

Android Based Business Card Scanner: An OCR Based Approach

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ABSTRACT:

We propose a system in which it allows the user to focus on application that performs scanning of paper based Business card using optical character recognition. The objective is to make visual capabilities of built in camera in android devices to extract name ,phone no,and email address that are given in business card. Its shows how process on business card through android phone using OCR, when the user wants to select proper or desired user. We can share image through android phone and all the contact details are automatically stored in the contact app through the intend service.

Keywords:Android,OCR,NDK,SDK.

I. INTRODUCTION

The Business men and employee use business card most They increase their contacts through paper based business card. Hence Day by day handling the paper based business card is now out of control In the world almost every country uses English Language, so we are the visiting cards & legal documents have fix font size & font style in order to follow universal standard. In earlier days paper based business card used to lose or damage so this disadvantage can be defeat in new electronic business card. An E-Card is created using digital media instead of paper or other traditional materials. E-Business card considered environment friendly & much more versatile. This older system can be automated using 'optical character recognition' technology. Business card scanning application use smart phone's camera and put it to work as a scanner. This application typically takes a photo of the paper based card and performs optical character recognition (OCR) on the image to translate the contents to editable text. It then adds that info like name, cell number, email address etc. to the app's own database, to your smart phone's contacts listing or both. The scope of Text data extraction .from business card application is to provide business card to convert image to text, single card pattern, multiple card pattern, QR code card pattern on the smart phone. Optical character recognition (OCR) performs electronic conversion of images of typewritten or printed text into machine encoded text.

II. Android scanner app framework

In this section we brief about the existing system, proposed system and introduce the technological background and system model we used.

A. Existing system

In the existing system were capture the business card using the OCR methodology from the mobile camera. Then the captured image was scanned and converted into the text and it has stored details in database or convert to the digital business card.

Proposed system

Our approach offers an ease of use by allowing user to store the contact details in contact application. The camera captured image details converted into text. Then contact details only saved into the contact app such as name, mobile no. and email id. The android application will also save the existing contact information in that app and the user can just scan the card in his mobile through the application we develop and anyone can save the contact details in efficient and fast, however we provided UI appears on Smartphone when saves the details in this application.

B. Technology background

OCR stands for Optical Character Recognition. It's a widespread technology to recognise text within pictures, like scanned documents and photos. OCR technology is employed to convert nearly any quite pictures containing written language (typed, written or printed) into electronic text knowledge. OCR technology became widespread within the early nineteen nineties whereas trying to digitize historic newspapers. Since then the technology has underwent many enhancements. These days solutions deliver almost perfect OCR accuracy. Advanced strategies like zonal OCR are accustomed change advanced document primarily based workflows.



Fig. OCR system model

C. Operating System

Android is all around loved with innovation organizations which require a helpful, minimal effort and adjustable working framework for keen gadgets. Android is an open source and permit free portable working framework dependent on the Linux part created by Google by and by. Android's open nature has supported countless to create brilliant applications. Regular a large number of engineers looks for android java code and fixes the mistakes. Review says that Android's graphical UIs more successful and present day than different Platforms. The most recent form of Android will be Android 9.0, code named Pie. Google's Android is verified against vindictive behaviour. Android has better soundness, security and execution than Apple IOS. Starting at JULY 2018, Android clients had the capacity to choose1 between 2.1 million applications while Apple's App Store remained the second-biggest application store with 2 million accessible applications.

III. Implementation

1. Login

The user can access the android app through login modules and he can create a his own contact details .

2.Capture

With using mobile camera the user can capture the business card and visiting card.

3.Scanning

In scanning process,the visiting card images will automatically recognize the text using optical character recognition and it will automatically stretch the name ,address,email-id and mobile no.

4.Contact Saving

It will call the contact app and it redirects to the contact information to the phonebook.

IV. Conclusion

As Fundamental goal of developing the application was to create business card and visiting card scan detail, social networking and platform for technical subject. As we were comfortable with android and java, it was chosen as programming language. Using this android application user can be easily recognized and track for validation. This application is much user friendly. User can save time by avoiding typing of customer information. User can easily share contact information to other user through different sharing applications in internet.

V. Future Enhancement

In the future,we will advantages to this application like scanning medical prescription and we will increase the accuracy of the applications.

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