 - 543035)