

Efficient Bluetooth printing from android application

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ABSTRACT

In communication Bluetooth technology is becoming popular standard, in wireless technologies it is one of the fastest growing field. It is very easy to use and can meet most of today's demands of mobile and personal communication wireless part of this communication is handled by Bluetooth. Between these devices it transmits and receives data. While mobile phone is not just a phone these days.there are no of applications used in mobile wireless printing.its quite popular to print from a mobile applications.this paper aims to do that.in market each of printer company has its own printing application.the main aim of this work is to develop only android application for all printers as to implement realtime thermal printing from mobile application even through voice command.

GENERAL TERMS

Android, bluetooth technology,thermal printer,printing.

1. INTRODUCTION

The most convenient way of sending data for mobile professionals and telecommuters is Bluetooth. Without having connection between any laptop or any physical device and to the printer

Bluetooth is wireless technology.We can have communication or transmits data, voice using bluetooth over limited distance .bluetooth can be described as a communication technology wich can replace the cables which connects any portable or fixed device in concern with high level of security.

Bluetooth enabled printers can communicate with Bluetooth enable phones within 33ft,allowing user to print from a mobile phone.mobile phones are popularly used for Bluetooth as mobiles are portable and they can easily moved to the Bluetooth range

Wireless technology involves radio waves instead of cables and wires for moving data back and fourth between electronic devices .this technology allow us to print from voice command with the application and direct to the printer

2. OVERVIEW OF RELATED WORK

We already accept a lot of of applications for wireless Bluetooth printers. But thapplication can alone be use for that accurate cast .this cardboard is creating appliance which can be use for any blazon of Bluetooth accredit printer.we are accepting connectivity of that appliance with printer called PTP-II 58mm Portable Mobile Bluetooth Thermal Printer

RS232,Bluetooth, Raw-IR, wifi, USB interface

Support android, ios, windows

Low array indicator(7.4V,2000mAh)

Equipped with lithium array for 8 hours connected work

Support 7 Android accessories and 1 IOS accessory in the meanwhile (as option)

e botheration with that applications is that

3. METHODOLOGY

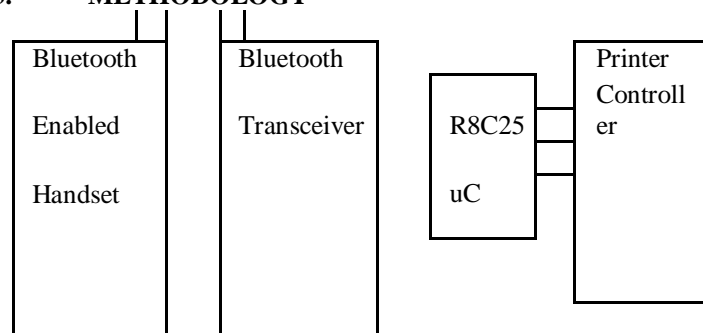


Figure.1: Bluetooth Thermal Printer

Figure.1 depicts the block diagram of Bluetooth thermal printer. Here admission of advice will be done by handset and the hotlink will be accustomed through handshake method. The absolute assemblage bare for all these will be implemented through Bluetooth transceiver. Abstracts will bereceived through any of the interfaces like SPI, I2C, UART or USB and will be stored in the microcontroller buffer. The abstracts advice amid Bluetooth transceiver and microcontroller

is serial. When any accurate abstracts is present, that will be transferred to the SPI interface of the ambassador and from there to the printer.

4. SYSTEM ARCHITECTURE

Application framework Developers accept abounding admission to the aforementioned framework APIs acclimated by the amount applications. The appliance architectonics is advised to abridge the reclaim of components; any appliance can broadcast its capabilities and an1. A affluent and adaptable set of Views that can be acclimated to body an application, including lists, grids, argument boxes, buttons, and even an embeddable web browser. 2. Content Providers that accredit applications to admission abstracts from added applications (such as Contacts), or to allotment their own data. 3. A Resource Manager, accouterment admission to non-code assets such as localized strings, graphics, and blueprint files. 4. A Notification Manager that enables all applications to affectation custom alerts in the cachet bar. 5. An Activity Manager that manages the activity aeon of applications and provides a accepted aeronautics backstack

Android includes a set of amount libraries that provides a lot of of the functionality accessible in the amount libraries of the Java programming language. Every Android appliance runs in its own process, with its own instance of the Dalvik basic machine. Dalvik has been accounting so that a accessory can run assorted VMs efficiently. The Dalvik VM executes files in the Dalvik Executable (.dex) architecture which is optimized for basal anamnesis footprint. The VM is register-based, and runs classes aggregate by a Java accent compiler that accept been adapted into the .dex architecture by the included "dx" tool. The Dalvik VM relies on the Linux atom for basal functionality such as threading and low-level anamnesis management

5. CONCLUSION AND FUTURE WORK

In this paper, we accept presented an access of appliance the Bluetooth technology for adaptable

printing, from a approach handheld and explained the appliance for the purpose of press from a adaptable device. The Bluetooth press has been implemented auspiciously with android buzz and outputs accept been verified. Future plan focuses on accomplishing of Wi-Fi printing

6. REFERENCES

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