

Contact Management Using QR Code

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Abstract- At present the business card is found to be one of the most important communication media to get connect with various businesses. QR code in context is used to generate the business card as the various mobile platforms like android, iOS, and Symbian makes use of revolutionizing QR code Technology in mobile devices. There are various business cards generating applications already exists in the market but they have some limitations. This paper discusses Contact Management Using QR Code android application which overcomes the limitations of the existing applications. The discussed application provides the feature of maintaining category wise contacts using QR code and facilitates editing of business card and contact during generation of QR code which get display on mobile screen.

Keywords: Android, Business cards, QR code, Smart phone.

I. INTRODUCTION

The QR code technology continues expanding into new industry segments such as transportation [1], retail [2], GPS [3], banking and health services etc. QR code technology can be integrated with an augmented reality [4]. The other domain that is open to QR code application is business card. Most of the people prefer to use business card to reach any business. Typical business card includes an organization name, address, email ID and contact information. On these business cards the valuable information of businesses can be to store in hidden format using QR code technology. Applications for generating business card using QR code are available in Smart phones which are quite useful in day-to-day life. These applications provide efficient and user friendly way to generate the business card using QR code to the user. Most of the applications are successful in assisting the user by providing the easiest way to create the business card using QR Code such as ABBYY card reader , Camcard reader , Yolu reader , World card Reader etc. But still these existing applications have drawbacks.

First drawback is related to editing a business card. Applications available in market do not provide any way to edit the generated business card because of which user have to recreate new business card. This is very time consuming process and requires extra efforts to generate new business card.

Second drawback is the absence of business card category to search specific category wise data and editing business cards. Type of Business is identified by their category so absence of this field may leads to increased search time.

In this paper we discuss android application for Contact management using QR code. This facilitates the ease of using the business card by providing the feature of category wise arrangement of business information. With this feature the user will easily and quickly search for a particular category. The business category involves Bookstore, Electronic and Clothing etc. We can enhance category as per user requirement. Another feature of this app is that it allows the editing of business card which solves the problem of recreating business card.

II. LITERATURE REVIEW

The industry and research fertility began to see the different uses for QR Code in mobile platform. Such as in work of SüleymanEken and AhmetSaya the concept of QR code uses in transportation have been elaborated [1]. This system provides the easiest approach for passenger to get the details about bus arrival time, departure time, buses current locations, and bus routes on a Google map and GPS. All this transportation details is stored in QR codes and this QR code is placed on bus stop which can be access by passenger using scanner. This system minimizes the passengers waiting time. The author Lei Fu has discussed the concept of shopping guide system using QR code. This system involves the Accurate and real-time shopping destination, thus helping shopping mall to mine customer data more accurately and systematically [2]. Rahul Raj C. P et. al. has deliberated about navigation system using QR code. This system incorporates accurate indoor navigation with the help of QR code that provides location information to the user optically [3]. The author DaruneeBunmaet. al. have explained the new innovation on augmented reality with the help of QR code. This system boosts data storage space to have larger capacity of information in QR code [4].

The one domain, business card generation can also successfully inherit the strength of QR code. By looking at demand for business card in QR code format the different applications for generating QR code has been developed. Various applications are available in market which is used to generate the business cards some of them are ABBY, camCard, Yolu and WorldCard. Following description elaborates about the features of existing business cards.

1. Yolu Card Reader :

Yolu card reader accurately scans the different business cards but generation and scanning of business card is too slow. Using this application it is easy to exchange electronic business cards. This feature is available only for the paid version. It provides easier way to export scan card when there is no network failure. It allows only 30 scans per day [5].

2. Cam Card Reader :

Excellent user interface, reasonable accuracy and cross platform accessibility are provided by cam card but these services may become paid in future. Sometimes Camcard fails to edit and scan of images as well as QR code [6].

3. ABBYY Business card Reader (BCR) :

With this application user can instantly transfer businesscard data in 21 languages right onto your smart phone in paid version. In trial version ABBYY business card reader allows to save only one name and phone number for given contact. This application allows sharing biz contacts data from BCR via e-mail, SMS or Wi-Fi [7].

4. WorldCard Mobile Lite :

Using this application user can only save 50 cards in card holder after recognition but its paid version has no limitations. User can back up the card holder, but cannot restore it in the lite version but backup can be restored in paid version .While exporting contacts to phone contacts, only the name, photo and phone number will be exported. Paid version of this application can export all in formation except card image [8].

After having an overview on existing business card we can figure out that most of the applications are based on paid version and the response time for performing scanning and generation process is more. Also none of the application support editing facility and category wise arrangement of contacts. These two features are incorporate into our Contact Management using QR code.

III. CONTACT MANAGEMENT USING QR CODE

This android application overcomes the drawbacks present in existing applications which have discussed in literature survey.

The application provides following function:

Generating business card using QR code: The System generates the business card using QR code. For that the user should enter the detail information.

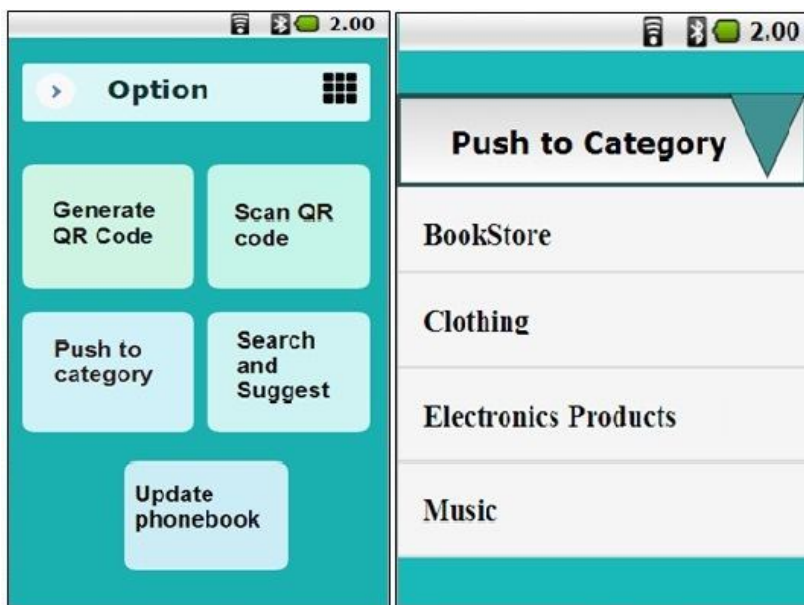
Reading Business card using QR code: After generating business card using QR code system will scan or read that generated QR code.

Maintaining category wise contacts: Basically there are many numbers of business cards, so system will maintain category wise contacts.

Search content wise and Suggest related contact: The system will provide option for searching content wise business card and also suggest related business card.

Sharing contact with Phonebook Updating: Once the system generates the business card using QR code, system will update the phonebook automatically. Sharing of contacts is also possible in this application.

In contrast to paid application free version availability is one of the features of Contact Management



“Figure 1. Overview of Implementation“



“Figure 2. Edit Business Card”

Using QR code application. Another feature is related to category wise arrangement of business card. Due to the absence of business category information in business card leads to create the greater confusion to user who access for the particular business, if user wants to access business card related to clothing category then he has to go through all generated business cards and meanwhile to search for all clothing related business cards, it is very time consuming and tedious task to search for a particular category. So category wise search enriches user experience.

One more feature is to provide the ability to edit the business card. User who has generated the business card can edit the details of existing business card. If some mistake is present in business card, then it can be solve by recreating a new business card.

CONCLUSION

As it is now possible to make use of the revolutionizing QR code Technology in mobile devices, generating business card using QR code is one of way to content management. By taking advantage of this concept we have develop the Contact Management using QR Code application. Contact Management using QR Code application has provided the various features which are more needed by most of the users who are using the existing applications and it is also a part of market demand and future scope. These features include Categorical arrangement and editing of contacts.

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