

PDA3505 JAVA api

Jar package mainly for 2 functions, they are printing function and barcode scanning function.

1. Printing function

1.1 Text printing, mainly use the interface of

`printerClass.printText(str);`

Before using `printerClass`, should set the variable first, For example:

```
Public static PrinterClassSerialPort printerClass=null;
```

Then Instantiate and open the serial port on `onCreate()` or

`onResume()`

```
printerClass=new PrinterClassSerialPort(new Handler());  
printerClass.open();
```

After instantiation, can call the printing interface, When printing the character string:

```
printerClass.printText(str);
```

When printing pictures, Need to turn the pictures into bitmap, then call the picture printing interface.

```
printerClass.printImage(bitmap);
```

When printing the barcode and QR code, need to turn the content of barcode or QR code into bitmap, then call the pictures printing interface, For example:

```
/**  
 * is for generating the given content to 1D barcode .
```

```

    *
    /** @param content" is the content which will be generated to 1D barcode
    /** @return " return to the generated 1D barcode" bitmap"
    /** @throws WriterException WriterException"abnormal
    */
    public Bitmap CreateOneDCode(String content) throws WriterException {
        // generate to 1D barcode,specified size when coding,don't zoom after generated the
        picture,if so ,it will fuzzy and lead to fail.
        BitMatrix matrix = new MultiFormatWriter().encode(content,
            BarcodeFormat.CODE_128, 500, 200);
        int width = matrix.getWidth();
        int height = matrix.getHeight();
        int[] pixels = new int[width * height];
        for (int y = 0; y < height; y++) {
            for (int x = 0; x < width; x++) {
                if (matrix.get(x, y)) {
                    pixels[y * width + x] = 0xff000000;
                }
            }
        }

        Bitmap bitmap = Bitmap.createBitmap(width, height,
            Bitmap.Config.ARGB_8888);
        // Generated bitmap through Pixel group ,Details,Plz refer api
        bitmap.setPixels(pixels, 0, width, 0, 0, width, height);
        return bitmap;
    }
}
/**
 * Generate to 2D code using character string.
 *
 * @param str
 * @return bitmap
 * @throws WriterException
 */
public Bitmap Create2DCode(String str) throws WriterException {
    // generate to 2D Matrix,specified size when coding,don't zoom after generated the picture,if
    so ,it will fuzzy and lead to fail.
    BitMatrix matrix = new MultiFormatWriter().encode(str,
        BarcodeFormat.QR_CODE, 300, 300);
    int width = matrix.getWidth();
    int height = matrix.getHeight();
    // When the 2D matrix turn into 1D pixel group,it is also arrange sideways always.
    int[] pixels = new int[width * height];

```

```

        for (int y = 0; y < height; y++) {
            for (int x = 0; x < width; x++) {
                if (matrix.get(x, y)) {
                    pixels[y * width + x] = 0xff000000;
                }
            }
        }
        Bitmap bitmap = Bitmap.createBitmap(width, height,
            Bitmap.Config.ARGB_8888);
        // Generated bitmap through Pixel group ,Details,Plz refer api
        bitmap.setPixels(pixels, 0, width, 0, 0, width, height);
        return bitmap;
    }

```

2. Barcode scanning function

For this function, it will be supported by the barcode engine on the devices. If installed the barcode scan engine, you can use open it and scan

Scan method:

```
CaptureService.scanGpio.openScan();
```

Open the scan engine, need to use the broadcast to receive the data which from the scan engine after scanning

Text is the data from the scanning

```

class ScanBroadcastReceiver extends BroadcastReceiver {
    @Override
    public void onReceive(Context context, Intent intent) {
        // TODO Auto-generated method stub
        String text = intent.getExtras().getString("code");
        Log.i("TAG", "MyBroadcastReceiver code:" + text);
        editText1.setText(text);
    }
}

```

Set the variable first

```
private ScanBroadcastReceiver scanBroadcastReceiver;
```

Then register

```
scanBroadcastReceiver = new ScanBroadcastReceiver();
```

```
IntentFilter intentFilter = new IntentFilter();  
intentFilter.addAction("com.zkc.scancode");  
this.registerReceiver(scanBroadcastReceiver,  
intentFilter);
```

When need to close the barcode scanning engine,can call the close method as below:

```
CaptureService.scanGpio.closeScan();
```

Then register after using

```
unregisterReceiver(scanBroadcastReceiver);
```